

How Contact Experiences Shape Welcoming: Perspectives from U.S.-Born and Immigrant Groups

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Abstract

This research examines how intergroup contact experiences—including both their frequency and their qualities (friendly, discriminatory)—predict indicators of welcoming among U.S.-born and immigrant groups. Analyzing a new survey of U.S.-born groups (whites and blacks) and immigrant groups (Mexicans and Indians) from the Atlanta and Philadelphia metropolitan areas (total N = 2,006), we examine welcoming as a key dimension of social integration. Along with reporting their contact experiences, survey respondents indicated the extent to which they are inclined to welcome and feel welcomed by each of the other groups. Results consistently demonstrated that greater contact frequency predicted greater tendencies to welcome and feel welcomed by each of the other groups. These effects persisted even when demographic characteristics, perceived discrimination, and exposure are included as predictors in the models. Findings also suggested that racial and nativity hierarchies shape how perceived discrimination predicts welcoming others and feeling welcomed by others.

Keywords

discrimination, immigration, integration, intergroup contact, welcoming

Considerable research has sought to understand the processes through which immigrants become a part of American society (Bean, Brown, and Bachmeier 2015; Kasinitz et al. 2008; National Academies of Sciences, Engineering, and Medicine [NASEM] 2015; Portes and Rumbaut [1990] 2014). There is growing recognition, however, of the need to consider how native and immigrant communities mutually influence each other and how receiving communities can meaningfully contribute to processes of immigrants' integration versus exclusion (Alba

and Foner 2015; Alba and Nee 2003). The relational dynamics between immigrants and the U.S.-born communities

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that receive them—how they interact and engage with one another in their everyday lives—are vital because such dynamics can set the tone for future social relations and have key consequences for immigrant integration (Fussell 2014).

Nonetheless, to date, few research studies have adopted this relational lens to study social integration among immigrants to the United States and the U.S.-born. Studies have traditionally focused on broad “contexts of reception”—the ways in which governmental policies, labor markets, and other key social institutions affect how immigrants become incorporated into American society (Portes and Rumbaut [1990] 2014). Such research clarifies how, for example, hostile receptions by educational, legal, and health care systems can hinder the social and economic progress of some immigrants (Bean et al. 2015; Marrow and Joseph 2015; Massey and Sánchez 2010). Yet given recent growth in local initiatives designed to welcome immigrants throughout the United States (see *Welcoming America* 2017), more work is needed to understand the ways in which immigrants also engage with and may even feel welcomed by people they encounter in their social environments.

Studies that do examine “contexts of reception” at an individual level have tended to focus on anti-immigrant attitudes and behaviors among members of the host society (Citrin et al. 1997; Espenshade and Hempstead 1996; Fetzer 2000; Segovia and Defever 2010; Valentino, Brader, and Jardina 2013). Only rare empirical examples have considered factors that may lead members of receiving communities to welcome immigrants and promote their successful integration (Okamoto and Ebert 2016; Phelps et al. 2013), and even these studies have yet to examine immigrants’ perspectives. Thus, missing from the literature are insights about how U.S.-born and

immigrant groups experience relations with one another—specifically, their willingness to welcome each other and the extent to which they feel welcomed by each other.

Analyzing a new survey on immigrant-native relations, the present research builds on prior work by examining *welcoming* as a key dimension of social integration among members of immigrant and U.S.-born communities. Extending beyond prior studies that focus only on native attitudes toward immigrant newcomers, we investigate how contact experiences among U.S.-born and immigrant groups shape welcoming attitudes toward one another and how these patterns might differ by race and nativity status. Our unique data set captures responses from members of racial majority and minority U.S.-born groups as well as high- and low-status immigrant groups in Atlanta and Philadelphia—two metropolitan areas with long-standing racialized dynamics between blacks and whites that are transforming with new waves of immigration.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Numerous studies have examined attitudes toward immigrants among members of host societies (see Ceobanu and Escandell 2010), and a range of attitudes exist in the general U.S. population (Muste 2013). Some Americans hold exclusionary attitudes toward immigrants, and factors such as perceived economic competition and cultural threat can exacerbate anti-immigrant attitudes (Fussell 2014; Hainmueller and Hopkins 2014; Masuoka and Junn 2013; NASEM 2015).

Less attention has been granted to factors that predict more inclusive attitudes toward immigrants (see Haubert and Fussell 2006). We extend this body of

research by examining indicators of *welcoming*, in line with emerging work that demonstrates how welcoming attitudes and behaviors play key roles in facilitating downstream immigrant integration processes and outcomes (see Fussell 2014; Jones-Correa 2011). Policies and institutions can signal inclusion and exclusion, thereby shaping the ways in which immigrants become incorporated into host societies (Bloemraad 2006; de Graauw 2016).

Recent studies have increasingly shifted attention toward interactions occurring *within* institutions, emphasizing the importance of feeling welcomed and included in institutional contexts (Gast and Okamoto 2016; Huang and Liu 2017; Mallet, Calvo, and Waters 2017; Williams 2015). Such studies suggest that welcoming attitudes can bolster immigrants' incorporation outcomes both symbolically and materially. New government policies and official events have also been established in cities across the United States to highlight the value of welcoming immigrants into one's community (see Jones-Correa 2011; Welcoming America 2017).

Related work also indicates that members of host societies are more likely to have inclusive attitudes as they develop social attachments to immigrants. Although members of host societies may express negative attitudes toward immigrants as their presence grows (Enos 2014; Hopkins 2010), numerous studies from North America and Europe indicate that having personal contact with immigrants can yield positive attitudes toward immigrants and immigrant communities (Dixon 2006; Ellison, Shin, and Leal 2011; Kiehne and Ayon 2016; McLaren 2003; Pettigrew et al. 2007). These findings complement decades of research indicating that contact—defined as face-to-face interactions between members of different groups—can meaningfully

contribute to improving intergroup attitudes (Pettigrew and Tropp 2011), especially when the contact is friendly and cooperative in nature (Allport 1954; Cook 1978). Such salutary effects of contact with immigrants emerge *beyond* any contextual effects resulting from greater exposure to immigrants as they make up larger proportions of the population (Pettigrew, Wagner, and Christ 2010; Savelkoul et al. 2015; Wagner et al. 2006). Moreover, contact is often used as a strategy to build connections between immigrant and U.S.-born communities and enhance immigrant integration (Bergmann 2016). As such, we expect that greater intergroup contact will generally predict greater tendencies to welcome immigrants among the U.S.-born.

At the same time, intergroup researchers acknowledge that contact experiences are not always positive and that negative forces can adversely affect the course of relations between groups (Dixon 2006; Pettigrew and Tropp 2011; Wagner and Hewstone 2012). Thus, researchers have begun to distinguish between positive and negative qualities of contact to gain a deeper understanding of how contact affects intergroup relations (Hayward et al. 2017; Pettigrew and Hewstone 2017). This work suggests that negative contact experiences may have stronger effects on intergroup attitudes and behaviors than positive contact experiences (Barlow et al. 2012). Nonetheless, people typically experience more positive intergroup encounters than negative ones, such that the effects of positive contact often outweigh the effects of negative contact by occurring more frequently (Graf, Paolini, and Rubin 2014; Hayward et al. 2017). Moreover, prior positive contact often serves as a buffer against the impact of negative contact between groups (Paolini et al. 2014). We therefore expect that greater contact—and particularly qualitatively positive contact—will

predict greater inclinations to welcome immigrants among the U.S.-born, even considering any negative intergroup experiences they may report.

We further recognize that inclinations to welcome others are likely to be shaped by existing racial and nativity hierarchies. Indeed, studies from the United States and elsewhere show that contact differentially affects the intergroup attitudes of racial and ethnic minority and majority groups (Binder et al. 2009; Sidanius et al. 2008; Tropp and Pettigrew 2005). Still, studies of racial stratification in the United States have traditionally granted primacy to the black-white dichotomy (Bonilla-Silva 1997). For instance, given their lower status position in the U.S. racial hierarchy, black Americans tend to report more negative interracial contact (Stephan et al. 2002) and perceive more racial discrimination than white Americans (Pew Research Center 2016), which can undermine the positive effects of contact on blacks' interracial attitudes (Tropp 2007).

More complex conceptualizations of racial hierarchies, such as those that characterize relations among multiple racial and ethnic groups in the United States (Bobo and Hutchings 1996; Bonilla-Silva and Glover 2004), offer more nuance regarding the role that perceived discrimination may play in welcoming processes. For example, whites' privileged status relative to blacks, Latinos, and Asians might lead us to expect that perceived discrimination from whites would have greater effects on how welcome immigrant and minority groups feel than would perceived discrimination from other nonwhite groups in the racial hierarchy.

Other expansive conceptualizations such as the racial triangulation framework (Kim 1999) encourage us to recognize status dimensions associated with being an "insider" or "outsider" in U.S.

society. This framework asserts that insider-outsider status operates on a separate axis from skin tone and socioeconomic status while setting the racial positioning of immigrant-origin minority groups within existing racial hierarchies. In line with this framework, perceptions of discrimination are often acute among Latinos and Mexican Americans (Massey and Sánchez 2010), and Indians and other South Asian immigrants are increasingly likely to be perceived as "outsiders" in the U.S. context (Mishra 2013). Correspondingly, due to their outsider status, immigrant newcomers may be especially affected by discrimination from U.S.-born groups, such as whites and blacks, while being relatively unaffected by discrimination from other immigrant groups.

In the present research, we examine how qualities of intergroup contact—including both discrimination and friendliness—shape tendencies to welcome others and feel welcomed by others among immigrant and U.S.-born communities who vary in racial and nativity status. We assess both aspects of welcoming among immigrants and the U.S.-born given that people may report willingness to engage with other groups at the same time as they have concerns about how they will be received (Shelton and Richeson 2006; Tropp and Bianchi 2006).

We hypothesize that greater contact between groups will predict greater tendencies to welcome and feel welcomed by other groups among both immigrants and the U.S.-born. Moreover, we hypothesize that contact will further promote tendencies to welcome and feel welcomed when it is regarded as qualitatively friendly in nature. We also expect that these effects of contact will persist even when taking into account negative dimensions of intergroup encounters such as perceived discrimination. Additionally, we expect that perceived

discrimination will play a greater role in predicting welcoming among groups who occupy lower status positions as compared to higher status positions in the U.S. racial and nativity hierarchies; in particular, we hypothesize that perceived discrimination from whites will be especially likely to predict feelings of being welcomed among immigrant and minority groups.

DATA AND METHODS

To examine how contact shapes welcoming among U.S.-born and immigrant populations, we analyze a new data set based on a largely representative sample of U.S.-born blacks and whites and foreign-born Mexicans and Indians in the Atlanta and Philadelphia metropolitan areas. This data set is uniquely suited to address the present research goals as it: (a) includes assessments of intergroup contact and welcoming; (b) incorporates multiple indicators of intergroup contact, thereby allowing us to distinguish between dimensions of contact frequency and quality; and (c) assesses contact experiences and welcoming indicators among members of U.S.-born and immigrant groups that vary in racial and nativity status.

U.S.-born whites and blacks have been widely studied in the contact research literature (Pettigrew and Tropp 2011), and they tend to vary on racial and socioeconomic dimensions that grant them higher and lower status, respectively, in U.S. society. For their part, Mexican and Indian immigrants also tend to vary in status on racial and socioeconomic dimensions. Mexicans are among the most vulnerable immigrant groups in the United States today. On the whole, they have lower levels of education and are employed in lower-skilled sectors of the economy; they also register low levels of English language proficiency and high

levels of undocumented status (NASEM 2015; Telles and Ortiz 2008). By contrast, foreign-born Indians are among the most highly educated immigrant groups, often employed in higher-skilled sectors of the economy and with considerable fluency in English (Leonard 2007; Portes and Rumbaut [1990] 2014). Thus, this data set offers an opportunity to test for the effects of contact frequency and quality using comparable surveys across differentially positioned immigrant and U.S.-born groups.

Using population estimates from the 2008 and 2010 American Community Survey (ACS), we selected the Philadelphia and Atlanta metropolitan areas as research sites as they are comparable in population size and both have racialized black-white histories and more than 50,000 immigrant arrivals from the two largest immigrant source countries to the United States (Mexico and India). Telephone interviews were conducted in English and Spanish for Mexican respondents and in English for respondents from the other three groups during the summer of 2013.¹ Using the entire Philadelphia and Atlanta metropolitan areas for our sampling frame, U.S.-born white and black samples were drawn through random digit dialing of landlines and cell phone numbers to randomize selection of respondents, in conjunction with an oversampling of high-density census tracts, based on ACS block group-level estimates of where blacks live. The survey employed a stratified sampling design for the Mexican and Indian foreign-born samples, drawing a random sample from cell phone lists as well as

¹Based on 2015 U.S. census estimates, approximately 75 percent of the Indian immigrant population uses English in the home or indicates that they speak English “very well.” Our Indian sample was drawn from those residing in the Atlanta or Philadelphia metropolitan areas who meet these criteria.

surname dictionaries, in conjunction with an oversampling of high-density census tracts based on ACS block group-level estimates of where Mexican and Indian immigrants live as well as some face-to-face survey administration to subsamples of Mexican and Indian immigrants.² We employed quotas by age and gender to ensure that our samples would not be heavily skewed on these dimensions across groups. Through these procedures, we obtained largely representative samples of respondents from the four groups.

To be eligible for participation, survey respondents had to be at least 18 years old and residing in either the Philadelphia or Atlanta metropolitan area at the time they were called. Survey respondents who identified as white or black had to indicate that they were born in the United States, and survey respondents who identified as Mexican or Indian had to indicate that they were born in Mexico or India, respectively. All together, 2,006 individuals—including 503 U.S.-born whites, 502 U.S.-born blacks, 500 Mexican immigrants, and 501 Indian immigrants—responded to the survey, with half of each sample coming from each of the two metropolitan areas.³

²To fulfill quotas by age and gender, 200 Mexican immigrants and 48 Indian immigrants completed the surveys through face-to-face interviews rather than by telephone. Mexicans and Indians who completed surveys through face-to-face interviews tended to be younger, more likely to be employed, and less likely to be homeowners than the remaining immigrant respondents; additionally, among those who completed surveys through face-to-face interviews, Mexicans were more likely and Indians less likely to be highly educated and male.

³The survey achieved a response rate of 20 percent for all households with whom contact was made and a cooperation rate of 90 percent for all respondents contacted who met our eligibility criteria (see American Association for Public Opinion Research 2008).

MEASURES

Survey respondents completed questions about contact and welcoming in relation to each of the other U.S.-born and immigrant groups.

Contact Frequency

Three separate items assessed respondents' *contact frequency* in relation to each of the other groups by asking how often they "interact with [whites/blacks/immigrants from Mexico/immigrants from India]" across three social spaces, including "at your job" (workplace), "around your home or in your neighborhood" (neighborhood), and "outside of your neighborhood" such as "at restaurants, stores, and malls" (public spaces). Responses to these items ranged from 0 (never) to 3 (often); these responses were summed to create overall measures of contact frequency across social spaces for respondents from each group in relation to each of the other groups.

Contact Quality

Contact quality was assessed in two ways. First, those respondents who reported some degree of contact with the specified group were asked about the *friendliness* of contact with that group across the three social spaces; specifically, "when you interact with [whites/blacks/immigrants from Mexico/immigrants from India] [at work/around your home or in your neighborhood/at restaurants, stores, and malls], does the contact with them generally feel . . ." with responses ranging from -2 (very unfriendly) to +2 (very friendly). Responses to these items were averaged to create a composite measure of contact friendliness across social spaces for respondents from each group in relation to each of the other groups. Internal consistency for these composite

measures was evaluated using the congeneric confirmatory factor analysis–based model of scale reliability (Graham 2006; Raykov 1997).⁴ Specifically, scale reliability was calculated using coefficient omega (ω) with a 95 percent bias-corrected bootstrap (BC) confidence interval (Raykov 1997).⁵ Estimates of reliability (ω) for the contact friendliness measures ranged between .50 and .62 among whites, .51 and .62 among blacks, .72 and .76 among Mexicans, and .52 and .66 among Indians.⁶

Respondents also indicated how often they have *perceived discrimination* from each of the other groups. Specifically, they completed three versions of the

⁴Congeneric model reliability estimates can be interpreted in the same manner as Cronbach's alpha (α); however, because the congeneric model does not assume tau equivalence or parallel measures, it is a more optimal estimate of scale reliability than α (Raykov 1997).

⁵The bias-corrected bootstrap confidence interval is preferred over normal theory confidence intervals (based on model estimate standard errors) because it shifts the confidence intervals so that the median is the sample estimate (Padilla and Divers 2013).

⁶Not all respondents who reported having contact with a specified group indicated that they had contact in all three social spaces. Given that estimates of internal consistency can be influenced by sample size (Shevlin et al. 2000), we conducted supplemental pairwise correlations to show correspondence in contact friendliness scores for respondents from each group in relation to each other group across the three social spaces (workplace, neighborhood, public spaces). Correlations among the contact friendliness items were .34–.44, .40–.47, and .24–.38 for whites in relation to blacks, Mexicans, and Indians, respectively. Correlations among these items were .33–.45, .36–.55, and .47–.58 for blacks in relation to whites, Mexicans, and Indians, respectively. Correlations among the contact friendliness items were .60–.62, .48–.58, and .42–.50 for Mexicans in relation to whites, blacks, and Indians, respectively, and correlations among these items were .44–.56, .45–.51, and .55–.64 for Indians in relation to whites, blacks, and Mexicans, respectively.

following item, adapted for respondents from each metropolitan area: “Thinking about your experiences in [greater Philadelphia/Atlanta], how often would you say you have been treated unfairly or poorly by [whites/blacks/immigrants from Mexico/immigrants from India]?”. Item responses ranged from 0 (never) to 3 (often).

Welcoming Indicators

Respondents from each metropolitan area were asked about their intentions to welcome each of the other groups (welcoming others) and their perceptions of those groups' welcoming intentions toward them (feeling welcomed). *Welcoming others* was assessed by asking, “Overall, when you think about [whites/blacks/immigrants from Mexico/immigrants from India] in [greater Philadelphia/Atlanta], how often do you attempt to welcome them into your community?”. Similarly, *feeling welcomed by others* was assessed by asking, “Overall, when you think about [whites/blacks/immigrants from Mexico/immigrants from India] in [greater Philadelphia/Atlanta], how often do you feel welcomed by them?”. Responses to these items ranged from 0 (never) to 3 (often).

Generally, correlations between the welcoming and feeling welcomed items were moderate among whites (.42–.44 in relation to blacks, Mexicans, and Indians), blacks (.25–.47 in relation to whites, Mexicans, and Indians), Mexicans (.51–.53 in relation to whites, blacks, and Indians), and Indians (.55–.58 in relation to whites, blacks, and Mexicans). These items are analyzed as separate outcomes in subsequent data analysis.

Exposure

In addition, indices of *exposure* were calculated for respondents from each group

in relation to each of the other groups. Exposure indices can be interpreted as the probability that members of one group would encounter members of another, specified group; they take into account the relative size of the groups being considered, and as such, exposure indices for any two groups should not be interchanged, provided that the size of the two groups differs (Massey and Denton 1988). Exposure indices were calculated at the metropolitan area level to capture a geographical area comparable to that encompassed by the contact measures, with possible values ranging from 0 to 1. We include indices of exposure to test whether the effects of contact frequency and quality on welcoming hold while controlling for the probability that members of each group would encounter each other.⁷

Demographic Characteristics

In addition to reporting their age, racial and ethnic background, place of residence, and birthplace, respondents were asked to report their gender and political ideology as well as level of education, employment status, and whether they owned their home as indicators of socioeconomic status. Sample characteristics are summarized for respondents from each group in Table 1.

RESULTS

Before conducting our main analyses, we tested for potential group differences in socioeconomic status to examine whether our samples of U.S.-born and immigrant

groups varied in ways that were consistent with patterns shown in prior research. A one-way analysis of variance showed significant group differences in levels of education, $F(3, 1916) = 535.79$, $p < .001$; Tukey post hoc comparisons indicated that, on average, Indian respondents reported higher levels of education ($M = 5.25$) than white and black respondents ($M = 4.48$ and 4.10 , respectively, $p < .001$), and Mexicans reported lower levels of education than respondents from the three other groups ($M = 2.49$, $p < .001$). Logistic regression also showed significant differences in homeownership and employment status across the groups. While white and Indian respondents did not significantly differ in rates of homeownership ($b = -.16$, Wald $\chi^2[1] = 1.22$, $p = .27$), black respondents ($b = -.16$, Wald $\chi^2[1] = 44.23$, $p < .001$) and especially Mexican respondents ($b = -2.43$, Wald $\chi^2[1] = 259.14$, $p < .001$) were significantly less likely to own their homes. Also, Indian respondents were more likely to be employed than white, black, or Mexican respondents ($b = -.32$ to $-.70$, Wald $\chi^2[1] = 5.64$ to 27.35 , $p < .05$).

Group Comparisons on Contact Measures

Using one-way repeated measures analyses of variance, we compared levels of contact frequency, friendliness, and discrimination among respondents from each group in relation to each other group; results from these analyses, including mean scores and post hoc comparisons with Bonferroni correction, are summarized in Table 2.

Of particular interest, whites and blacks reported having more contact with each other than with either immigrant group, and both Mexicans and Indians reported significantly more contact with whites and blacks than with each

⁷Given that calculating exposure at the metropolitan area level limits its variability, supplementary analyses were conducted using exposure indices calculated at the county level. Nearly identical results were obtained regardless of whether county or metro area indices of exposure were used.

Table 1. Sample Characteristics

Variable	Whites	Blacks	Mexicans	Indians
Total N	503	502	500	501
Respondent age	18–94	18–90	18–82	18–91
Respondent gender				
Female	269	274	260	231
Male	234	228	240	270
Level of education				
Eighth grade or less	1	6	118	1
Some high school	18	24	101	2
High school degree/GED	96	112	189	26
Some college	118	174	53	72
Four-year college degree	149	96	14	119
Graduate degree	111	66	4	250
Employment status				
Full- or part-time	290	274	318	354
Not employed	213	228	182	147
Homeownership				
Homeowner	362	275	105	376
Rent or other	141	227	395	125
Political ideology				
Strong conservative	67	38	65	14
Moderate conservative	95	50	132	63
Neither	166	257	186	199
Moderate liberal	102	81	49	123
Strong liberal	56	55	35	59

Note: A total of 12 whites, 11 blacks, and 8 Indians did not report their age. A total of 10 whites, 24 blacks, 21 Mexicans, and 31 Indians did not report their level of education. A total of 17 whites, 21 blacks, 33 Mexicans, and 43 Indians did not report their political ideology.

other. Whites and blacks also report more friendly contact and perceive greater discrimination in relation to each other than in relation to the immigrant groups. Additionally, mean scores indicated that reports of friendly contact were relatively common, whereas reports of discrimination were relatively uncommon.

Predicting Welcoming Indicators

Correlations between scores on the contact frequency, friendliness, discrimination, and welcoming measures were conducted separately for each group, including U.S.-born whites and blacks (Table 3) and Mexican and Indian

immigrants (Table 4).⁸ It should be noted that respondents from each group were asked to complete measures of contact frequency and friendliness, discrimination, and welcoming in relation to the other three groups under study and not in relation to their own group. Thus, certain rows and columns of Tables 3 and 4 are intentionally left blank where there are no responses available from

⁸Variance inflation factors (VIFs) among the contact frequency, friendliness, and discrimination variables were also low for white respondents (1.02–1.49), black respondents (1.02–1.41), Mexican respondents (1.09–1.47), and Indian respondents (1.01–1.37), suggesting low levels of collinearity.

Table 2. Mean Reports of Contact Frequency, Friendliness, and Discrimination among U.S.-Born and Immigrant Respondents

	Contact Frequency		Contact Quality: Friendliness		Contact Quality: Discrimination	
	M (SD)	N	M (SD)	N	M (SD)	N
White respondents						
with blacks	5.80 _a (2.13)	502	1.25 _a (.70)	494	1.05 _a (.86)	499
with Mexicans	3.49 _b (2.23)	500	1.16 _b (.72)	432	.54 _b (.68)	482
with Indians	3.14 _c (2.20)	500	1.14 _b (.70)	418	.55 _b (.73)	486
	$F(2, 996) = 446.72^{***}$		$F(2, 782) = 9.10^{***}$		$F(2, 948) = 136.32^{***}$	
Black respondents						
with whites	5.77 _a (2.18)	501	1.24 _a (.72)	487	1.20 _a (.88)	499
with Mexicans	3.36 _b (2.31)	499	1.23 _a (.72)	423	.51 _b (.71)	479
with Indians	2.82 _c (2.20)	500	1.03 _b (.88)	394	.67 _c (.87)	479
	$F(2, 992) = 495.89^{***}$		$F(2, 732) = 14.41^{***}$		$F(2, 936) = 152.22^{***}$	
Mexican respondents						
with whites	4.16 _a (2.48)	500	.97 _a (.97)	445	.75 _a (.89)	498
with blacks	3.53 _b (2.60)	500	.86 _a (.89)	408	.72 _a (.90)	498
with Indians	1.54 _c (2.01)	498	.64 _b (1.04)	256	.35 _b (.70)	492
	$F(2, 994) = 380.88^{***}$		$F(2, 494) = 23.65^{***}$		$F(2, 976) = 68.05^{***}$	
Indian respondents						
with whites	6.24 _a (2.19)	501	1.17 _a (.72)	492	.85 _a (.90)	494
with blacks	5.08 _b (2.15)	501	1.09 _a (.76)	483	.71 _b (.84)	494
with Mexicans	3.57 _c (2.18)	501	1.00 _b (.79)	446	.42 _c (.72)	484
	$F(2, 1000) = 443.84^{***}$		$F(2, 880) = 13.92^{***}$		$F(2, 962) = 71.53^{***}$	

Note: Means with different subscripts (a, b, or c) are significantly different from each other using Bonferroni-adjusted tests of statistical significance. *** $p < .001$ (two-tailed).

Table 3. Correlations among Contact Measures and Welcoming Indicators for White and Black Respondents

	Contact Frequency			Contact Friendliness			Perceived Discrimination			Welcoming Others			Feeling Welcomed		
	Wht	Blk	Mex	Wht	Blk	Mex	Wht	Blk	Mex	Wht	Blk	Mex	Wht	Blk	Mex
Contact frequency															
With whites (Wht)			.43	.35	.19	.07	.05								
With blacks (Blk)			.41	.55	.11	.26	.14	.13	.09	.07	.38	.24	.22	.23	.17
With Mexicans (Mex)			.47	.55	.08	.06	.21	.07	.09	.14	.29	.41	.34	.16	.28
With Indians (Ind)								.02	.03	.11	.27	.30	.35	.18	.18
Contact friendliness															
With whites (Wht)	.19		.14	.12											
With blacks (Blk)					.61	.57	.05	-.14	-.05	-.02	.19	.18	.17	.32	.20
With Mexicans (Mex)	.12		.19	.04	.49	.63	.03	-.08	-.04	-.03	.11	.25	.23	.22	.35
With Indians (Ind)	.09		.08	.21	.38	.51	.05	-.14	-.05	-.17	.21	.21	.32	.27	.23
Perceived discrimination															
By whites (Wht)	.06		.04	.00	-.25	-.14	-.18				-.05	-.04	-.01	-.28	-.10
By blacks (Blk)			.16	.18	-.03	-.13	.02	.33	.46	.42	.02	.01	.02	-.12	-.08
By Mexicans (Mex)	.15		.13	.18	-.04	-.11	-.26	.37	.58	.01	.02	.07	.01	-.12	-.03
By Indians (Ind)														-.16	
Welcoming others															
Toward whites (Wht)	.33		.16	.22	.17	.06	.11	.01	.09	.10				.42	.29
Toward blacks (Blk)											.71	.64		.34	.42
Toward Mexicans (Mex)	.26		.30	.24	.14	.16	.16	-.08	.02	.05	.68	.85		.30	.34
Toward Indians (Ind)	.24		.27	.35	.17	.13	.24	-.12	.00	-.04	.62	.80		.30	.34
Feeling welcomed															
By whites (Wht)	.19		.13	.11	.31	.12	.21	-.20	-.04	-.11	.16	.19			
By blacks (Blk)														.58	.53
By Mexicans (Mex)	.15		.33	.15	.13	.25	.16	.01	.02	.00	.20	.38		.36	.38
By Indians (Ind)	.17		.20	.32	.22	.20	.36	-.11	.02	-.14	.26	.45		.33	.45

Note: Correlations for white respondents appear above the diagonal, and correlations for black respondents appear below the diagonal. Correlations highlighted in bold are significant at the .05 level (two-tailed).

Table 4. Correlations among Contact Measures and Welcoming Indicators for Mexican and Indian Respondents

	Contact Frequency			Contact Friendliness			Perceived Discrimination			Welcoming Others			Feeling Welcomed			
	Wht	Blk	Mex	Ind	Wht	Blk	Mex	Ind	Wht	Blk	Mex	Ind	Wht	Blk	Mex	Ind
Contact frequency																
With whites (Wht)		.65		.48	.39	.31		.26	-.02	.04		.08	.44	.33		.30
With blacks (Blk)	.61			.53	.13	.35		.18	.07	.08		.15	.31	.29	.45	.36
With Mexicans (Mex)	.37	.53														
With Indians (Ind)					.10	.20		.26	.12	.12		.22	.24	.30		.38
Contact friendliness																
With whites (Wht)	.41	.25	.03			.62		.56	-.26	-.14		-.16	.29	.34	.20	.20
With blacks (Blk)	.40	.38	.10		.77			.53	-.10	-.15		-.06	.24	.23	.32	.22
With Mexicans (Mex)	.35	.32	.19		.67	.75										
With Indians (Ind)									-.11	-.07		-.19	.33	.29	.30	.14
Perceived discrimination																
By whites (Wht)	-.01	.04	.04		-.20	-.16	-.17		.65			.50	-.03	-.09	.06	.08
By blacks (Blk)	-.06	-.05	-.05		-.17	-.24	-.23		.58	.03	.00	.39	.08	-.01	-.02	.10
By Mexicans (Mex)	-.08	-.06	.08		-.20	-.22	-.22		.48	.57						
By Indians (Ind)										-.05	.01	.02	-.01	.17		-.16
Welcoming others																
Toward whites (Wht)	.38	.29	.11		.35	.34	.36		-.09	-.09	-.14		.69	.53	.39	.37
Toward blacks (Blk)	.32	.35	.15		.36	.38	.34		-.04	-.10	-.12		.68	.41	.54	.42
Toward Mexicans (Mex)	.26	.30	.23		.33	.33	.35		-.05	-.14	-.05		.64	.78		
Toward Indians (Ind)														.38	.36	.51
Feeling welcomed																
By whites (Wht)	.40	.27	.07		.47	.43	.39		-.20	-.13	-.18		.56	.50	.44	.54
By blacks (Blk)	.33	.36	.12		.35	.48	.44		-.04	-.19	-.13		.53	.58	.44	.45
By Mexicans (Mex)	.27	.27	.24		.29	.38	.42		.02	-.14	-.08		.43	.51	.55	.54
By Indians (Ind)																

Note: Correlations for Mexican respondents appear above the diagonal, and correlations for Indian respondents appear below the diagonal. Correlations highlighted in bold are significant at the .05 level (two-tailed).

the specified group to be correlated—for example, among white respondents for variables assessing contact and welcoming in relation to white respondents and among black respondents for variables assessing contact and welcoming in relation to black respondents.

Overall, correlations between scores on contact frequency, friendliness, and discrimination measures were low to moderate in magnitude for respondents from each group in relation to each other group. Contact frequency, friendliness, and discrimination—along with demographic indicators and the exposure index—were therefore entered as distinct predictors for the welcoming indicators in a series of regression models.

Separate ordinary least squares (OLS) regression analyses were conducted to predict welcoming others and feeling welcomed for respondents from each group in relation to each other group, with predictor variables entered in two steps. Contact frequency and outgroup exposure along with demographic controls (age, gender, political ideology, level of education, homeownership, employment status⁹) were entered as predictors at Step 1 (S1). This procedure allowed us to test how contact frequency uniquely predicts each welcoming indicator beyond what can be predicted by outgroup exposure and the demographic controls. Friendliness and discrimination were then entered at Step 2 (S2) to determine the degree to which these qualitative aspects of contact would further predict the welcoming

indicators beyond contact frequency and other variables entered at the first step.

Because only those who reported having some contact frequency with a specified group responded to questions about contact quality, there are some missing cases when contact quality is included as a predictor in the regression models. We therefore conducted parallel regression analyses where only demographic variables, contact frequency, and exposure were entered as predictors for each welcoming indicator. The effects for contact frequency and exposure in these analyses were virtually identical to the effects observed in the analyses reported in the following paragraphs.

U.S.-born whites. At Step 1 of the analysis for whites, we find that greater contact frequency consistently predicted greater welcoming of others and feeling welcomed by others in relation to blacks, Mexicans, and Indians (see Table 5); exposure did not significantly contribute to predicting these outcomes. At Step 2, more friendly contact further predicted welcoming and feeling welcomed by blacks, Mexicans, and Indians. This effect held even when perceived discrimination was included in the model. Perceived discrimination only predicted a lesser tendency to feel welcomed by blacks, Mexicans, and Indians as well as a lesser tendency to welcome blacks.

U.S.-born blacks. At Step 1 of the analysis for blacks, greater contact frequency predicted greater tendencies to welcome and to feel welcomed by whites, Mexicans, and Indians (see Table 6). Exposure did not consistently predict these outcomes, and greater exposure to whites only predicted a lesser tendency to be welcoming toward whites.¹⁰ At Step 2, more friendly contact further predicted greater

⁹Since many Mexicans completed the survey in Spanish ($n = 386$) rather than in English ($n = 114$), preferred language of interview (0 = Spanish, 1 = English) was added as a control variable when analyzing data for Mexican respondents. We also control for mode of interview (0 = telephone interview, 1 = face-to-face interview) among both immigrant samples to account for potential differences associated with survey administration.

¹⁰Greater exposure to whites did not significantly predict willingness to welcome whites when the county-level exposure index was used ($\beta = .06$, $t = 1.11$, $p = .27$).

Table 5. Standardized Coefficients (β) from Ordinary Least Squares Regressions Predicting Welcoming Indicators among White Respondents

	Welcoming Others						Feeling Welcomed					
	Blacks		Mexicans		Indians		Blacks		Mexicans		Indians	
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
Demographic controls												
Age	-.02	-.05	-.08	-.11*	-.02	-.05	.11*	.05	-.02	-.07	.02	-.03
Gender	.07	.06	.09	.09	.10*	.11*	.08	.07	.03	.02	.00	.01
Level of education	.05	.06	-.01	-.02	-.05	-.07	-.01	.00	.02	.01	-.04	-.07
Employment status	-.21***	-.21***	-.13*	-.12*	-.01	.00	-.03	-.03	-.05	-.04	-.01	.00
Homeownership	-.01	-.03	-.02	-.02	-.04	-.03	.08	.04	.14**	.15**	.15**	.15**
Political ideology	.02	.01	.07	.06	.09	.08	.13**	.12**	.09	.07	.12*	.11*
Contact frequency and exposure												
Contact frequency	.42***	.41***	.34***	.29***	.26***	.21***	.16**	.16**	.19***	.13*	.14**	.10*
Exposure	-.04	-.05	-.07	-.09	.00	.00	.07	.07	.10	.08	.08	.09
Contact quality												
Friendliness	—	.14**	—	.23***	—	.29***	—	.24***	—	.31***	—	.30***
Discrimination	—	-.10*	—	.00	—	-.02	—	-.28***	—	-.12*	—	-.16*
R ² Change	.14	.03	.13	.05	.09	.08	.07	.15	.08	.11	.06	.13
FChange	8.89	7.96	7.12	10.88	4.35	17.60	4.35	41.19	3.74	23.45	2.99	28.27
p	***	***	***	***	***	***	***	***	***	***	***	***

Note: Coefficients for variables entered at Step 1 of each regression analysis are listed under column “S1,” and coefficients for variables entered at Step 2 of each regression analysis are listed under column “S2.”

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

inclinations to welcome and to feel welcomed by whites, Mexicans, and Indians. By contrast, perceived discrimination only predicted a lesser tendency to feel welcomed by whites.

Mexican immigrants. At Step 1 of the analysis for Mexicans, greater contact frequency predicted greater tendencies to welcome and feel welcomed by whites, blacks, and Indians (see Table 7). Again, we find that exposure did not significantly predict these outcomes. At Step 2, more friendly contact further predicted a tendency to welcome and feel welcomed by whites, blacks, and Indians.¹¹ Additionally, perceived discrimination only predicted a lesser tendency to feel welcomed by whites and blacks.

Indian immigrants. At Step 1 of the analysis for Indians, greater contact frequency predicted greater welcoming of others and feeling welcomed by others in relation to whites, blacks, and Mexicans, yet exposure did not significantly predict these outcomes (see Table 8). At Step 2, more friendly contact further predicted tendencies to welcome and feel welcomed by whites, blacks, and Mexicans. Perceived discrimination only predicted a lesser tendency to feel welcomed by whites.

In sum, across all four samples, we consistently find that greater contact frequency predicts greater tendencies to welcome others and feel welcomed by others, and these tendencies are

enhanced further when the contact is regarded as friendly in nature. Like other survey studies of contact, it is possible that self-selection could be playing a role (cf. Dixon 2006; Powers and Ellison 1995) such that those who are more open to cross-group interactions may be more likely to engage in contact. Alternatively, although people may be willing to interact with other groups, they may resist doing so for fear of being rejected (e.g., Shelton and Richeson 2006). We therefore conducted two additional tests to account for the role that associations between welcoming others and feeling welcomed might play.

First, we estimated supplementary models predicting *welcoming others* while including the relevant *feeling welcomed by others* variable as an additional control in our models. It could be, for example, that those who perceive members of other groups to be open to cross-group interactions are more likely to report willingness to engage in intergroup contact (e.g., Tropp and Bianchi 2006); thus, we sought to control for the extent to which respondents felt welcomed by others when predicting their own willingness to welcome others. The results were strikingly similar to our main analyses: greater contact frequency predicted greater inclinations to welcome each of the other groups even when controlling for the extent to which respondents felt welcomed by the other group in question.¹²

¹¹As shown in Table 5, contact frequency uniquely predicted Mexicans' feeling welcomed by Indians at Step 1 of the analysis; however, when contact friendliness was entered at Step 2, exposure and contact friendliness emerged as significant predictors of feeling welcomed by Indians, while contact frequency was no longer significant.

¹²To further control for self-selection into contact, it would have been ideal to include a traditional measure of racial prejudice as a statistical control. Our survey did not include such a measure but did ask whites and blacks about their attitudes toward the number of immigrants in their metropolitan area. Response options were coded as 1 (not too many), 2 (a lot but not too many), or 3 (too many) so that higher scores indicated stronger anti-immigrant attitudes. Initial correlations revealed that anti-immigrant attitudes were modestly and inversely correlated with the welcoming indicators (*r*s ranged between $-.24$ and $-.29$ among whites and between $-.05$ and $-.22$ among blacks). We then included this measure as an additional control in models predicting welcoming others and feeling welcomed among whites and blacks in relation to each of the other groups. Consistently, the effects of contact frequency and quality remained significant and positive among both blacks and whites, bolstering our confidence in our main results.

Table 6. Standardized Coefficients (β) from Ordinary Least Squares Regressions Predicting Welcoming Indicators among Black Respondents

	Welcoming Others						Feeling Welcomed					
	Whites		Mexicans		Indians		Whites		Mexicans		Indians	
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
Demographic controls												
Age	.03	.03	-.01	.00	-.01	-.01	.00	-.01	-.12*	-.11	-.11	-.10
Gender	-.04	-.04	-.04	-.05	-.08	-.08	.00	-.01	-.03	-.03	-.03	-.05
Level of education	.00	.02	-.03	-.01	.03	.05	.06	.10*	.09	.12*	-.03	.01
Employment status	-.15**	-.13*	-.02	.00	-.05	-.03	-.19**	-.14*	-.08	-.06	-.15*	.12*
Homeownership	.04	.02	.00	-.01	-.08	-.10	.14**	.11*	.10	.09	.14*	.10
Political ideology	-.12*	-.13*	-.08	-.09	-.09	-.08	-.04	-.06	-.03	-.05	-.04	-.02
Contact frequency and exposure												
Contact frequency	.33***	.30***	.21***	.19***	.24***	.21***	.21***	.17**	.19***	.19**	.26*	.22***
Exposure	-.11*	-.11*	.00	-.01	-.02	-.02	-.04	.05	.10	.07	-.03	-.03
Contact quality												
Friendliness	—	.14**	—	.15**	—	.22***	—	.24***	—	.22***	—	.31***
Discrimination	—	.04	—	-.03	—	-.03	—	-.18***	—	-.07	—	-.11
R ² Change	.12	.02	.05	.02	.09	.05	.07	.11	.07	.05	.09	.12
FChange	7.09	4.08	2.44	4.29	4.04	9.48	3.91	26.74	3.74	23.45	2.99	28.27
p	***	*	*	*	***	***	***	***	***	***	**	***

Note: Coefficients for variables entered at Step 1 of each regression analysis are listed under column “S1,” and coefficients for variables entered at Step 2 of each regression analysis are listed under column “S2.”
* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

Table 7. Standardized Coefficients (β) from Ordinary Least Squares Regressions Predicting Welcoming Indicators among Mexican Respondents

	Welcoming Others						Feeling Welcomed					
	Whites		Blacks		Indians		Whites		Blacks		Indians	
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
Demographic controls												
Age	-.03	-.03	.03	.03	-.14*	-.13*	.01	.00	.06	.06	-.04	-.03
Gender	-.04	-.03	-.04	-.03	.02	.02	-.03	-.02	-.08	-.06	-.04	-.04
Level of education	-.01	-.02	.03	.04	.03	.03	.01	.02	-.02	.00	.00	.00
Employment status	-.12*	-.09	-.07	-.07	.03	.03	-.08	-.06	-.04	-.03	-.07	-.07
Homeownership	.06	.06	.04	.04	.11	.13*	.00	.00	-.02	-.03	.01	.04
Political ideology	-.01	-.02	.03	.03	-.01	-.03	-.01	-.02	.02	.02	.01	-.01
Mode of interview	-.13*	-.05	-.22***	-.18**	-.33***	-.20*	-.10	-.04	-.07	-.04	-.21**	-.08
Language of interview	-.01	.02	.08	.08	.03	.03	.05	.12	.23***	.26***	.24**	.24*
Contact frequency and exposure												
Contact frequency	.37***	.29***	.35***	.29***	.33***	.25***	.35***	.27***	.32***	.24***	.16*	.08
Exposure	.03	.05	.04	.05	.07	.07	.02	.02	.06	.06	.13	.14*
Contact quality												
Friendliness	—	.24***	—	.19**	—	.28***	—	.21***	—	.21***	—	.29***
Discrimination	—	-.03	—	.02	—	-.02	—	-.15**	—	-.11*	—	-.01
R ² Change	.18	.05	.18	.03	.19	.06	.15	.06	.07	.05	.10	.07
FChange	8.66	11.70	8.10	6.33	5.09	9.38	6.80	15.83	3.46	10.89	2.32	8.96
p	***	***	***	**	***	***	***	***	**	***	*	***

Note: Coefficients for variables entered at Step 1 of each regression analysis are listed under column “S1,” and coefficients for variables entered at Step 2 of each regression analysis are listed under column “S2.”

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

Table 8. Standardized Coefficients (β) from Ordinary Least Squares Regressions Predicting Welcoming Indicators among Indian Respondents

	Welcoming Others						Feeling Welcomed					
	Whites			Blacks			Whites			Blacks		
	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
Demographic controls												
Age	-.02	-.02	.02	.01	-.03	.00	.02	.01	.02	.00	-.05	-.01
Gender	.00	.03	-.05	-.04	-.11*	-.09	-.09	-.04	-.07	-.05	-.07	-.05
Level of education	.06	.09	-.03	-.03	.03	.03	.01	.05	.03	.03	.01	.01
Employment status	-.12*	-.09	-.07	-.03	-.05	-.02	-.25***	-.20***	-.18**	-.13*	-.11*	-.07
Homeownership	-.08	-.07	-.03	-.03	-.10	-.09	-.05	-.02	-.01	-.01	-.01	-.01
Political ideology	.00	.00	.02	.02	.02	.02	-.05	-.05	.03	.03	.01	.02
Mode of interview	-.13*	-.07	-.14**	-.10	-.14*	-.08	-.09	.01	-.01	.06	-.15**	-.07
Contact frequency and exposure												
Contact frequency	.32***	.21***	.28***	.19**	.16**	.11*	.41***	.26***	.37***	.23***	.20***	.14**
Exposure	-.07	-.07	.04	.05	.07	.07	.01	.02	-.03	-.01	.06	.05
Contact quality												
Friendliness	—	.24***	—	.26***	—	.31***	—	.34***	—	.36***	—	.36***
Discrimination	—	-.03	—	-.01	—	.00	—	-.14**	—	-.08	—	-.03
R ² Change	.11	.05	.10	.06	.06	.09	.16	.12	.12	.12	.07	.13
FChange	5.55	11.23	4.62	12.78	2.62	18.24	8.58	33.49	6.07	31.49	2.81	27.35
p	***	***	***	***	**	***	***	***	***	***	**	***

Note: Coefficients for variables entered at Step 1 of each regression analysis are listed under column “S1,” and coefficients for variables entered at Step 2 of each regression analysis are listed under column “S2.”
* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

Second, we used structural equation modeling (SEM) to estimate models that would allow us to correlate errors for the welcoming indicators. In separate models for each respondent group, we simultaneously tested how contact frequency, friendliness, and discrimination would predict the welcoming indicators in relation to all other groups while allowing errors to be correlated in relation to each target group (e.g., among white respondents, correlating errors pertaining to welcoming blacks and feeling welcomed by blacks) and across each welcoming indicator (e.g., among white respondents, correlating errors pertaining to feeling welcomed by blacks, Mexicans, and Indians).¹³ Our results from the SEM analyses were identical to those from the regression models reported previously in terms of the effects of contact frequency and friendliness.¹⁴ In every case, contact frequency (β s = .15–.34, $p < .001$) and contact friendliness (β s = .09–.34, p s from $<.01$ to $<.001$) both predicted greater tendencies to welcome others and feel welcomed by others. Consistent with results from the regression

models, whites' perceptions of discrimination predicted a lesser tendency to welcome blacks ($\beta = -.08$, $p < .05$) and lesser feelings of being welcomed by blacks and Indians ($\beta = -.24$ and $-.13$, $p < .001$) and Mexicans ($\beta = -.08$, $p < .01$). Also, perceived discrimination from whites predicted lesser feelings of being welcomed by whites among blacks and Indians ($\beta = -.14$ and $-.18$, $p < .001$) and marginally among Mexicans ($\beta = -.07$, $p = .08$). In contrast to findings from the regression models, however, SEM results showed that in addition to the effects of perceived discrimination from whites, blacks' perceptions of discrimination from Indians predicted lesser feelings of being welcomed by Indians ($\beta = -.10$, $p < .01$), whereas Indians' perceptions of discrimination by blacks predicted lesser feelings of being welcomed by blacks ($\beta = -.10$, $p < .01$).

DISCUSSION AND CONCLUSION

Our research examines how intergroup contact—both its frequency and quality—shapes welcoming processes among groups who vary in racial and nativity status. In line with our hypotheses, we found that greater frequency of contact predicted greater tendencies to welcome and feel welcomed by other groups regardless of nativity and race. These patterns were consistent for respondents from each U.S.-born and immigrant group and in relation to each of the other U.S.-born and immigrant groups studied. Furthermore, as hypothesized, these encouraging tendencies were enhanced when respondents rated the quality of their contact as friendly, and they persisted when controlling for demographic indicators as well as perceived discrimination by and exposure to the group in question.

These findings are particularly notable because they emerged in the racially

¹³We also allowed the contact indicators to covary, given robust correlations between respondents' reports of contact frequency (.43–.70, $p < .001$), friendliness (.38–.77, $p < .001$), and discrimination (.33–.65, $p < .001$) in relation to all other groups. The measures of contact frequency (sum) and friendliness (mean) were treated as observed variables in structural equation modeling (SEM) so that measurement of these concepts would be equivalent to those used in the regression analyses.

¹⁴Models estimated for whites and blacks fit the data well; whites: $\chi^2(60) = 177.13$, $p < .001$, Comparative Fit Index (CFI) = .96, root mean square error of approximation (RMSEA) = .06; blacks: $\chi^2(60) = 198.63$, $p < .001$, CFI = .95, RMSEA = .07. Models estimated for Mexicans and Indians fit somewhat less well; Mexicans: $\chi^2(60) = 289.56$, $p < .001$, CFI = .93, RMSEA = .09; Indians: $\chi^2(60) = 380.17$, $p < .001$, CFI = .92, RMSEA = .10. The SEM models are available from the first author upon request.

segregated contexts of Atlanta and Philadelphia, where opportunities for contact may be limited (see Logan and Stults 2011). We found varied levels of contact across groups, with U.S.-born whites and blacks reporting considerable contact with each other and Mexican and Indian immigrants reporting more limited contact with each other than with U.S.-born whites and blacks. Yet despite group differences in levels of contact, we observe robust associations between contact frequency and the welcoming indicators for all groups in relation to one another.¹⁵ Also, respondents from all four groups typically reported friendly contact; and although Mexicans reported lower levels of contact friendliness overall, greater contact friendliness still predicted their greater tendency to welcome and feel welcomed by each of the other groups. The consistent, positive effects of frequent and friendly contact across groups with different status positions are striking and somewhat unexpected given other work showing that positive contact effects are often weaker among members of lower status minority groups as compared to among higher status majority groups (Binder et al. 2009; Tropp and Pettigrew 2005). Nonetheless, complementing a long tradition of research on intergroup contact (Pettigrew and Tropp 2011), our findings strongly suggest that frequent and friendly contact experiences can facilitate processes of social integration. We also note that intergroup exposure was not a consistent predictor of the welcoming indicators, which highlights the importance of distinguishing between having groups represented in one's social environment (which may afford opportunities for contact) and having actual interaction with members

of those groups (Dixon 2006; Pettigrew et al. 2010).

As hypothesized, and in line with conceptual models highlighting whites' privileged status within the racial hierarchy (Bonilla-Silva and Glover 2004), perceived discrimination from whites consistently predicted lesser feelings of being welcomed among blacks, Mexicans, and Indians. We also considered how outsider status might further shape the role that perceived discrimination could play (Kim 1999); here, we observed mixed findings across groups and different sets of analyses. For instance, while the regressions and SEM models both revealed that perceived discrimination from whites predicted lesser feelings of being welcomed among blacks and Indians, SEM results also revealed that perceived discrimination from Indians predicted lesser feelings of being welcomed among blacks and perceived discrimination from blacks predicted lesser feelings of being welcomed among Indians. Although these patterns should be interpreted with caution, they suggest different ways in which racial and nativity hierarchies may shape perceptions and effects of discrimination among immigrant and minority groups. As an example, it could be that Indians are especially attuned to discrimination from U.S.-born groups, such as whites and blacks, due to their outsider status as immigrants (Kim 1999); at the same time, blacks, as an historically disadvantaged racial minority group, may be especially attuned to discrimination from groups perceived to have higher status in the racial hierarchy, such as whites who constitute the racial majority group and Indians who are often perceived to occupy a position as "honorary whites" (Bonilla-Silva and Glover 2004). Future research should continue to examine the ways in which immigrant and minority groups may differentially conceive of their status positions and correspondingly, how

¹⁵The only exception to this general pattern involves Mexican immigrants feeling welcomed in relation to Indian immigrants (see Table 7).

and why they are likely to be affected by discrimination within existing racial and nativity hierarchies.

Interestingly, and distinct from our hypotheses, whites were the only group for whom perceptions of discrimination from blacks, Mexicans, and Indians predicted lower feelings of being welcomed by each of these groups. Still, these results are consistent with models of group position (Blumer 1958; Sampson and Bobo 2014), which propose that members of dominant racial groups will seek to protect their privileged position and be wary of subordinate groups that appear to challenge the racial hierarchy. Additionally, whites' perceptions of discrimination from blacks predicted not only lesser feelings of being welcomed by blacks but less willingness to welcome blacks into their communities. These patterns may reflect recent trends in the United States showing that many whites feel engaged in a zero-sum competition with blacks and perceive they are discriminated against to the same degree as blacks (Norton and Sommers 2011; Piacenza 2014). Thus, our results indicate that group positions have the potential to shape the ways in which perceived discrimination affects welcoming processes among groups with high or low status in the U.S. racial and nativity hierarchies.

As evidenced by these findings, integration involves a relational process through which immigrants and the U.S.-born interact across a host of social arenas and from distinct status positions. Looking beyond how institutions and policies shape immigrant incorporation, we emphasize the importance of attending to relational dynamics between immigrants and the native born. Theories of immigrant integration would do well to consider further how people engage with one another as a key part of the integration process. Doing so would contribute a vital element to standard models, which

typically focus on broader contexts and grant less attention to the effects of individuals' contact encounters. The effects of contact on feeling welcome and welcoming others—demonstrated in the analyses presented here—suggest that individuals' perceptions of reception are meaningfully shaped by their contact experiences. Future research should specify the kinds of behaviors people conceive of as welcoming and investigate linkages between broader social contexts and relational dynamics between groups to clarify how a sense of welcoming can transform patterns of social integration among immigrants and the U.S.-born. Such research may also provide useful insights about how and under what conditions everyday contact experiences may cultivate deeper and lasting ties across group lines, such as those afforded by cross-group friendships (Davies et al. 2011). From a policy perspective, cities and organizations should be encouraged to continue to follow the lead of others (see Jones-Correa 2011; Welcoming America 2017) by creating opportunities for interaction and communication among members of diverse groups—even in relatively segregated contexts—so that they can engage with one another, build meaningful relationships, and contribute to their mutually shared goals.

REFERENCES

- Alba, Richard D., and Nancy Foner. 2015. *Strangers No More: Immigration and the Challenges of Integration in North America and Western Europe*. Princeton, NJ: Princeton University Press.
- Alba, Richard D., and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge, MA: Harvard University Press.
- Allport, Gordon. 1954. *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley Publishing Company.
- American Association for Public Opinion Research. 2008. *Standard Definitions:*

- Final Dispositions of Case Codes and Outcome Rates for Surveys*. 5th ed. Lenexa, KS: AAPOR.
- Barlow, Fiona Kate, Stefania Paolini, Anne Pedersen, Matthew J. Hornsey, Helena R. M. Radke, Jake Harwood, Mark Rubin, and Chris G. Sibley. 2012. "The Contact Caveat: Negative Contact Predicts Increased Prejudice More Than Positive Contact Predicts Reduced Prejudice." *Personality and Social Psychology Bulletin* 38:1629–43.
- Bean, Frank D., Susan K. Brown, and James D. Bachmeier. 2015. *Parents without Papers: The Progress and Pitfalls of Mexican American Integration*. New York: Russell Sage Foundation.
- Bergmann, Jonas. 2016. *Building Contact between Immigrants and Host Communities Is Vital to Integration*. Washington, DC: World Bank.
- Binder, Jens, Hanna Zagefka, Rupert Brown, Friedrich Funke, Thomas Kessler, Amelie Mummendey, Annemie Maquil, Stephanie Demoulin, and Jacques-Philippe Leyens. 2009. "Does Contact Reduce Prejudice or Does Prejudice Reduce Contact? A Longitudinal Test of the Contact Hypothesis." *Journal of Personality and Social Psychology* 96:843–56.
- Bloemraad, Irene. 2006. *Becoming a Citizen: Incorporating Immigrants and Refugees in the United States and Canada*. Berkeley, CA: University of California Press.
- Blumer, Herbert. 1958. "Race Prejudice as a Sense of Group Position." *Pacific Sociological Review* 1:3–7.
- Bobo, Lawrence, and Vincent L. Hutchings. 1996. "Perceptions of Racial Group Competition: Extending Blumer's Theory of Group Position to a Multiracial Social Context." *American Sociological Review* 61:951–72.
- Bonilla-Silva, Eduardo. 1997. "Rethinking Racism: Toward a Structural Interpretation." *American Sociological Review* 62:465–80.
- Bonilla-Silva, Eduardo, and Karen S. Glover. 2004. "We Are All Americans": The Latin Americanization of the United States." Pp. 149–83 in *The Changing Terrain of Race and Ethnicity*, edited by M. Krysan and A. E. Lewis. New York: Russell Sage Foundation.
- Ceobanu, Alin M., and Xavier Escandell. 2010. "Comparative Analyses of Public Attitudes toward Immigrants and Immigration Using Multinational Survey Data: A Review of Theories and Research." *Annual Review of Sociology* 36:309–28.
- Citrin, Jack, Donald P. Green, Christopher Muste, and Cara Wong. 1997. "Public Opinion toward Immigration Reform: The Role of Economic Motivations." *Journal of Politics* 59:858–82.
- Cook, Stuart W. 1978. "Interpersonal and Attitudinal Outcomes in Cooperating Interracial Groups." *Journal of Research and Development in Education* 12:97–113.
- Davies, Kristin, Linda R. Tropp, Arthur Aron, Thomas F. Pettigrew, and Stephen C. Wright. 2011. "Cross-Group Friendships and Intergroup Attitudes: A Meta-Analytic Review." *Personality and Social Psychology Review* 15:332–51.
- de Graauw, Els. 2016. *Making Immigrant Rights Real: Non-Profits and the Politics of Integration in San Francisco*. Ithaca, NY: Cornell University Press.
- Dixon, Jeffrey C. 2006. "The Ties That Bind and Those That Don't: Toward Reconciling Group Threat and Contact Theories of Prejudice." *Social Forces* 84:2179–204.
- Ellison, Christopher G., Heeju Shin, and David L. Leal. 2011. "The Contact Hypothesis and Attitudes toward Latinos in the United States." *Social Science Quarterly* 92:938–58.
- Enos, Ryan D. 2014. "The Causal Effect of Intergroup Contact on Exclusionary Attitudes." *Proceedings of the National Academy of Sciences* 111:3699–704.
- Espenshade, Thomas J., and Katherine Hempstead. 1996. "Contemporary American Attitudes toward U.S. Immigration." *International Migration Review* 30:535–70.
- Fetzer, Joel S. 2000. *Public Attitudes toward Immigration in the United States, France, and Germany*. New York: Cambridge University Press.
- Fussell, Elizabeth. 2014. "Warmth of the Welcome: Attitudes toward Immigrants and Immigration Policy in the United States." *Annual Review of Sociology* 40:479–98.
- Gast, Melanie Jones, and Dina G. Okamoto. 2016. "Moral or Civic Ties? Deservingness and Engagement among Undocumented Latinas in Non-Profit Organizations." *Journal of Ethnic and Migration Studies* 42:2013–30.
- Graf, Sylvie, Stefania Paolini, and Mark Rubin. 2014. "Negative Intergroup Contact Is More Influential, but Positive Intergroup Contact Is More Common: Assessing Contact Prominence and Contact Prevalence in Five Central European Countries."

- European Journal of Social Psychology* 44:536–47.
- Graham, James M. 2006. “Congeneric and (Essentially) Tau-Equivalent Estimates of Score Reliability: What They Are and How to Use Them.” *Educational and Psychological Measurement* 66:930–44.
- Hainmueller, Jens, and Daniel J. Hopkins. 2014. “Public Attitudes toward Immigration.” *American Review of Political Science* 17:225–49.
- Haubert, Jeanne, and Elizabeth Fussell. 2006. “Explaining Pro-Immigrant Sentiment in the U.S.: Social Class, Cosmopolitanism, and Perceptions of Immigrants.” *International Migration Review* 40:489–507.
- Hayward, Lydia, Linda R. Tropp, Matthew J. Hornsey, and Fiona K. Barlow. 2017. “Toward a Comprehensive Understanding of Intergroup Contact: Descriptions and Mediators of Positive and Negative Contact among Majority and Minority Groups.” *Personality and Social Psychology Bulletin* 43:347–64.
- Hopkins, Daniel J. 2010. “Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition.” *American Political Science Review* 104:40–60.
- Huang, Xi, and Cathy Yang Liu. 2017. “Welcoming Cities: Immigration Policy at the Local Government Level.” *Urban Affairs Review* 75:433–42.
- Jones-Correa, Michael. 2011. *All Immigration Is Local: Receiving Communities and Their Role in Successful Immigrant Integration*. Washington, DC: Center for American Progress.
- Kasinitz, Philip, John H. Mollenkopf, Mary C. Waters, and Jennifer Holdaway. 2008. *Inheriting the City: The Children of Immigrants Come of Age*. Cambridge, MA and New York: Harvard University Press and Russell Sage Foundation.
- Kiehne, Elizabeth, and Cecilia Ayon. 2016. “Friends or Foes: The Impact of Political Ideology and Immigrant Friends on Anti-Immigrant Sentiment.” *Journal of Sociology and Social Welfare* 43:135–54.
- Kim, Claire Jean. 1999. “The Racial Triangulation of Asian Americans.” *Politics and Society* 27:105–38.
- Leonard, Karen Isaksen. 2007. “India.” Pp. 458–68 in *The New Americans: A Guide to Immigration since 1965*, edited by M. C. Waters and R. Ueda. Cambridge, MA: Harvard University Press.
- Logan, John R., and Brian J. Stults. 2011. *The Persistence of Segregation in the Metropolis: New Findings from the 2010 Census*. Washington, DC: Project US2010.
- Mallet, Marie L., Rocío Calvo, and Mary C. Waters. 2017. “‘I Don’t Belong Anymore’: Undocumented Latino Immigrants Encounter Social Services in the United States.” *Hispanic Journal of Behavioral Sciences* 39:267–82.
- Marrow, Helen B., and Tiffany D. Joseph. 2015. “Excluded and Frozen out: Unauthorised Immigrants’ (Non)Access to Care after US Health Care Reform.” *Journal of Ethnic and Migration Studies* 41:2253–73.
- Massey, Douglas S., and Nancy A. Denton. 1988. “The Dimensions of Residential Segregation.” *Social Forces* 67:281–315.
- Massey, Douglas S., and Magaly Sánchez R. 2010. *Brokered Boundaries: Immigrant Identity in Anti-Immigrant Times*. New York: Russell Sage Foundation.
- Masuoka, Natalie, and Jane Junn. 2013. *The Politics of Belonging: Race, Public Opinion, and Immigration*. Chicago, IL: University of Chicago Press.
- McLaren, Lauren M. 2003. “Anti-Immigrant Prejudice in Europe: Contact, Threat Perception, and Preferences for the Exclusion of Migrants.” *Social Forces* 81:909–36.
- Mishra, Sangay. 2013. “Race, Religion, and Political Mobilization: South Asians in the Post-9/11 United States.” *Studies in Ethnicity and Nationalism* 13:115–37.
- Muste, Christopher P. 2013. “The Dynamics of Immigration Opinion in the United States, 1992–2012.” *Public Opinion Quarterly* 77:398–416.
- National Academies of Sciences, Engineering, and Medicine. 2015. *The Integration of Immigrants into American Society*, edited by M. C. Waters and M. G. Pineau. Washington, DC: National Academies Press.
- Norton, Michael I., and Samuel R. Sommers. 2011. “Whites See Racism as a Zero-Sum Game That They Are Now Losing.” *Perspectives on Psychological Science* 6:215–18.
- Okamoto, Dina G., and Kimberly Ebert. 2016. “Group Boundaries, Immigrant Inclusion, and the Politics of Immigrant-Native Relations.” *American Behavioral Scientist* 60:224–50.
- Padilla, Miguel A., and Jasmin Divers. 2013. “Coefficient Omega Bootstrap Confidence Intervals: Non-Normal Distributions.”

- Educational and Psychological Measurement* 73:956–72.
- Paolini, Stefania, Jake Harwood, Mark Rubin, Shenel Husnu, Nicholas Joyce, and Miles Hewstone. 2014. "Positive and Extensive Intergroup Contact in the Past Buffers against the Disproportionate Impact of Negative Contact in the Present." *European Journal of Social Psychology* 44:548–62.
- Pettigrew, Thomas F., Oliver Christ, Ulrich Wagner, and Jost Stellmacher. 2007. "Direct and Indirect Intergroup Contact Effects on Prejudice: A Normative Interpretation." *International Journal of Intercultural Relations* 31:411–25.
- Pettigrew, Thomas F., and Miles Hewstone. 2017. "The Single Factor Fallacy: Implications of Missing Critical Variables from an Analysis of Intergroup Contact Theory." *Social Issues and Policy Review* 11:8–37.
- Pettigrew, Thomas F., and Linda R. Tropp. 2011. *When Groups Meet: The Dynamics of Intergroup Contact*. New York: Psychology Press.
- Pettigrew, Thomas F., Ulrich Wagner, and Oliver Christ. 2010. "Population Ratios and Prejudice: Modelling Contact and Threat Effects." *Journal of Ethnic and Migration Studies* 36:635–50.
- Pew Research Center. 2016. "On Views of Race and Inequality, Blacks and Whites Are Worlds Apart." Retrieved June 19, 2017 (<http://www.pewsocialtrends.org/2016/06/27/on-views-of-race-and-inequality-blacks-and-whites-are-worlds-apart/>).
- Phelps, Joshua M., Reidar Ommundsen, Salman Turken, and Pal Ulleberg, P. 2013. "Intergroup Perception and Proactive Majority Integration Attitudes." *Social Psychology* 44:196–207.
- Piacenza, Joanna. 2014. "Americans' Racial Disconnect on Fairness and Discrimination." Retrieved June 19, 2017 (<https://www.prii.org/spotlight/graphic-of-the-week-americans-racial-disconnect-on-fairness-and-discrimination/>).
- Portes, Alejandro, and Rubén G. Rumbaut. [1990] 2014. *Immigrant America: A Portrait*. 4th ed. Berkeley: University of California Press.
- Powers, Daniel A., and Christopher G. Ellison. 1995. "Interracial Contact and Black Racial Attitudes: The Contact Hypothesis and Selectivity Bias." *Social Forces* 74:205–26.
- Raykov, Tenko. 1997. "Estimate of Composite Reliability for Congeneric Measures." *Applied Psychological Measurement* 21:173–84.
- Sampson, Frank L., and Lawrence D. Bobo. 2014. "Ethno-Racial Attitudes and Social Inequality." Pp. 515–45 in *The Handbook of the Social Psychology of Inequality*, edited by J. D. McLeod, E. J. Lawler, and M. Schwalbe. Dordrecht, Netherlands: Springer.
- Savelkoul, Michael, Miles Hewstone, Peer Scheepers, and Dietlind Stolle. 2015. "Does Relative Out-Group Size in Neighborhoods Drive Down Associational Life of Whites in the U.S.? Testing Constrict, Conflict, and Contact Theories." *Social Science Research* 52:236–52.
- Segovia, Francine, and Renatta Defever. 2010. "The Polls-Trends: American Public Opinions on Immigrants and Immigration Policy." *Public Opinion Quarterly* 74:375–94.
- Shelton, J. Nicole, and Jennifer A. Richeson. 2006. "Ethnic Minorities' Racial Attitudes and Contact Experiences with White People." *Cultural Diversity and Ethnic Minority Psychology* 12:149–64.
- Shevlin, Mark, Jeremy Miles, Mark Davies, and Stephanie Walker. 2000. "Coefficient Alpha: A Useful Indicator of Reliability?" *Personality and Individual Differences* 28:229–37.
- Sidanius, Jim, Shana Levin, Colette van Laar, and David O. Sears. 2008. *The Diversity Challenge: Social Identity and Intergroup Relations on the College Campus*. New York: Russell Sage Foundation.
- Stephan, Walter G., Kurt A. Boniecki, Oscar Ybarra, Ann Bettencourt, Kelly S. Ervin, Linda A. Jackson, Penny S. McNatt, and C. Lausanne Renfro. 2002. "The Role of Threats in the Racial Attitudes of Blacks and Whites." *Personality and Social Psychology Bulletin* 28:1242–54.
- Telles, Edward E., and Vilma Ortiz. 2008. *Generations of Exclusion: Mexican Americans, Assimilation, and Race*. New York: Russell Sage.
- Tropp, Linda R. 2007. "Perceived Discrimination and Interracial Contact: Predicting Interracial Closeness among Black and White Americans." *Social Psychology Quarterly* 70:70–81.
- Tropp, Linda R., and Rebecca Bianchi. 2006. "Valuing Diversity and Interest in Intergroup Contact." *Journal of Social Issues* 62:533–51.
- Tropp, Linda R., and Thomas F. Pettigrew. 2005. "Relationships between Intergroup

- Contact and Prejudice among Minority and Majority Status Groups." *Psychological Science* 16:951–57.
- Valentino, Nicholas A., Ted Brader, and Ashley E. Jardina. 2013. "Immigration Opposition among U.S. Whites: General Ethnocentrism or Media Priming of Attitudes about Latinos?" *Political Psychology* 34:149–66.
- Wagner, Ulrich, Oliver Christ, Thomas F. Pettigrew, Jost Stellmacher, and Carina Wolf. 2006. "Prejudice and Minority Proportion: Contact Instead of Threat Effects." *Social Psychology Quarterly* 69:380–90.
- Wagner, Ulrich, and Miles Hewstone. 2012. "Intergroup Contact." Pp. 193–209 in *Oxford Handbook of Intergroup Conflict*, edited by L. R. Tropp. New York: Oxford University Press.
- Welcoming America. 2017. "Welcoming Week: Connecting Neighbors, Serving Communities." Retrieved June 15, 2017 (<https://www.welcomingamerica.org/programs/welcoming-week>).
- Williams, Linda M. 2015. "Beyond Enforcement: Welcomeness, Local Law Enforcement, and Immigrants." *Public Administration Review* 75:433–42.

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