



U.S. children draw on personal experiences and perceived parental beliefs to form attitudes about immigrant groups

Laura Elenbaas^{*}, Megan N. Norris¹, Jane Singman², Myeong Won Chloe Kim, Miaomiao Zhang

Department of Human Development and Family Science, Purdue University, West Lafayette, IN, USA

ARTICLE INFO

Keywords:

Intergroup contact
Anti-immigrant bias
Social exclusion

ABSTRACT

Drawing on intergroup contact theory, this study investigated how 8- to 11-year-old American children's ($N = 262$, 55% girls, 52% White, in 2024 and 2025) direct contact with immigrants (e.g., at school) and perceptions of their parents' attitudes about them spending time with immigrants (comfortable or uncomfortable) informed their own attitudes about immigrant groups. More direct contact was associated with more positive attitudes, specifically, liking immigrants more and seeing immigrants as more American ($\beta s = .16$ and $.20$). At the same time, children who perceived their parents to be more comfortable with immigrants also liked immigrants more, felt closer to them, and were more interested in including them in their own activities ($\beta s = .56$, $.28$, and $.40$). These associations were comparable for children's attitudes about peers from Mexico, China, India, El Salvador, Nigeria, and Poland even though the sample had, on average, more frequent contact with people from some of those groups than with others. In an increasingly diverse country with a complex history around immigration, this new evidence is a helpful first step to understanding how American children integrate their personal experiences and perceptions of their parents' beliefs to form their own attitudes about immigrant groups.

Introduction

Immigrant-origin children fare better emotionally and academically when their peers are non-biased and inclusive (Suárez-Orozco et al., 2018). Positive intergroup contact, such as having classmates or teammates who are immigrants, helps reduce prejudice, find common ground, and support friendship among children who are not immigrants themselves (Jones & Rutland, 2018). However, children's peer relationships are often regulated by their parents (Ladd & Kochenderfer-Ladd, 2019), who may or may not hold their own biases about immigrants (Lee & Fiske, 2006). Despite well-established associations between parents' and children's attitudes about other social groups such as gender (Tenenbaum & Leaper, 2002), we know surprisingly little about the extent to which attitudes about immigrants are shared within U.S. families. Moreover, although this question is relevant to any population, it might be especially important for children who have few opportunities for real-life contact with immigrants and may be especially likely to "fill in the

^{*} Corresponding author at: Department of Human Development and Family Science, Purdue University, 1202 Mitch Daniels Blvd., West Lafayette, IN 47907-2055, USA.

E-mail addresses: elenbaa@purdue.edu (L. Elenbaas), mnnorris@gustavus.edu (M.N. Norris), singman2@wisc.edu (J. Singman), kim4663@purdue.edu (M.W.C. Kim), zhan5339@purdue.edu (M. Zhang).

¹ Gustavus Adolphus College, USA.

² University of Wisconsin Madison, USA.

blanks” with attitudes gleaned third hand (Elenbaas et al., 2025). Drawing on intergroup contact theory (Tropp et al., 2022), this study examined naturally occurring relations between 8- to 11-year-old U.S. children’s (a) direct contact with immigrants (e.g., neighbors), (b) perceptions of their parents’ attitudes about them spending time with immigrants (e.g. uncomfortable), and (c) children’s own attitudes (e.g., similarity) about immigrant groups. We focused on middle childhood when *meta*-analytic evidence suggests that the impact of intergroup contact (or lack thereof) may be strongest (Beelmann & Heinemann, 2014). We asked about immigrants from six different countries –Mexico, China, India, El Salvador, Nigeria, or Poland– reflecting countries comprising a high proportion of immigrants to the U.S. and the global diversity of the immigrant-origin population (Batalova, 2025).

U.S. Children’s attitudes about immigrants

The U.S. is home to the largest immigrant population in the world; 18 million children, 26% of the child population, are immigrants or children of immigrants (Batalova, 2025). Although national identity, i.e., being American, is often quite important to U.S. children (Hazelbaker & Mistry, 2022), developing attitudes about immigrants have traditionally received less attention in the U.S. relative to other countries around the world. Drawing on research from areas with a longstanding focus on native-born children’s attitudes about immigrants does, however, point to middle childhood as a potential turning point at which children have identified their national ingroup, begin to prefer it, see immigrants as outgroup members, and sometimes hold different beliefs about different national outgroups, a developmental pattern that generally aligns with predictions from social identity perspectives (Verkuyten, 2021).

For example, a series of foundational studies with children in Bosnia and Herzegovina, Cyprus, England, Israel, The Netherlands, Northern Ireland, and Spain found that children identified their national ingroup around age 5, but knew little about other countries until about age 8, at which point they expressed an ingroup preference (Barrett & Oppenheimer, 2011). In middle childhood, for example, British children spend time with British peers over Turkish peers (Palmer et al., 2022), German children include German peers on their sports team over Syrian peers (Beißert et al., 2020), and Dutch children befriend Dutch peers over Moroccan peers (Verkuyten, 2001). In the U.S., as well, American children tend to prefer other Americans over new immigrants (Santhanagopalan et al., 2025). Yet, ingroup bias does not necessarily imply outgroup dislike; older U.S. children and adolescents typically disapprove of calling immigrants names (Gönültaş & Mulvey, 2021) or bullying them (Hitti et al., 2023).

By about age 10 years, children in the multi-national studies introduced above expressed more detailed beliefs about the appearance and habits of national outgroups, with different attitudes about people from different countries (Barrett & Oppenheimer, 2011). Likewise, in middle childhood, Canadian (Siddiqui et al., 2020), Dutch (Thijs & Verkuyten, 2023), Indian (Ellwood-Lowe et al., 2020), Turkish (Davoodi et al., 2020), and American (Hussak & Cimpian, 2019) children start to conceptualize national identity in terms of common traditions and values, and describe immigrants as doing (Brown & Lee, 2015) and liking (Immel et al., 2026) different things than co-nationals. The evidence for what exactly U.S. children think about different, specific immigrant groups, however, is mixed. On the one hand, some studies show that U.S.-born children consider themselves “very American” but consider Latine (Brown, 2011) and Asian (Sierksma et al., 2022) immigrants only “a little American” and immigrants from Middle Eastern and North African (MENA) countries potentially “un-American” (Brown et al., 2017). On the other hand, these perceptions are quite variable. For example, one recent study found that 4- to 11-year-olds were split as to whether immigrant peers from “Andora” (a fictional country) would be more similar to Andorans or to Americans (Sodhi & Liberman, 2024).

Positive effects of intergroup contact

One key contributor to why some American children may see immigrants as more like themselves, or in a more non-biased light in general, may be their own personal experiences with immigrant peers and families, for instance at school or in their neighborhood. Across many intergroup contexts, positive and constructive interactions between children from different backgrounds, such as playing together or working on a project together, can support cross-group friendship formation (Tropp & Prenovost, 2008). The emotional and cognitive impacts of positive direct contact are many, but years of research point to three key mechanisms: these experiences alleviate children’s anxiety about interacting with outgroup members, build their capacity to take outgroup members’ perspectives, and help children identify what they have in common with people who they initially saw as different from themselves (Tropp et al., 2022).

In the context of immigrant-national relations in the U.S., as well, American children who experience more direct intergroup contact with immigrants tend to have more positive attitudes about immigrants overall (Gönültaş & Mulvey, 2019). For example, recent studies have found that, relative to children without contact, 6- to 11-year-olds who knew even one person from a MENA country felt less fearful towards this group overall (Brown et al., 2017), 8- to 12-year-olds who had more everyday interactions with people from Mexico, China, or Egypt felt more similar to people from these backgrounds (Elenbaas et al., 2025), and 13- to 15-year-olds who had more direct contact with immigrants in general were more likely to say they would personally intervene to stop someone from bullying a Latine immigrant peer (Hitti et al., 2023).

Overall, a *meta*-analysis of 122 studies on prejudice reduction from around the world found that intergroup contact is important throughout childhood, but its effect is slightly larger in middle childhood relative to younger ages (Beelmann & Heinemann, 2014), suggesting that the impact of contact may be strongest at this time. Moreover, a recent *meta*-analysis of 30 longitudinal studies of anti-immigrant bias in Europe found that individual differences grew stronger over the course of adolescence (Crocetti et al., 2021), suggesting that attitudes established in middle childhood may strengthen over subsequent periods of development.

Potential influence of parent attitudes

Notably, as children's attitudes about immigrants are forming, their chances to meet someone from another country, and their feelings about immigrants overall, are likely shaped by the decisions and beliefs of their parents (Ladd & Kochenderfer-Ladd, 2019). American adults hold a wide range of views about immigrants (Esses, 2021). Some see immigrants as untrustworthy "outsiders" (Fiske, 2018), perpetual foreigners who will never be "real" Americans (Zou & Cheryan, 2017), or even threats to their economic prosperity (Stephan et al., 2015). By contrast, adults who have frequent positive contact with immigrants (e.g., at work) tend to want to get to know immigrants better, believe they benefit society, and feel fine about immigration (Berg, 2024). Attitudes can also differ based on specific countries of origin (Lee & Fiske, 2006). For example, one recent study examined American's attitudes about 28 different immigrant groups (Toprakiran & Lai, 2024). Inspecting the six groups in the present study, results revealed that adults viewed immigrants from Mexico, India, El Salvador, and Nigeria as friendly and trustworthy but saw immigrants from China and Poland as antagonistic and untrustworthy. As well, immigrants from Mexico and India were considered American while immigrants from China, El Salvador, Nigeria, and Poland were seen as mixed on Americanness.

U.S. parents and their children have similar attitudes about gender (Tenenbaum & Leaper, 2002) and race (Degner & Dalege, 2013). Accurate or inaccurate, many U.S. children also think they know how their parents feel about people from different religious backgrounds (Brenick & Romano, 2016). Importantly, these perceptions matter. For example, from as young as age 4, the more White U.S. children *think* that their parents do not want them to play with Black peers the less frequently they actually play with Black peers (Rizzo et al., 2021). From an intergroup contact theory perspective, support from authority figures is one of the four key conditions for optimal contact experiences (Dovidio et al., 2017). By contrast, as these findings show, when children feel like the primary authority figures in their lives—their parents—do *not* like an outgroup they tend to be hesitant about that outgroup themselves.

Additionally, children may be especially likely to rely on inferences about their parents' attitudes when they have few opportunities to form their own opinions based on direct contact with immigrant peers or families (Miklikowska, 2017). In past decades, immigration to the U.S. has been relatively regionally stratified, with over half of new immigrants settling in just four large coastal states (Budiman, 2020). Outside of these regions, many American children may have been forming their attitudes about immigrants based primarily on information gleaned third hand, such as what they hear others saying (Girouard-Hallam & Norris, 2024) or see in the media (Bobba, Miniati, et al., 2024). As one example, a recent study with 8- to 12-year-olds in two U.S. regions with small immigrant populations found that direct contact was positively associated with children's broader attitudes, but the nature of children's indirect contact also mattered: when they saw or heard things that made people from other countries seem nice rather than mean their interest in meeting immigrant peers was positive rather than mixed (Elenbaas et al., 2025).

Ultimately, this is not an either-or issue; children integrate multiple, potentially competing messages and experiences to form attitudes about outgroups (Rutland et al., 2024). Given the myriad possible ways in which biases (or lack thereof) may be conveyed in family contexts (Aral et al., 2021), it is reasonable to hypothesize that U.S. children's attitudes about immigrants should be at least positively associated with what they *perceive* their parents' attitudes about immigrants to be. And given that immigrants' destinations are shifting, generating rapid increases in community diversity in less traditional receiving regions of the U.S. Batalova (2025), many American children who previously had little direct contact with immigrant peers may soon be able to apply their attitudes in inclusive or exclusive face-to-face interactions.

Current research

Drawing on intergroup contact theory (Tropp et al., 2022), this study was a first step to understanding how American children's direct contact with immigrants (e.g., school friends) *and* perceptions of their parents' attitudes about them spending time with immigrants (e.g., uncomfortable) shape children's own attitudes about immigrant groups. We tested four attitudes relevant to middle childhood: social preferences (e.g., liking), inclusion of the other in the self (closeness), shared group identity (how American), and affiliation intentions (e.g., to hang out).

We focused on middle childhood—ages 8 to 11 years—for three main reasons detailed above. First, in middle childhood (but not necessarily before), U.S. children reliably identify as American (Hazelbaker & Mistry, 2022), view immigrants as outgroup members (Brown & Lee, 2015), and may begin to hold different attitudes about different immigrant groups (Sierksma et al., 2022). Second, intergroup contact is especially impactful in middle childhood (Beelmann & Heinemann, 2014). Third, at this age, U.S. children *think* they know how their parents feel about other social groups (e.g., gender Killen et al., 2002), suggesting that they may be forming perceptions of their parents' attitudes about immigrants as well.

Our sample lived in an area with a small immigrant population; 7% of residents were immigrants at the time of data collection (AIC, 2023). Yet, nation-wide, this area also experienced one of the largest proportional increases in its immigrant population over the past decade, including a 46% increase in the proportion of child residents with immigrant parents (Batalova, 2025). Thus, it is an example of a place where U.S.-born children currently have more opportunities to meet immigrant peers than their parents did when they were young, *and* a place where direct contact is still relatively minimal, potentially leaving ample room for parents' attitudes to influence their children's attitudes.

Immigrants to the U.S. arrive from almost 200 countries of origin (Batalova, 2025). Our design asked about six different countries. We chose Mexico, China, and India because immigrants from these countries are the largest groups in the U.S. overall, representing 22%, 6%, and 6% of all immigrants, respectively (Kramer & Passel, 2025). They are also the largest immigrant groups in the area where our participants lived (AIC, 2023). We chose El Salvador, Nigeria, and Poland to represent other major sending regions of the world (Kramer & Passel, 2025).

Hypotheses

As noted above, we expected overall rates of direct intergroup contact to be relatively low for this sample. Yet, per intergroup contact theory (Tropp et al., 2022), we expected that children who personally had more direct contact with immigrants (e.g., neighbors) and children who perceived their parents were more comfortable with them spending time with immigrants (e.g., working on school projects together) would report stronger social preferences for immigrants (e.g., like them more), feelings of closeness with immigrants, perceptions of shared group identity (i.e., see them as more American), and intentions to affiliate with immigrants (e.g., invite them to an activity with friends). We tested for potential mean differences in each of these four attitudes by country (between-subjects) but given the variability in past research with U.S. children we considered these tests exploratory. We also explored whether the relations between direct contact, perceived parent attitudes, and children's own attitudes were stronger or weaker for immigrant groups with which participants might be more or less familiar due to their relative representation in the U.S. immigrant population.

Method

Participants

Power analyses using a Monte Carlo simulation approach (Muthén & Muthén, 2002) expecting effects around $\beta = .20$ for relations between direct contact and all four outcomes (Beelmann & Heinemann, 2014) and between perceived parent attitudes and all four outcomes (Degner & Dalege, 2013) indicated that a sample of 240 participants would yield power consistently above .85 to test our hypotheses. We enrolled 269 participants and later excluded six due to persistent inattentiveness and one due to parental interference. The final analytic sample was $N = 262$ children ages 8 to 11 years.

Table 1 provides complete sample demographics. Children reported their age, gender, race or ethnicity, and generational status. Parents reported their educational attainment, family annual income, political affiliation, and region.

We recruited and tested participants at 43 community sites in 2024 and 2025, as part of a larger project that we described to sites and families as investigating “how children in the U.S. think about children and families who immigrate to the U.S.” Sites included 15 community centers, five after-school programs, five libraries, five daycares, three festivals, three markets, two museums, two parks, one school, one summer camp, and one arts group. The areas where these sites were located ranged from < 1% to 21% immigrant residents (U.S. Census Bureau, 2024).

Table 1
Sample demographics, $N = 262$.

	<i>n</i>	Proportion		<i>n</i>	Proportion
Child Age in Years			Parent Educational Attainment		
8	57	.22	Some high school	3	.01
9	77	.29	High school degree or equivalent	40	.15
10	68	.26	Some college	39	.15
11	48	.18	Technical or vocational degree	7	.03
Not specified	12	.05	Two-year college or associates degree	20	.08
Child Gender			Four-year college or bachelor's degree	44	.17
Girl	144	.55	Master's degree	34	.13
Boy	99	.38	Doctorate degree	10	.04
Non-binary	4	.02	Not specified	65	.25
Another identity	3	.01	Family Annual Income		
Not specified	12	.05	< \$15 K	8	.03
Child Race or Ethnicity			\$15 K – \$25 K	15	.06
White	138	.52	\$25 K – \$50 K	42	.16
Black	37	.14	\$50 K – \$75 K	31	.12
Multiracial/Multiethnic	32	.12	\$75 K – \$100 K	22	.08
Another identity	11	.04	\$100 K – \$150 K	21	.08
Asian	9	.03	\$150 – \$200 K	22	.08
Latino/Hispanic	8	.03	\$200 K – \$250 K	8	.03
Middle Eastern	1	.00	\$250 K – \$500 K	8	.03
Not specified	26	.10	> \$500 K	2	.01
Child Generational Status			Not specified	83	.32
First-generation	6	.02	Parent Political Affiliation		
Second-generation	35	.13	Unaffiliated	74	.28
Third-generation +	169	.65	Democrat	53	.20
Not specified	52	.20	Republican	31	.12
			Another Party	12	.05
			Not specified	92	.35
			Family Region		
			Suburban	85	.32
			Rural	52	.20
			Urban	50	.19
			Not Specified	75	.29

Procedure

The study was approved by the Institutional Review Board at [masked], study ID 2024–614, and conducted in accordance with the ethical principles of the American Psychological Association. Parent consent and child assent were obtained for all participants.

The measures below were part of a larger study that children took approximately 25 min to complete independently and privately, using an iPad, with members of the research team nearby at their site to facilitate but not directly observe their responses. Children were randomly assigned to consider immigrants from either Mexico, China, India, El Salvador, Nigeria, or Poland. Measures were presented in a random order, with items randomized within measures.

Measures

Complete details on all measures are available on OSF: <https://osf.io/w2nfp/overview>.

Direct contact

Participants considered six questions about how often they interacted with immigrant peers and families from their randomly assigned country (Gönültaş & Mulvey, 2021), e.g., “At school, how many friends do you have who are from [Country] but now live in the U.S.?” from 0 = none to 3 = a lot, $\alpha = .83$, $\omega = .83$.

Perceived parent attitudes

Participants responded to four questions about their parents’ comfort with them interacting with immigrant peers from their randomly assigned country (Elenbaas et al., 2024), e.g., “How would they feel about you inviting kids from [Country] who now live in the U.S. over to your house?” from -2.5 = really uncomfortable to 2.5 = really comfortable, $\alpha = .77$, $\omega = .77$.

Social preferences

Participants answered three questions about their feelings towards peers and families from their assigned country (Brown, 2011), e.g., “How much do you like kids who are from [Country] and now live in the U.S.?” from 1 = really don’t like to 6 = really like, $\alpha = .66$, $\omega = .69$.

Inclusion of the other in the self

Participants considered two questions about how close they felt to kids from the U.S. (not used here) and kids from their assigned country, represented by overlapping circles, from 1 = no overlap to 5 = complete overlap (Vezzali et al., 2012).

Shared group identity

Participants answered one question, “In your opinion, how American are people who were born in [Country] but now live in the U.S.?” from 1 = not at all to 4 = very (Brown, 2011).

Affiliation intentions

Participants considered four questions about their interest in spending time with peers from their assigned country in different contexts (Cameron et al., 2006), e.g., “Imagine you’re at the park one day and you meet another kid who has just moved to your town from [Country], how much would you want to play or hang out with them?” from 1 = really don’t want to to 6 = really want to, $\alpha = .77$, $\omega = .78$.

Analysis plan

All analyses were conducted in Mplus 8 (Muthén & Muthén, 2017). First, we tested EFAs for fit, retaining factors if RMSEA $< .06$, SRMR $< .08$, and CFI and TLI $> .90$ (Hu & Bentler, 1999), and all standardized loadings $> .30$ (Costello & Osborne, 2005). Then, we tested for measurement invariance across the six countries (Mexico, China, India, El Salvador, Nigeria, or Poland, between-subjects) using multi-group CFAs comparing configural, metric, and scalar models. Next, we examined descriptives for each measure using average scores.

Finally, we tested our hypotheses about the effects of children’s direct contact and perceived parent attitudes on their social preferences, inclusion of the other in the self, shared group identity, and affiliation intentions using a path model. Model fit was evaluated as above. Missing data were rare (ranging from 2% to 5% across measures); we used ML estimation to test model fit and MLR estimation, a FIML method that generates more robust standard errors (Yuan & Bentler, 2000), to examine parameter estimates. We checked all demographics as covariates of both predictors. Lastly, we used a multi-groups approach, sequentially constraining paths from direct contact and perceived parent attitudes to the four outcomes, and following up with Wald χ^2 tests, to determine whether their strength or direction differed by country (between-subjects).

Results

All EFAs evidenced good fit and good loadings for single-factor models (see the Supplementary Materials). Multi-group CFAs for measurement invariance evidenced partial to strong invariance (see the Supplementary Materials). Descriptives, the final path model,

and comparisons across countries are below.

Descriptives

Direct Contact. Average contact was low, between “none” and “a few,” $M = .72$, $SD = .66$, $\min = 0$, $\max = 3$. Participants reported more direct contact with peers and families from Mexico ($M = 1.15$, $SE = .09$) than from any other country, all $ps < .05$, with the exception of China ($M = .84$, $SE = .10$), which did not differ from Mexico, $p = .43$; Nigeria $M = .73$, $SE = .09$, India $M = .58$, $SE = .10$, El Salvador $M = .52$, $SE = .10$, Poland $M = .50$, $SE = .10$; $F(5, 248) = 6.78$, $p < .001$, $\eta_p^2 = .12$.

In order to see whether children’s reports were related to an objective measure of their potential intergroup contact, the Supplementary Materials contain bivariate correlations between children’s self-reported direct contact and publicly available Census data on the proportion of immigrants overall and immigrants from their randomly assigned country living in participants’ townships (Tables S1 and S2), zip codes (Tables S3 and S4), and Census tracts (Tables S5 and S6) (U.S. Census Bureau, 2024). Overall, associations with children’s self-reports were most consistent for immigrants overall.

Perceived Parent Attitudes. Average perceptions were medium-positive, between “a little comfortable” and “comfortable,” $M = 1.34$, $SD = .92$, $\min = -2.50$, $\max = 2.50$. Participants perceived comparable parent attitudes about them spending time with peers from all six countries, all $ps > .05$; Nigeria $M = 1.49$, $SE = .14$, India $M = 1.46$, $SE = .14$, Mexico $M = 1.41$, $SE = .14$, China $M = 1.37$, $SE = .15$, Poland $M = 1.24$, $SE = .14$, El Salvador $M = 1.05$, $SE = .14$; $F(5, 250) = 1.45$, $p = .206$, $\eta_p^2 = .03$.

Social Preferences. Average preferences were positive, between “like” and “really like,” $M = 5.25$, $SD = .67$, $\min = 2.67$, $\max = 6.00$. Participants felt similar social preferences for peers and families from all six countries, all $ps > .05$; Mexico $M = 5.39$, $SE = .10$, China $M = 5.29$, $SE = .11$, India $M = 5.22$, $SE = .10$, El Salvador $M = 5.22$, $SE = .10$, Poland $M = 5.20$, $SE = .10$, Nigeria $M = 5.16$, $SE = .10$; $F(5, 251) = .70$, $p = .626$, $\eta_p^2 = .01$.

Inclusion of the Other in the Self. Average closeness was medium-high, between 50% and 75% overlap, $M = 3.43$, $SD = 1.13$, $\min = 1$, $\max = 5$. Participants felt similarly close to people from all six countries, all $ps > .05$; Mexico $M = 3.78$, $SE = .17$, China $M = 3.66$, $SE = .18$, Poland $M = 3.34$, $SE = .18$, Nigeria $M = 3.31$, $SE = .17$, El Salvador $M = 3.30$, $SE = .17$, India $M = 3.17$, $SE = .17$; $F(5, 245) = 1.91$, $p = .094$, $\eta_p^2 = .04$.

Shared Group Identity. Average shared identity was medium-high, close to “pretty American,” $M = 2.96$, $SD = .87$, $\min = 1$, $\max = 4$. Participants perceived equivalent shared identity with people from all six countries, all $ps > .05$; China $M = 3.13$, $SE = .14$, Nigeria $M = 3.11$, $SE = .13$, Mexico $M = 3.11$, $SE = .13$, India $M = 2.98$, $SE = .13$, Poland $M = 2.78$, $SE = .14$, El Salvador $M = 2.67$, $SE = .13$; $F(5, 247) = 2.16$, $p = .059$, $\eta_p^2 = .04$.

Affiliation Intentions. Average affiliation intentions were high, close to “want to,” $M = 5.06$, $SD = .75$, $\min = 2.5$, $\max = 6.00$. Participants were comparably interested in affiliating with peers from all six countries, all $ps > .05$; Nigeria $M = 5.22$, $SE = .11$, Mexico $M = 5.17$, $SE = .11$, Poland $M = 5.01$, $SE = .12$, El Salvador $M = 5.01$, $SE = .12$, China $M = 4.97$, $SE = .12$, India $M = 4.96$, $SE = .12$; $F(5, 250) = .95$, $p = .447$, $\eta_p^2 = .02$.

Path model

A path model linking children’s direct contact and perceived parent attitudes to their own social preferences, inclusion of the other in the self, shared group identity, and affiliation intentions fit the data well, $\chi^2(174) = 311.52$, $p < .001$, RMSEA = .06 90% CI [.05, .07], SRMR = .06, CFI = .91, TLI = .89. Analytic code is available in the Supplementary Materials.

As illustrated in Fig. 1, more direct contact was associated with more positive social preferences, $b = .16$, $SE = .06$, $\beta = .16$, $SE = .06$,

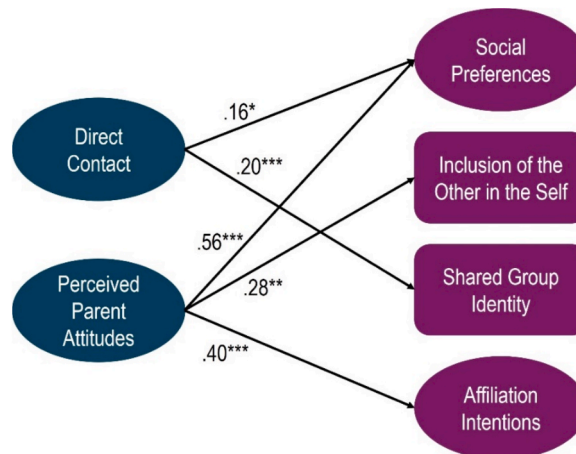


Fig. 1. Direct Contact and Perceived Parent Attitudes Inform U.S. Children’s Attitudes about Immigrants Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Numbers on paths are standardized betas (β).

$p = .011$, and higher shared group identity, $b = .27$, $SE = .09$, $\beta = .20$, $SE = .06$, $p = .002$. Direct contact was positively but not significantly associated with inclusion of the other in the self, $b = .06$, $SE = .12$, $\beta = .04$, $SE = .07$, $p = .617$, or affiliation intentions, $b = .14$, $SE = .08$, $\beta = .12$, $SE = .07$, $p = .077$.

Likewise, more positive perceived parent attitudes were associated with more positive social preferences, $b = .37$, $SE = .08$, $\beta = .56$, $SE = .08$, $p < .001$, higher inclusion of the other in the self, $b = .35$, $SE = .11$, $\beta = .28$, $SE = .09$, $p = .001$, and stronger affiliation intentions, $b = .33$, $SE = .10$, $\beta = .40$, $SE = .09$, $p < .001$. Perceived parent attitudes were positively but not significantly associated with shared group identity, $b = .12$, $SE = .08$, $\beta = .12$, $SE = .08$, $p = .132$.

Among all potential demographic covariates (see Table 1), only child age and parent education were significant. Older children reported more positive parent attitudes, $b = .26$, $SE = .07$, $\beta = .27$, $SE = .06$, $p < .001$, and children whose parents had completed more years of education reported lower direct contact, $b = -.21$, $SE = .11$, $\beta = -.17$, $SE = .08$, $p = .047$, but more positive parent attitudes, $b = .60$, $SE = .15$, $\beta = .33$, $SE = .07$, $p < .001$. We also checked alternative models treating child age and parent education as moderators of the effects in Fig. 1 (see the Supplementary Materials), but neither indicated significant moderation so we retained these as covariates. Child generational status was not a significant covariate, however, for transparency, we report descriptives for the experiences, perceptions, and attitudes of first- and second-generation versus third-generation + participants in the Supplementary Materials (no average differences emerged).

Multi-groups comparison

An initial unconstrained model fit the data poorly, $\chi^2 (1174) = 1907.08$, $p < .001$, RMSEA = .12 90% CI [.11,.13], SRMR = .17, CFI = .67, TLI = .64. Constraining the paths from direct contact to all four outcomes did not result in a significant reduction in model fit, $\Delta \chi^2 (20) = 22.95$, $p = .291$, indicating that the strength and direction of the relations between direct contact and children's own attitudes were comparable across countries.

Constraining the paths from perceived parent attitudes to all four outcomes did result in a significant reduction in model fit, $\Delta \chi^2 (20) = 44.61$, $p = .001$. However, follow-up Wald tests individually constraining paths from perceived parent attitudes to each outcome across countries were not significant: social preferences $\chi^2 (5) = 7.60$, $p = .180$, inclusion of the other in the self $\chi^2 (5) = 3.37$, $p = .643$, shared group identity $\chi^2 (5) = 10.04$, $p = .074$, affiliation intentions $\chi^2 (5) = 6.12$, $p = .294$. We concluded that the strength and direction of relations between perceived parent attitudes and children's own attitudes did not vary meaningfully by the country of origin in question.

Discussion

Framed by intergroup contact theory (Tropp & Prenovost, 2008) and focusing on middle childhood when attitudes about immigrants are actively forming (Gönültaş & Mulvey, 2019), this study was a first step in understanding how 8- to 11-year-old American children's direct contact with immigrants and perceptions of their parents' attitudes about them spending time with immigrants informed their own attitudes about immigrant groups. As predicted, direct contact was associated with more positive attitudes, specifically, liking immigrants more and seeing immigrants as more American (with small effect sizes). At the same time, results shed new light on how American parents may influence their children's developing attitudes about immigrants; specifically, children who perceived their parents to be more comfortable with immigrants also reported liking immigrants more, feeling closer to them, and wanting to include them in their own activities (with medium to large effect sizes). These associations were consistent for children's attitudes about people from Mexico, China, India, El Salvador, Nigeria, and Poland even though children had, on average, more frequent contact with peers and families from some of those countries than with others.

Positive effects of intergroup contact

Children integrate multiple messages and experiences to form their attitudes about outgroups (Rutland et al., 2024). The first set of results from this study align well with predictions from intergroup contact theory (Tropp et al., 2022): similar to other children around the world (Jones & Rutland, 2018), American children who personally knew more people who had immigrated to the U.S. reported stronger social preferences for others with the same national background and perceived them as more American. Although the effects did not reach statistical significance, intergroup contact was also associated with feeling closer to immigrants and wanting to include them in activities. At the same time, these relations are especially noteworthy in our sample of children who lived in an area of the U.S. with a small immigrant population and reported low levels of intergroup contact overall. Together with other U.S. studies demonstrating the power of even a few positive cross-group relationships (e.g., Brown et al., 2017), these results highlight just how much children construe based on a very modest amount of personal experience with outgroup members.

We asked children about immigrants from six countries: Mexico, China, and India because these are the largest immigrant groups in the U.S. and El Salvador, Nigeria, and Poland to represent additional important sending regions (Kramer & Passel, 2025). As expected, children did report the most direct contact with people from Mexico, followed by China, and comparably low rates of contact with each of the other groups. Interestingly, however, there were no average differences in children's own intergroup attitudes, or in the strength of the relations between direct contact and children's attitudes, by their randomly assigned country.

On the one hand, this is perhaps surprising given the pro- and anti-immigrant attitudes of children in other areas of the world tend to differentiate in middle childhood (Barrett & Oppenheimer, 2011). On the other hand, it is perhaps not surprising for children experiencing little direct contact. Although some prior studies have found that older U.S. children think differently about different

immigrant groups (e.g., Brown, 2011), other studies are inconclusive on this point (e.g., Sodhi & Liberman, 2024), and one recent study with 8- to 12-year-olds in a similar area of the U.S. found that children's interest in getting to know immigrant peers was comparable across different countries of origin (Mexico, China, or Egypt, Elenbaas et al., 2025).

By adulthood, Americans hold specific attitudes about specific immigrant groups (Toprakiran & Lai, 2024). Overall, however, American children's responses in the current study more closely reflected a generic "different from us" assumption about immigrants. As would be expected with a simple ingroup-outgroup distinction (Verkuyten, 2021), participants were not highly prejudiced on average, instead reporting that they did like immigrant peers and families, felt at least somewhat close to kids from other countries, perceived this outgroup as still "pretty American," and likely would spend time with immigrant peers if the opportunity arose. Nevertheless, related research suggests that it takes more than cautious optimism for children to actually form an intergroup friendship (Qi et al., 2022).

Positive relations with Parents' attitudes

In particular, support from authority figures is a key condition for optimal intergroup contact (Dovidio et al., 2017). In childhood, parents are central authority figures in the lives of their children, with considerable influence over their peer relationships (Ladd & Kochenderfer-Ladd, 2019). Our sample overall thought that their parents were somewhere between "a little comfortable" and "comfortable" with them spending time with immigrants from Mexico, China, India, El Salvador, Nigeria, or Poland, and 11% of children were confident that their parents would be "really comfortable" with them doing all four possible activities together: working on a school project, playing or hanging out, inviting them over to their house, and being friends. However, children's perceptions were quite variable. About one in 13 children (7% of the sample) felt that their parents were, on average, uncomfortable with immigrants, and fully 30% thought that their parents would not want them to do at least one of the four possible activities with an immigrant peer.

Critically, participants who thought that their parents were more comfortable with immigrants also personally liked immigrants more, felt closer to them, and wanted to include them in their own activities. Although the effect did not reach statistical significance, positive parent attitudes were also associated with perceiving immigrants as more American. In other words, even *thinking* that their parents would be for or against them spending time with an immigrant peer was enough to shift American children's attitudes towards or away from the idea. Because of changing demographic trends in their region, our participants are likely to have increasing opportunities for direct interactions with immigrant peers as they move into adolescence (Batalova, 2025). Yet, in middle childhood, they had already formed attitudes about immigrants based largely on information gleaned third hand, including inferences about their parents' attitudes in this domain.

Possible transmission processes

There is a rich history of research on immigrant-origin parents' socialization of their children to appreciate important parts of their culture while being prepared to face potential bias in the U.S. (Umaña-Taylor & Hill, 2020). By contrast, the literature on how U.S.-born parents prepare their children to interact with immigrant peers is surprisingly scarce. Taking a broader lens, researchers studying parents' influences on children's peer relationships distinguish between indirect processes that occur as part of family life but have implications for children's peer relationships (e.g., attachment, discipline strategies), and direct processes through which parents explicitly manage their children's peer relationships (Ladd & Kochenderfer-Ladd, 2019).

Focusing first on direct processes, parents function as designers, mediators, supervisors, and advisors, shaping their children's access to peers by choosing the neighborhood where the family lives and the school the child attends, creating or restricting informal opportunities for friendship (e.g., play groups), setting rules about and monitoring their children's peer interactions, and offering advice on navigating social situations from friendship to bullying (McDowell & Parke, 2009). In so doing, parents may expand or contract their children's opportunities to encounter neighbors or classmates from other countries, spend time on shared interests, and become friends.

Moreover, parents may convey their own attitudes about immigrants directly or indirectly. For example, related research shows that some parents express explicit racial prejudice while others avoid the topic of race (Lloyd & Gaither, 2018). Likewise, while some gender attitudes are overtly expressed, most parents instead convey biases indirectly, for instance through their choices about their children's clothing, toys, chores, and recreational activities (Leaper, 2022). Thus, some parents may convey direct messages about their attitudes towards immigrants. However, given that children pick up on even slight nonverbal cues of adults' discomfort in intergroup contexts, such as leaning away or frowning (Skinner & Perry, 2020), it is also possible that even subtle emotional expressions might give children clues about their parents' attitudes towards this social group.

Limitations and future directions

As suggested above, now that we know American children draw on their perceptions of their parents' comfort with immigrants to form their own attitudes, we can go on to measure parents' perspectives directly and investigate how they may convey their beliefs to their children. Parents may, for example, directly prohibit their children from spending time with immigrant peers or families, subtly suggest that other playmates would be better, overtly express prejudice, or covertly signal apprehension (Elenbaas et al., 2026). Moreover, this correlational study provides a snapshot of American children's experiences, but longitudinal research is needed to explain the joint and separate effects of parents' attitudes and peer contact on developing thinking about immigrants (Bobba, Branje, et al., 2024) as well as how parents and peers may shape attitudes differently across childhood and into adolescence (Miklikowska,

2017).

As not all measures in this study demonstrated strong invariance across groups, future work might also examine unique biases that emerge about specific immigrant groups, for instance through open-ended measures, to capture nuanced differences in children's thinking about groups with different histories (Lei et al., 2023). Conceptually, in the context of the U.S., the broad social category of "immigrant" tends to evoke assumptions about range of other group memberships including (but not limited to) race or ethnicity (Brown, 2011), language (DeJesus et al., 2018), religion (Brown et al., 2017), and culture (e.g., food Immel et al., 2026), all of which also independently matter for U.S. children's intergroup attitudes. In this study, we did not find differences in children's attitudes based on the immigrant group under consideration. This supported generalizability; we were able to draw conclusions about contact, parent attitudes, and children's own attitudes that were not tied to one specific immigrant group. Simultaneously, we welcome further research exploring children's thinking about multiple intersecting dimensions of immigration, nationality, and identity in the U.S. and around the world (e.g., Beißert et al., 2020; Santhanagopalan et al., 2021; Tenenbaum & Ruck, 2012; Verkuyten et al., 2014).

Likewise, different regions of the U.S. are home to higher and lower proportions of immigrants overall and to distinctly different groups of immigrants (Kramer & Passel, 2025), and future studies might aim to assess the interaction of parent beliefs and personal experiences when opportunities for contact are much higher than those experienced by our participants. Additionally, this study assumed (and found) that children's reported direct contact was positive (e.g., friends at school). However, not all intergroup contact goes smoothly (McKeown & Dixon, 2017). Future studies should capture the valence of these early experiences, as even rare instances of hostile contact are potent predictors of prejudice (Paolini et al., 2024).

Methodologically, we also encourage research integrating self-report and publicly available indices of children's experiences of and opportunities for intergroup contact. In the U.S., Census data on the number of immigrants living in areas as large as a state or as small as a Census tract can be used to approximate local opportunities for intergroup contact (U.S. Census Bureau, 2024). For instance, recent studies on diversity exposure and children's racial (e.g., Burke et al., 2023) and social class (e.g., Elenbaas, 2019) biases have used zip codes, and scholars studying neighborhood effects on development (e.g., poverty, violence, assets) often use Census tracts (Leventhal, 2018). Townships might best represent where participants in the current study spent most of their time, and, as detailed in the Supplementary Materials, children who reported more direct contact with immigrant peers and families did indeed live in areas where immigrants made up a larger portion of the population. Whatever the relevant unit of analysis for the study context, assessment of participant-reported social ties remains equally important, as researchers in this area have long documented that opportunities for intergroup contact are necessary but not sufficient for the formation of actual cross-group relationships (Juvonen et al., 2019).

Finally, developmentally, many studies find a dip in children's explicit national, ethnic, or racial prejudice in middle childhood relative to early childhood (Raabe & Beelmann, 2011). Among the possible explanations, increases in both moral reasoning and sensitivity to social norms seem key: older children are less likely to express prejudice because they believe it is wrong, perceive that others disapprove, or both (Killen & Rutland, 2011). This does not mean that prejudice disappears; for example, 36% of participants in the current study gave at least one negative response on their attitude measures (e.g., did not want to affiliate). However, most assessments of children's intergroup attitudes are self-reports (Fukuda et al., 2025), and in middle childhood, these may be capturing personal beliefs, social expectations, or both. Moreover, recent studies point to emerging individual differences in motivations to respond without prejudice in middle childhood that align with these two developmental explanations (Pitcher & Smith, 2025). Borrowing from social psychology (Plant & Devine, 1998), internal motivation to respond without prejudice comes from a personal belief that it is wrong and external motivation to respond without prejudice comes from social pressure to avoid appearing biased. Adults (Butz & Plant, 2009) and likely older children (Hughes et al., 2016) can be internally motivated, externally motivated, both, or neither, with different implications. For example, one recent study found that 8- to 11-year-old Dutch children with higher internal motivation to respond without prejudice also had more positive attitudes about Turkish and Moroccan peers while children with higher external motivation had less positive outgroup attitudes (Thijs et al., 2023). There is also new evidence that the nature of parents' motivations to respond without prejudice may shape the behavioral standards that they set for their children (Scott et al., 2019). Illuminating social, moral, and motivational reasons for developmental changes and individual differences in intergroup attitudes in middle childhood (and beyond) is an important area of ongoing research.

Conclusions

Immigrant-origin children do better socially and emotionally when they are accepted by their U.S.-born peers (Suárez-Orozco et al., 2018) and native-born children are less anxious when they have realistic rather than prejudiced attitudes about immigrants (Bobbà & Crocetti, 2025). Although positive intergroup contact helps, children are unlikely to have such experiences if their parents do not support it due to biases of their own. This study examined naturally occurring relations between 8- to 11-year-old American children's direct contact with immigrants, perceptions of their parents' attitudes about them spending time with immigrants, and their own attitudes towards people from Mexico, China, India, El Salvador, Nigeria, or Poland. Overall, children with more direct contact and children who perceived their parents to be more comfortable held more positive and inclusive attitudes towards immigrants themselves. In an increasingly diverse country with a complex history around immigration, this evidence is a helpful first step to understanding how families may shape children's social experiences with and attitudes about immigrants.

Ethics: This research was approved by the IRB at Purdue University, study ID 2024-614.

Data. Data are available from the corresponding author on reasonable request. Analytic code is in the Supplementary Materials. Measures are on OSF: <https://osf.io/w2nfp/overview>.

Funding.

This research was funded by awards from the Clifford B. Kinley Trust at Purdue University and the College of Health and Human

Sciences DEI Small Grants Program.

CRediT authorship contribution statement

Laura Elenbaas: Writing – original draft, Visualization, Supervision, Software, Resources, Methodology, Funding acquisition, Formal analysis, Conceptualization. **Megan N. Norris:** Writing – review & editing, Supervision, Methodology, Investigation, Conceptualization. **Jane Singman:** Writing – review & editing, Project administration, Investigation, Data curation. **Myeong Won Chloe Kim:** . **Miaomiao Zhang:** Writing – review & editing, Validation, Investigation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jecp.2026.106650>.

Data availability

Data will be made available on request.

References

- AIC. (2023). *Immigrants in Indiana*. American Immigration Council. <https://www.americanimmigrationcouncil.org/research/immigrants-in-indiana>.
- Aral, T., Juang, L. P., Schwarzenenthal, M., & Rivas-Drake, D. (2021). The role of the family for racism and xenophobia in childhood and adolescence. *Review of General Psychology*, 26(3), 327–341. <https://doi.org/10.1177/10892680211056320>
- Barrett, M., & Oppenheimer, L. (2011). Findings, theories, and methods in the study of children's national identifications and national attitudes. *European Journal of Developmental Psychology*, 8(1), 5–24. <https://doi.org/10.1080/17405629.2010.533955>
- Batalova, J. (2025). *Frequently requested statistics on immigrants and immigration in the United States*. Migration Policy Institute. <https://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states>.
- Beelmann, A., & Heinemann, K. S. (2014). Preventing prejudice and improving intergroup attitudes: A meta-analysis of child and adolescent training programs. *Journal of Applied Developmental Psychology*, 35(1), 10–24. <https://doi.org/10.1016/j.appdev.2013.11.002>
- Beißert, H., Gönültaş, S., & Mulvey, K. L. (2020). Social inclusion of refugee and native peers among adolescents: It is the language that matters! *Journal of Research on Adolescence*, 30(1), 219–233. <https://doi.org/10.1111/jora.12518>
- Berg, J. A. (2024). Assessing the effects of intergroup contact on immigration attitudes. *The Social Science Journal*, 61(1), 239–255. <https://doi.org/10.1080/03623319.2020.1814982>
- Bobba, B., Branje, S., & Crocetti, E. (2024). Parents' and classmates' influences on adolescents' ethnic prejudice: A longitudinal multi-informant study. *Child Development*, 95(5), 1522–1538. <https://doi.org/10.1111/cdev.14087>
- Bobba, B., & Crocetti, E. (2025). The toll of prejudice: The longitudinal interplay between ethnic prejudice and well-being in adolescence. *European Journal of Personality*, 39(4), 614–634. <https://doi.org/10.1177/08902070241289965>
- Bobba, B., Miniati, A., & Crocetti, E. (2024). When ethnic minorities hit the headlines: The longitudinal associations between news features and adolescents' ethnic prejudice. *Journal of Research on Adolescence*, 34(4), 1456–1470. <https://doi.org/10.1111/jora.13013>
- Brenick, A., & Romano, K. (2016). Perceived peer and parent out-group norms, cultural identity, and adolescents' reasoning about peer intergroup exclusion. *Child Development*, 87(5), 1392–1408. <https://doi.org/10.1111/cdev.12594>
- Brown, C. S. (2011). American elementary school children's attitudes about immigrants, immigration, and being an American. *Journal of Applied Developmental Psychology*, 32(3), 109–117. <https://doi.org/10.1016/j.appdev.2011.01.001>
- Brown, C. S., Ali, H., Stone, E. A., & Jewell, J. A. (2017). U.S. children's stereotypes and prejudicial attitudes toward Arab Muslims. *Analyses of Social Issues and Public Policy*, 17(1), 60–83. <https://doi.org/10.1111/asap.12129>
- Brown, C. S., & Lee, C. A. (2015). Impressions of immigration: Comparisons between immigrant and nonimmigrant children's immigration beliefs. *Analyses of Social Issues and Public Policy*, 15(1), 160–176. <https://doi.org/10.1111/asap.12067>
- Budiman, A. (2020). *Key findings about U.S. immigrants*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2020/08/20/key-findings-about-u-s-immigrants/>.
- Burke, N., Rizzo, M. T., Britton, T. C., & Rhodes, M. (2023). Does racial diversity affect White children's racial bias and reasoning? Depends on where they live and how their social world is structured. *Developmental Psychology*, 59(11), 2094–2104. <https://doi.org/10.1037/dev0001644>
- Butz, D. A., & Plant, E. A. (2009). Prejudice control and interracial relations: The role of motivation to respond without prejudice. *Journal of Personality*, 77(5), 1311–1342. <https://doi.org/10.1111/j.1467-6494.2009.00583.x>
- Cameron, L., Rutland, A., Brown, R., & Douch, R. (2006). Changing children's intergroup attitudes toward refugees: Testing different models of extended contact. *Child Development*, 77(5), 1208–1219. <https://doi.org/10.1111/j.1467-8624.2006.00929.x>
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation*, 10(1), 7. <https://doi.org/10.7275/jy11-4868>
- Crocetti, E., Albarello, F., Prati, F., & Rubini, M. (2021). Development of prejudice against immigrants and ethnic minorities in adolescence: A systematic review with meta-analysis of longitudinal studies. *Developmental Review*, 60, Article 100959. <https://doi.org/10.1016/j.dr.2021.100959>
- Davoodi, T., Soley, G., Harris, P. L., & Blake, P. R. (2020). Essentialization of social categories across development in two cultures. *Child Development*, 91(1), 289–306. <https://doi.org/10.1111/cdev.13209>
- Degner, J., & Dalege, J. (2013). The apple does not fall far from the tree, or does it? A meta-analysis of parent–child similarity in intergroup attitudes. *Psychological Bulletin*, 139(6), 1270–1304. <https://doi.org/10.1037/a0031436>
- DeJesus, J. M., Hwang, H. G., Dautel, J. B., & Kinzler, K. D. (2018). “American = English speaker” before “American = White”: The development of children's reasoning about nationality. *Child Development*, 89(5), 1752–1767. <https://doi.org/10.1111/cdev.12845>

- Dovidio, J. F., Love, A., Schellhaas, F. M. H., & Hewstone, M. (2017). Reducing intergroup bias through intergroup contact: Twenty years of progress and future directions. *Group Processes and Intergroup Relations*, 20(5), 606–620. <https://doi.org/10.1177/1368430217712052>
- Elenbaas, L. (2019). Perceived access to resources and young children's fairness judgments. *Journal of Experimental Child Psychology*, 188. <https://doi.org/10.1016/j.jecp.2019.104667>
- Elenbaas, L., Hitti, A., Kneeskern, E., & Ackerman, A. (2026). Mean, pushy, reckless, and different: US parents' stereotypes generate discomfort with their children's intergroup peer interactions. *Social Development*, 35(1), Article e70044. <https://doi.org/10.1111/sode.70044>
- Elenbaas, L., Hitti, A., Kneeskern, E., Ackerman, A., Fisher, K., Cao, J., & Irwin, C. (2024). "Honestly, they are just like us": U.S. parents choose middle class gender and racial ingroup peers for their children. *Developmental Psychology*, 60(4), 637–648. <https://doi.org/10.1037/dev0001724>
- Elenbaas, L., Mulvey, K. L., Brown, C. S., Singman, J., & Norris, M. N. (2025). Direct and indirect intergroup contact are related to American children's attitudes about immigrant groups. *Journal of Applied Developmental Psychology*, 100. <https://doi.org/10.1016/j.appdev.2025.101841>
- Ellwood-Lowe, M. E., Berner, C., Dunham, Y., & Srinivasan, M. (2020). Indian = Hindu? the development of nationalist attitudes among Hindu and Muslim children in India. *Child Development*, 91(4), 1375–1394. <https://doi.org/10.1111/cdev.13311>
- Esses, V. M. (2021). Prejudice and discrimination toward immigrants. *Annual Review of Psychology*, 72(1), 503–531. <https://doi.org/10.1146/annurev-psych-080520-102803>
- Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science*, 27(2), 67–73. <https://doi.org/10.1177/0963721417738825>
- Fukuda, E., Scott, K. E., Swerbenksi, K. L., Huth, N., Barnett, K. C., Sarmiento, N., Henkel, M. A., & Shutts, K. (2025). A systematic review of modern measures for capturing children's ethnic and racial attitudes, stereotypes, and discrimination. *Developmental Review*, 76, Article 101189. <https://doi.org/10.1016/j.dr.2025.101189>
- Girouard-Hallam, L. N., & Norris, M. N. (2024). Overheard and understood: A systematic review of children's learning from overhearing. *Translational Issues in Psychological Science*. <https://doi.org/10.1037/tps0000399>
- Gönültaş, S., & Mulvey, K. L. (2019). Social-developmental perspective on intergroup attitudes towards immigrants and refugees in childhood and adolescence: A roadmap from theory to practice for an inclusive society. *Human Development*, 63(2), 90–111. <https://doi.org/10.1159/000503173>
- Gönültaş, S., & Mulvey, K. L. (2021). The role of immigration background, intergroup processes, and social-cognitive skills in bystanders' responses to bias-based bullying toward immigrants during adolescence. *Child Development*, 92(3), e296–e316. <https://doi.org/10.1111/cdev.13476>
- Hazelbaker, T., & Mistry, R. S. (2022). Negotiating Whiteness: Exploring White elementary school-age children's racial identity development. *Social Development*, 31(4), 1280–1295. <https://doi.org/10.1111/sode.12602>
- Hitti, A., Gönültaş, S., & Mulvey, K. L. (2023). What motivates adolescent bystanders to intervene when immigrant youth are bullied? *Journal of Research on Adolescence*, 33, 603–617. <https://doi.org/10.1111/jora.12829>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hughes, J. M., Alo, J., Krieger, K., & O'Leary, L. M. (2016). Emergence of internal and external motivations to respond without prejudice in White children. *Group Processes & Intergroup Relations*, 19(2), 202–216. <https://doi.org/10.1177/1368430215603457>
- Hussak, L. J., & Cimpian, A. (2019). "It feels like it's in your body": How children in the United States think about nationality. *Journal of Experimental Psychology: General*, 148, 1153–1168. <https://doi.org/10.1037/xge0000567>
- Immel, B., Sodhi, S., & Liberman, Z. (2026). Children expect national group membership to guide food choice. *Journal of Experimental Child Psychology*, 264, Article 106437. <https://doi.org/10.1016/j.jecp.2025.106437>
- Jones, S., & Rutland, A. (2018). Attitudes toward immigrants among the youth. *European Psychologist*, 23(1), 83–92. <https://doi.org/10.1027/1016-9040/a000310>
- Juvonen, J., Lessard, L. M., Rastogi, R., Schacter, H. L., & Smith, D. S. (2019). Promoting social inclusion in educational settings: Challenges and opportunities. *Educational Psychologist*, 54(4), 250–270. <https://doi.org/10.1080/00461520.2019.1655645>
- Killen, M., Lee-Kim, J., McGlothlin, H., & Stangor, C. (2002). How children and adolescents evaluate gender and racial exclusion. *Monographs of the Society for Research in Child Development*, 67(4), 1–129. <https://doi.org/10.1111/1540-5834.00218>
- Killen, M., & Rutland, A. (2011). *Children and social exclusion: Morality, prejudice, and group identity*. Wiley/Blackwell Publishers. <https://doi.org/10.1002/9781444396317>
- Kramer, S., & Passel, J. (2025). *What the data says about immigrants in the U.S.* Pew Research Center. <https://www.pewresearch.org/short-reads/2025/08/21/key-findings-about-us-immigrants/>
- Ladd, G. W., & Kochenderfer-Ladd, B. (2019). Parents and children's peer relationships. In M. H. Bornstein (Ed.), *Handbook of Parenting* (3rd ed., Vol. 5, pp. 278–315). Routledge. doi: 10.4324/9780429401695.
- Leaper, C. (2022). Origins and consequences of childhood gender segregation: Toward an integrative developmental systems model. In D. P. VanderLaan, & W. I. Wong (Eds.), *Gender and Sexuality Development: Contemporary Theory and Research* (pp. 159–205). Springer International Publishing. https://doi.org/10.1007/978-3-030-84273-4_6
- Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the Stereotype Content Model. *International Journal of Intercultural Relations, Special Issue: Attitudes towards Immigrants and Immigration*, 30(6), 751–768. <https://doi.org/10.1016/j.ijintrel.2006.06.005>
- Lei, R. F., Foster-Hanson, E., & Goh, J. X. (2023). A sociohistorical model of intersectional social category prototypes. *Nature Reviews Psychology*, 1–12. <https://doi.org/10.1038/s44159-023-00165-0>
- Leventhal, T. (2018). Neighborhood context and children's development: When do neighborhoods matter most? *Child Development Perspectives*, 12(4), 258–263. <https://doi.org/10.1111/cdep.12296>
- Loyd, A. B., & Gaither, S. E. (2018). Racial/ethnic socialization for White youth: What we know and future directions. *Journal of Applied Developmental Psychology*, 59, 54–64. <https://doi.org/10.1016/j.appdev.2018.05.004>
- McDowell, D. J., & Parke, R. D. (2009). Parental correlates of children's peer relations: An empirical test of a tripartite model. *Developmental Psychology*, 45(1), 224–235. <https://doi.org/10.1037/a0014305>
- McKeown, S., & Dixon, J. (2017). The "contact hypothesis": Critical reflections and future directions. *Social and Personality Psychology Compass*, 11(1), Article e12295. <https://doi.org/10.1111/spc3.12295>
- Miklikowska, M. (2017). Development of anti-immigrant attitudes in adolescence: The role of parents, peers, intergroup friendships, and empathy. *British Journal of Psychology*, 108(3), 626–648. <https://doi.org/10.1111/bjop.12236>
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling*, 9(4), 599–620. https://doi.org/10.1207/S15328007SEM0904_8
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide*. Muthén & Muthén.
- Palmer, S. B., Gönültaş, S., Yüksel, A. Ş., Argyri, E. K., McGuire, L., Killen, M., & Rutland, A. (2022). Challenging the exclusion of immigrant peers. *International Journal of Behavioral Development*, 47(1), 9–20. <https://doi.org/10.1177/01650254221128275>
- Paolini, S., Gibbs, M., Sales, B., Anderson, D., & McIntyre, K. (2024). Negativity bias in intergroup contact: Meta-analytical evidence that bad is stronger than good, especially when people have the opportunity and motivation to opt out of contact. *Psychological Bulletin*, 150(8), 921–964. <https://doi.org/10.1037/bul0000439>
- Pitcher, K. J., & Smith, R. L. (2025). The need for social developmental research on internal and external motivation to respond without prejudice. *Youth*, 5(4), 103. <https://doi.org/10.3390/youth5040103>
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75(3), 811–832. <https://doi.org/10.1037/0022-3514.75.3.811>
- Qi, H., Mikami, A. Y., & Owens, J. S. (2022). Associations between cross-racial friendships and children's social and academic adjustment in racially diverse classrooms. *Child Development*, 93(5), 1427–1443. <https://doi.org/10.1111/CDEV.13773>

- Raabe, T., & Beelmann, A. (2011). Development of ethnic, racial, and national prejudice in childhood and adolescence: A multinational meta-analysis of age differences. *Child Development*, 82(6), 1715–1737. <https://doi.org/10.1111/j.1467-8624.2011.01668.x>
- Rizzo, M. T., Green, E. R., Dunham, Y., Bruneau, E., & Rhodes, M. (2021). Beliefs about social norms and racial inequalities predict variation in the early development of racial bias. *Developmental Science*, e13170. <https://doi.org/10.1111/desc.13170>
- Rutland, A., Cameron, L., & Killen, M. (2024). Creating inclusive environments: Enabling children to reject prejudice and discrimination. *Annual Review of Developmental Psychology*, 6, 203–221. <https://doi.org/10.1146/annurev-devpsych-120920-041454>
- Santhanagopalan, R., DeJesus, J. M., Moorthy, R. S., & Kinzler, K. D. (2021). Nationality cognition in India: Social category information impacts children's judgments of people and their national identity. *Cognitive Development*, 57, Article 100990. <https://doi.org/10.1016/j.cogdev.2020.100990>
- Santhanagopalan, R., Hok, H., Shaw, A., & Kinzler, K. D. (2025). The ontogeny of attitudes toward migrants. *Developmental Science*, 28(2), Article e13599. <https://doi.org/10.1111/desc.13599>
- Scott, K. E., Shutts, K., & Devine, P. G. (2019). Parents' expectations for and reactions to children's racial biases. *Child Development*. <https://doi.org/10.1111/cdev.13231>
- Siddiqui, H., Cimpian, A., & Rutherford, M. D. (2020). Canadian children's concepts of national groups: A comparison with children from the United States. *Developmental Psychology*, 56, 2102–2109. <https://doi.org/10.1037/dev0001103>
- Sierksma, J., Brey, E., & Shutts, K. (2022). Racial stereotype application in 4-to-8-year-old White American children: Emergence and specificity. *Journal of Cognition and Development*, 23(5), 660–685. <https://doi.org/10.1080/15248372.2022.2090945>
- Skinner, A. L., & Perry, S. (2020). Are attitudes contagious? Exposure to biased nonverbal signals can create novel social attitudes. *Personality and Social Psychology Bulletin*, 46(4), 514–524. <https://doi.org/10.1177/0146167219862616>
- Sodhi, S., & Liberman, Z. (2024). Children's expectations of nationality-based behaviors differ for immigrants and nonimmigrants. *Child Development*, 96(2), 830–846. <https://doi.org/10.1111/cdev.14210>
- Stephan, W. G., Ybarra, O., & Rios, K. (2015). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of Prejudice, Stereotyping, and Discrimination* ((2nd ed., pp. 255–278). Psychology Press. <https://doi.org/10.4324/9780203361993>
- Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist*, 73(6), 781–796. <https://doi.org/10.1037/amp0000265>
- Tenenbaum, H. R., & Leaper, C. (2002). Are parents' gender schemas related to their children's gender-related cognitions? A meta-analysis. *Developmental Psychology*, 38(4), 615–630. <https://doi.org/10.1037/0012-1649.38.4.615>
- Tenenbaum, H. R., & Ruck, M. D. (2012). British adolescents' and young adults' understanding and reasoning about the religious and nonreligious rights of asylum-seeker youth. *Child Development*, 83(3), 1102–1115. <https://doi.org/10.1111/j.1467-8624.2012.01755.x>
- Thijs, J., Miklikowska, M., & Bosman, R. (2023). Motivations to respond without prejudice and ethnic outgroup attitudes in late childhood: Change and stability during a single school year. *Developmental Psychology*, 59(9), 1691–1702. <https://doi.org/10.1037/dev0001565>
- Thijs, J., & Verkuyten, M. (2023). Being considered a co-national: Social categorization and perceived acculturation of immigrant peers. *Journal of Experimental Child Psychology*, 225, Article 105520. <https://doi.org/10.1016/j.jecp.2022.105520>
- Toprakiran, S., & Lai, C. K. (2024). *Stereotypes and attitudes toward nationality groups in the United States*. *OSF Preprint*. <https://doi.org/10.31234/osf.io/48waw>
- Tropp, L. R., & Prenovost, M. A. (2008). The role of intergroup contact in predicting children's interethnic attitudes: Evidence from meta-analytic and field studies. In S. R. Levy, & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 236–248). Oxford University Press.
- Tropp, L. R., White, F., Rucinski, C. L., & Tredoux, C. (2022). Intergroup contact and prejudice reduction: Prospects and challenges in changing youth attitudes. *Review of General Psychology*, 26(3), 342–360. <https://doi.org/10.1177/10892680211046517>
- Umaña-Taylor, A. J., & Hill, N. E. (2020). Ethnic-racial socialization in the family: A decade's advance on precursors and outcomes. *Journal of Marriage and Family*, 82(1), 244–271. <https://doi.org/10.1111/jomf.12622>
- U.S. Census Bureau. (2024). *Place of birth for the foreign-born population in the United States (Table B05006)*. American Community Survey 5-Year Estimates. data.census.gov.
- Verkuyten, M. (2001). National identification and intergroup evaluations in dutch children. *British Journal of Developmental Psychology*, 19(4), 559–571. <https://doi.org/10.1348/026151001166254>
- Verkuyten, M. (2021). Group identity and ingroup bias: The social identity approach. *Human Development*, 65(5–6), 311–324. <https://doi.org/10.1159/000519089>
- Verkuyten, M., Thijs, J., & Sierksma, J. (2014). Majority children's evaluation of acculturation preferences of immigrant and emigrant peers. *Child Development*, 85(1), 176–191. <https://doi.org/10.1111/cdev.12111>
- Vezzali, L., Stathi, S., & Giovannini, D. (2012). Indirect contact through book reading: Improving adolescents' attitudes and behavioral intentions toward immigrants. *Psychology in the Schools*, 49(2), 148–162. <https://doi.org/10.1002/pits.20621>
- Yuan, K.-H., & Bentler, P. M. (2000). Three likelihood-based methods for mean and covariance structure analysis with nonnormal missing data. *Sociological Methodology*, 30(1), 165–200. <https://doi.org/10.1111/0081-1750.00078>
- Zou, L. X., & Cheryan, S. (2017). Two axes of subordination: A new model of racial position. *Journal of Personality and Social Psychology*, 112(5), 696–717. <https://doi.org/10.1037/pspa0000080>