

The essence of an immigrant identity:

Children's pro-social responses to others based on perceived ability and desire to change

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### Abstract

Much work has highlighted the degree to which children and adults view human characteristics as immutable. Less work has elucidated how people may conceptualize such immutability. Using immigration as an example domain, we examined the extent to which children's ( $N=112$  5- to 10-year-olds) immutability concepts reflected beliefs about others lacking the ability and/or the desire to change. Children readily agreed that immigrants could—and wanted to—change certain aspects of their identities (i.e., by adopting the norms of their new country). We also investigated the social ramifications of messages focusing on different aspects of immutability. Children felt and behaved more positively toward people who had the ability and desire to change than toward those who did not. Moreover, information about desires played a greater role in shaping children's attitudes and behaviors than did information about abilities. This work extends scholarship on psychological essentialism by highlighting the need to study sub-components of a specific pillar of essentialist thought (i.e., separating the immutability component of essentialism into perceptions regarding people's perceived desire and, separately, perceived ability to change), partially because essentialism impacts social cognition and behavior differently across sub-components.

**Keywords:** identity; immigration; morality; psychological essentialism; social cognitive development; social preferences

### **The essence of an immigrant identity:**

#### **Children's pro-social responses to others based on perceived ability and desire to change**

The philosopher Heraclitus mused that one cannot step into the same river twice, ostensibly because people and the world they inhabit are constantly in flux. Interestingly, laypeople's views do not always coincide with Heraclitus' view: people often report that others' characteristics are stable over time (e.g., Dunlea & Heiphetz, 2020, in press; Heiphetz et al., 2017; Hussak & Cimpian, 2019). Such views reflect *psychological essentialism*—the belief that people possess internal, immutable, biologically-based “essences” that constitute their identity (Gelman, 2003; Medin & Ortony, 1989).

While essentialism research has offered important insight regarding the extent to which children and adults view human characteristics as immutable, this work has largely treated immutability as one concept. However, the perception that a characteristic is unchanging could include multiple components, including a perceived lack of *ability* to change and a perceived lack of *desire* to change. Here, we highlighted one domain—immigration—where both components are relevant and investigated the developmental origins of concepts regarding immutability in this domain. Specifically, we probed elementary schoolers' views regarding the extent to which immigrants could and, separately, wanted to change by adopting the norms of their new country.

Many adults living in the United States—primarily those identifying as part of the native majority group—believe that immigrants do not readily adopt United States norms (Paxton & Mughan, 2006). One interpretation of this scholarship is that many adults view immigrants' identities as immutable. However, adults may conceptualize immutability in this domain as arising in different ways. First, adults may believe that immigrants' identities are immutable

because they lack the *desire* to adopt the norms of their new country (Piontkowski et al., 2002). Exemplifying this view, reporter Tucker Carlson once stated that immigrants “don’t seem all that *interested in* [emphasis added] integrating” (as cited in Lalami, 2017). Second, adults may believe that immigrants’ identities are immutable because they lack the *ability* to adopt the norms of their new country (Suarez-Orozco & Suarez-Orozco, 2001). In 2016, Donald Trump reflected this view when stating that “not everyone who seeks to join our country will be *able to* [emphasis added] successfully assimilate” (as cited in Lalami, 2017). Together, this evidence suggests that adults apply an essentialist framework when reasoning about immigrants. We built on prior evidence by investigating the extent to which children apply an essentialist framework when reasoning about immigrants.

Past work leads to three possibilities. One possibility is that children view immigrants as possessing both the motivation and ability to adopt the norms of their new country. Native majority-group elementary schoolers typically express greater positivity toward immigrant peers who assimilate (i.e., adopt the norms of their new country) over those who do not (Verkuyten et al., 2014). Children of this age are also especially likely to hold positive views of others (Boseovski, 2010). Therefore, children may be motivated to view immigrants as being both able and willing to adopt local norms. A second possibility is that children view immigrants as lacking both the motivation and ability to adopt the norms of their new country. This possibility stems from prior work suggesting that elementary schoolers readily employ an essentialist framework when reasoning about a wide range of entities, including abilities (Dweck, 2006) and mental states (e.g., desires, beliefs, Heiphetz et al., 2017). Because essentialism includes the view that characteristics are immutable (Gelman, 2003), children may infer that distinct aspects of immigrants’ identities (i.e., desires, abilities) cannot change. A third possibility is that

children's judgments regarding ability and desire diverge. Elementary schoolers understand that people may possess the desire—but not the ability—to act in a certain way (Kushnir, 2018). For example, in one line of work, elementary schoolers learned about a character who *wanted* to prevent a crumbling building from collapsing and reported that she lacked the *ability* to carry out her desire (Lane, 2020). If children employ this reasoning in the context of immigration, they may infer that immigrants may possess the desire, but not the ability, to adopt new norms. We tested among these possibilities.

In addition to probing children's own notions of immigrants' ability and desire to change, we investigated the social ramifications of these views. As mentioned above, native majority group children are especially likely to report negativity toward immigrant peers who do not adopt the norms of their new country (Verkuyten et al., 2014). We built on this scholarship by providing children information about *why* others might not adopt these norms (lacking desire, lacking ability). We probed the role of each factor separately to examine the relative weight children place on information about desires and abilities when responding to others.

The current work also has translational implications. As previously mentioned, native majority group children favor immigrant peers who employ assimilationist acculturation strategies over those who do not (Verkuyten et al., 2014). Given children's pro-assimilationist views, one way to curb anti-immigrant sentiment during childhood may include teaching children that some immigrants do indeed possess the ability and desire to assimilate. This form of intervention may be easily implementable because it leverages children's existing pro-assimilationist biases to potentially promote social good (i.e., decreasing intergroup negativity; for similar reasoning, see Roberts et al., 2019). However, there is reason to challenge this approach altogether because it does not work toward ameliorating children's pro-assimilationist

preferences. Indeed, pro-assimilationist views devalue immigrants' native cultures and allow "no room for a positive role for the ethnic or racial group" (Alba & Nee, 2003, p. 5). Therefore, it is important to consider the translational implications of this work alongside a potential longer-term goal of reducing pro-assimilationist views.

## Method

**Participants.** We recruited children between 5 and 10 years old. Five-year-olds were the youngest children we tested because younger children do not reason coherently about national groups (DeJesus et al., 2018). Moreover, testing children in this age range allowed us to compare our results with research on age-related changes in essentialist reasoning. While reports of essentialist perspectives typically decrease throughout the elementary school years (e.g., Heiphetz et al., 2017; Hussak & Cimpian, 2019), younger (5- to 7-year-old) and older (8- to 10-year-old) children in the current work responded similarly to items probing essentialism's immutability component (see Results), suggesting that views of immutability within the context of immigration may be stable throughout the elementary school years.

Our final sample included 112 children (36% female, 63% male, remainder unspecified) between the ages of 5 and 10 years ( $M_{\text{age}}=7.47$  years,  $SD_{\text{age}}=1.62$  years;  $N_{\text{younger}}=56$ ,  $N_{\text{older}}=56$ ).<sup>1</sup> Children's parents completed a demographic questionnaire where they identified their children as White or European-American (47%), Black or African-American (14%), Asian or Asian-American (8%), multiracial (24%), and "other" (5%); the remaining parents did not identify their child's race. Parents reported their child's ethnicity using a separate question, and 13% identified

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<sup>1</sup> Our pre-registration (<http://aspredicted.org/blind.php?x=b7b4th>) specified a target sample size of 80 children per age group. This was an error. Initially, we planned to include a mediator in this study, and the mediation analysis would have required 80 children per group to detect our expected effect. We decided to forego the mediation and revised the rest of our pre-registration accordingly. However, we failed to update the sample size. We ended data collection after recruiting a sample of sufficient size to conduct the actual analyses we pre-registered (e.g., ANOVA). We did not perform any statistical tests prior to completing data collection.

their children as Hispanic or Latinx. We excluded data from one additional younger child because she did not understand the experimental items and one additional older child because he heard another person's responses before participating.

We recruited participants from a lab database and at a children's museum in a large city in the northeastern United States. Forty-one percent of participants completed this study in person. Due to COVID-19, the remainder participated online. As in other studies (e.g., Dunlea & Heiphetz, in press; Marshall et al., 2020), testing venue did not predict children's responses. Children who participated in person received a small prize; children who participated online received a \$5 gift card.

**Procedure.** First, the experimenter told children that he or she would ask them questions and that there were no (in)correct answers. The experimenter then introduced children to a five-point Likert-type scale consisting of stick figures arrayed from smallest to largest on a sheet of paper (or, online, on a PowerPoint slide). The experimenter then instructed participants on how to use the scale (e.g., "If your answer is 'not at all,' you would point here," said while pointing to the smallest picture). The remaining labels were "a little bit," "a medium amount," "a lot," and "completely." The experimenter then asked children two items to gauge their understanding of the scale ("Can you show me where you would point if your answer was 'not at all'?"; "Can you show me where you would point if your answer was 'a medium amount'?"). For online participants, each stick figure had a number beneath it ranging from 1 for the smallest figure to 5 for the largest figure; children reported the number underneath the figure they wished to select. Children largely used the scale correctly: 99% of children pointed to the scale floor when indicating "not at all," and 89% of children pointed to the scale midpoint when indicating "a

medium amount.” Participants who answered incorrectly received corrective feedback, and all children provided the correct answer on their second attempt.

The remainder of the study progressed in three parts (Blocks I, II, and III). Block I examined the extent to which children employed an essentialist framework when reasoning about immigrants. During Block I, the experimenter showed participants outlines of two countries. The experimenter described one outline as a map of “America”<sup>2</sup> and the other as a country “that we do not know the name of.”<sup>3</sup> The experimenter then showed children a picture of a stick figure on a PowerPoint display and told participants that the character moved from the unknown country to America. The experimenter then asked children a comprehension check item (“Can you remind me, where does Val live now? Does [he/she] live in America, or this other country?”); all children responded correctly. The experimenter referred to the character using pronouns matching the child’s reported gender.

Next, the experimenter read three sets of statements, one set at a time, highlighting different norms across the aforementioned countries. One set of statements highlighted differences in cuisine (“In America, people eat American food. In this other country, people do not eat American food”), a second set highlighted linguistic differences (“In America, people speak English. In this other country, people do not speak English”), and a third set highlighted differences in holidays (“In America, people celebrate Christmas. In this other country, people do not celebrate Christmas”). After listening to each set of statements, participants indicated their agreement regarding the extent to which the character was *capable* of adopting and, separately,

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<sup>2</sup> America consists of several countries spanning the North and South American continents. However, because people in the United States often use the term “America” as a synonym for the United States (Martinez-Carter, 2013), we used the term “America” when interviewing children. The outline referring to “America” depicted an outline of the United States.

<sup>3</sup> Children use familiar country labels (e.g., “France”, “Mexico”) to make inferences about people living a given country (Barrett et al., 2003). Because we did not want children’s inferences about people immigrating from a specific country to influence their responses, we did not specify the character’s country of origin.



*desired* to adopt the norm that was just described. For example, after listening to the set of statements about differences in cuisine, children responded to the following items: (1) “How much do you agree that Val *can* eat American food now?” and (2) “How much do you agree that Val *wants to* eat American food now?” Participants indicated their agreement using the Likert-type scale described above. We selected topics based on prior work showing that food (Lieberman et al., 2016), language (Kinzler, 2020), and traditions (Litwicky, 2004) are robust indicators of socio-cultural group membership. The order in which items referencing each cultural element appeared was counterbalanced across participants.

Blocks II and III examined how different messages about immigrants’ ability and desire to change might influence intergroup relations. Although prominent theorists (e.g., Allport, 1954) have argued that both prejudice (negative intergroup attitudes) and discrimination (negative intergroup behavior) shape intergroup relations, much intergroup research has examined attitudes without testing corresponding behavior. We included attitudinal and behavioral measures to reflect both aspects of intergroup relations. This approach allowed us to contribute to ongoing conversations in psychology regarding links between attitudes and behaviors (Wallace et al., 2005).

In Block II, the experimenter told children that they would learn about additional people, all of whom moved to America. The experimenter subsequently showed children a picture of four characters on a PowerPoint display. The experimenter pointed to each character, one at a time, and described that character’s ability and, separately, desire to adopt a given American norm (either eating American cuisine, speaking English, or celebrating Christmas). Descriptions aligned with one of four possible conditions in a 2 (Ability: can vs. cannot) x 2 (Desire: wants vs. does not want) within-participants design. For example, the interviewer told participants that

“[Character A] *can* speak English but *does not want* to, [Character B] *cannot* speak English and *does not want* to, [Character C] *cannot* speak English but *wants* to, and [Character D] *can* speak English and *wants* to.”<sup>4</sup> The purpose of providing these descriptions was to familiarize children with each of the characters.

Next, the experimenter re-introduced participants to each character, one at a time (e.g., “Here’s [Character A] again. Remember, [Character A] can speak English but [he/she] does not want to”). Participants then answered three items probing their attitudes toward each character: (1) “How much do you like [Character A]?” (2) “How much do you want to be friends with [Character A]?” (3) “How much do you want to play with [Character A]?” We adapted these measures from scholarship examining children’s intergroup attitudes (Heiphetz & Young, 2019). Participants indicated their responses using the same Likert-type scale described in Block I and answered all items about one character before moving on to items about the next character. After recording children’s responses to all items regarding a given American norm (e.g., speaking English), the experimenter completed an analogous procedure for items regarding the remaining norms (in this example, eating American food and celebrating Christmas). Descriptions of a character’s ability and desire to adopt the norms of their new country were consistent across norm types. For example, if participants learned that [Character A] could speak English but did not want to, participants also learned that [Character A] could celebrate Christmas but did not want to. The order of experimental items (e.g., items probing participants’ attitudes toward characters) and the order in which participants answered questions about a specific cultural element (e.g., speaking English) were counterbalanced across participants.

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<sup>4</sup> Participants learned about characters named Kai, Lane, River, and Sage. Pairings of character names and descriptions (i.e., whether the character could and, separately, wanted to assimilate) were counterbalanced across participants.

In Block III, the experimenter showed children a picture of the four characters from Block II and specified that participants would be playing a “sharing game” with each character. The experimenter then reminded participants about each character at a broad level (e.g., “Remember, [Character A] can do the things that people in America do but does not want to”). After re-introducing a character, the interviewer said, “Now, here are some stickers. You can decide how many stickers you want to give to [Character A]. You can give as many stickers as you want, but you cannot keep any for yourself.” Participants received five stickers.

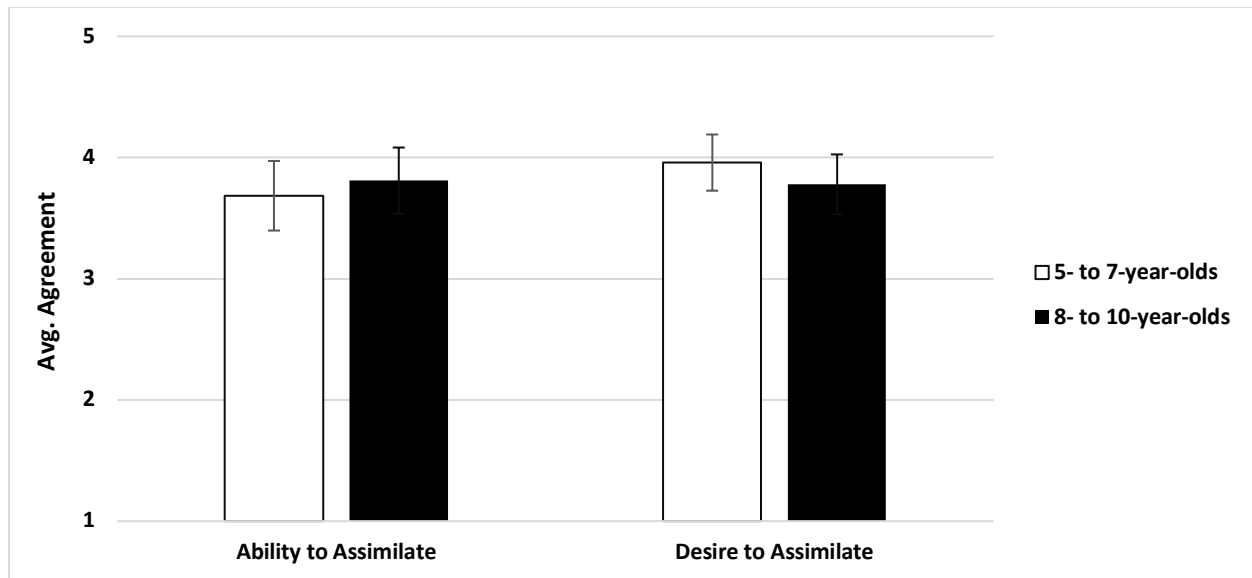
The experimenter then showed children how to distribute the stickers between two envelopes, one of which was illustrated with a picture of a stick figure resembling the character that the experimenter had just re-introduced and the other of which was illustrated with a picture of a trash can. The experimenter told participants that the character being discussed would receive any stickers placed in the former envelope and that any stickers placed in the latter envelope would be discarded. Children who completed the task in person physically placed stickers into the corresponding envelopes. Participants who completed this study online completed a modified version of this task including pictures of stickers. Online participants indicated the envelopes into which they wanted to place the stickers and observed (via video camera) the experimenter placing actual stickers in the corresponding envelopes. Participants finished making resource allocation decisions for a given character before moving on to the next trial. The order in which participants distributed stickers to each character was counterbalanced across participants.

## **Results**

**Immutability Judgments.** An exploratory series of tests examined children’s perceptions of immigrants (Figure 1). First, we used a series of one-sample *t*-tests to compare

participants' agreement that immigrants are able to—and, separately, want to—adopt to the norms of their new country with 3 (the midpoint of the scale indicating, on average, moderate agreement). We did so among younger and, separately, older children. This approach yielded four comparisons; thus,  $p$  values needed to be .013 or lower to pass the Bonferroni-corrected significance threshold. Children in both age groups reported high agreement that immigrants *can* (younger:  $(t(55)=4.67, p<.001, \text{Cohen's } d=.62, 95\% \text{ CI}_{\text{diff}}: [.39, .98]$ ; older:  $(t(55)=5.81, p<.001, \text{Cohen's } d=.78, 95\% \text{ CI}_{\text{diff}}: [.53, 1.09])$ ) and *want to* (younger:  $(t(55)=8.10, p<.001, \text{Cohen's } d=1.08, 95\% \text{ CI}_{\text{diff}}: [.72, 1.20])$ ; older:  $(t(55)=6.21, p<.001, \text{Cohen's } d=.83, 95\% \text{ CI}_{\text{diff}}: [.53, 1.03])$ ) adopt the norms of their new country.

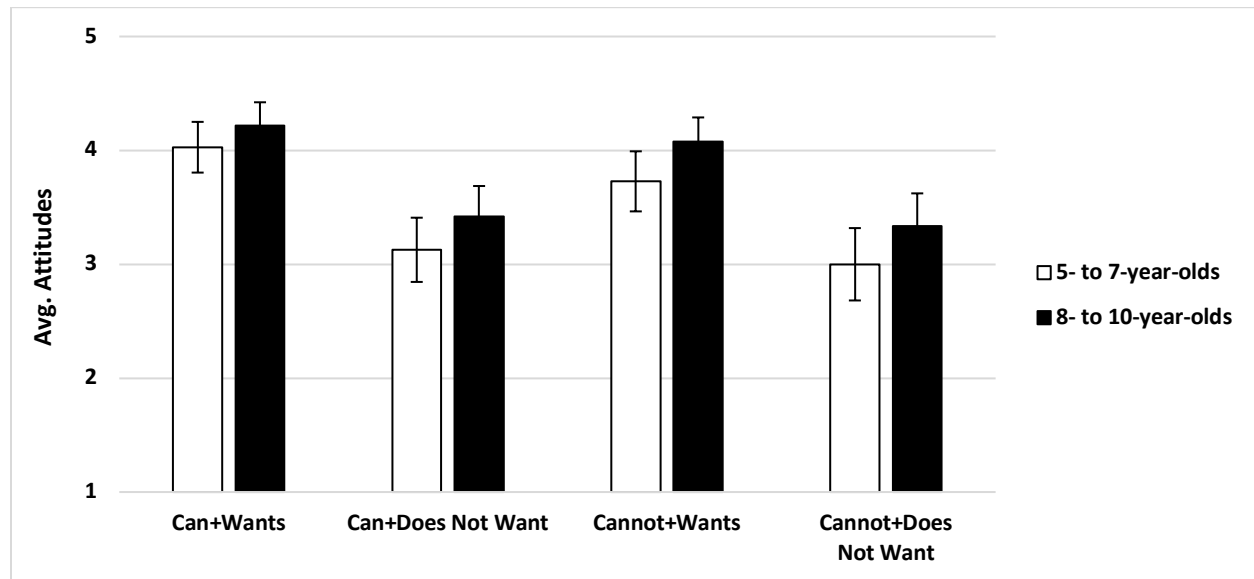
Next, we used independent-samples  $t$ -tests to compare the extent to which younger versus older children reported that immigrants *can* and, separately, *want to* adopt the norms of their new country. This approach yielded two comparisons; thus,  $p$  values needed to be .025 or lower to pass the Bonferroni-corrected significance threshold. These analyses did not reveal differences in participants' reports of immigrants' ability ( $(t(110)=-.62, p=.538, \text{Cohen's } |d|=.12, 95\% \text{ CI}_{\text{diff}}: [-.53, .28])$ ) or desire ( $(t(110)=1.04, p=.303, \text{Cohen's } |d|=.20, 95\% \text{ CI}_{\text{diff}}: [-.16, .52])$ ) to adopt their new country's norms. These findings suggest that both groups of children view immigrants as possessing the capacity and desire to change.



*Figure 1.* Average agreement that immigrants can (left) and want to (right) adopt American norms. Scores above the scale midpoint (3) indicate relatively high agreement, whereas scores below the scale midpoint indicate relatively low agreement. A score of 3 indicates moderate agreement. Error bars represent 95% confidence intervals.

**Attitudes.** The three items measuring attitudes for each character had acceptable reliability ( $\alpha_{\text{can+wants}}=.90$ ,  $\alpha_{\text{can+does not want}}=.92$ ,  $\alpha_{\text{cannot+wants}}=.92$ ,  $\alpha_{\text{cannot+does not want}}=.93$ ). Thus, we created one composite attitude score for each character by averaging across the three items (how much participants liked, wanted to be friends with, and wanted to play with the character). In accordance with our pre-registration, we analyzed this composite using a 2 (Participant Age: 5- to 7-year-old vs. 8- to 10-year-old) x 2 (Ability: can vs. cannot) x 2 (Desire: wants vs. does not want) mixed ANOVA with repeated measures on the last two factors (Figure 2). This analysis revealed a main effect of Ability ( $F(1, 111)=10.02$ ,  $p=.002$ ,  $\eta_p^2=.08$ ). Participants reported more positivity toward characters who were able (versus unable) to adopt their new country's norms. This analysis also revealed a main effect of Desire ( $F(1, 111)=83.45$ ,  $p<.001$ ,  $\eta_p^2=.43$ ). Participants reported more positivity toward characters who wanted (versus did not want) to

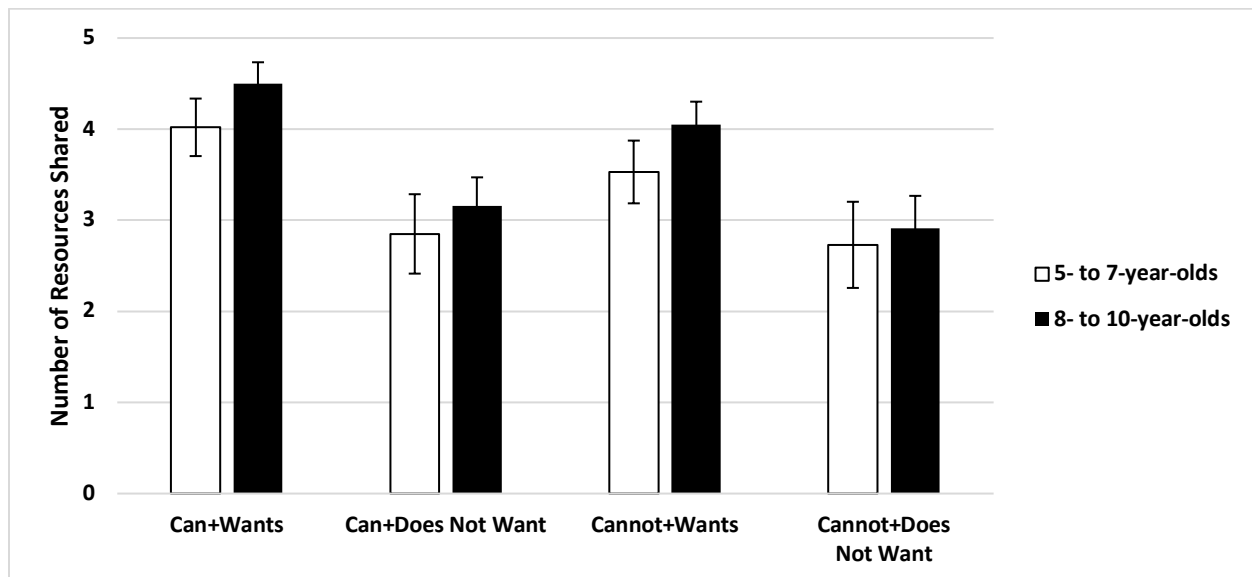
adopt their new country's norms. No other main effects or interactions reached significance ( $p \geq .057$ ).



*Figure 2.* Average attitudes toward different characters. Higher values reflect more positive attitudes. Error bars represent 95% confidence intervals.

**Resource Allocation.** Next, consistent with our pre-registration, we analyzed participants' resource allocations using a 2 (Participant Age: 5- to 7-year-old vs. 8- to 10-year-old) x 2 (Ability: can vs. cannot) x 2 (Desire: wants vs. does not want) mixed ANOVA with repeated measures on the last two factors (Figure 3). This analysis revealed a main effect of Ability ( $F(1, 109)=12.08, p=.001, \eta_p^2=.10$ ); participants shared more resources with characters who were able (versus unable) to adopt the norms of their new country. This analysis also revealed a main effect of Desire ( $F(1, 109)=73.63, p<.001, \eta_p^2=.40$ ); participants shared more resources with characters who wanted (versus did not want) to adopt the norms of their new country. Finally, this analysis revealed a main effect of Participant Age ( $F(1, 109)=4.77, p=.031, \eta_p^2=.04$ ); older children shared more resources than younger children. No interactions reached significance ( $p \geq .121$ ).

We also conducted exploratory analyses examining the extent to which children's attitudes toward a given character predicted the number of resources they shared with that character. We conducted this analysis for each of the four characters among younger and, separately, older children. This approach resulted in eight analyses; therefore,  $p$  values needed to be .006 or lower to reach the Bonferroni-corrected threshold. We observed a significant positive relation between younger children's attitudes and behaviors for three of the four characters ( $r_s \geq .44$ ,  $p_s \leq .001$ ). The relation between younger children's attitudes and behaviors toward characters who both could and wanted to adopt to the norms of their new country passed the traditional .05 significance threshold ( $r = .28$ ,  $p = .037$ ); however, this relation dropped to non-significance after applying the Bonferroni correction. Additionally, we observed a significant positive relation between older children's attitudes and behaviors for all four characters ( $r_s \geq .43$ ,  $p_s \leq .001$ ). These findings suggest that, among elementary schoolers, more positive attitudes toward immigrants generally predict more pro-social behaviors toward immigrants.



*Figure 3.* Average number of resources shared with different characters. Error bars represent 95% confidence intervals.

### General Discussion

Using immigration as an example domain, we examined the extent to which children's immutability concepts reflect beliefs about others lacking the *ability* and, separately, the *desire* to change. We also probed the consequences of such beliefs. In doing so, the current work makes three contributions.

First, this work extends scholarship on essentialism by examining the development of immutability concepts. Immigration likely represents a domain in which adults' immutability concepts reflect notions of lacking the ability (Suarez-Orozco & Suarez-Orozco, 2001) and desire (Piontkowski et al., 2002) to change. However, the origin of these "end state" immutability concepts is unclear. Past work led to three possibilities. First, because children exhibit positive attitudes toward immigrants who adopt the norms of their new country (Verkuyten et al., 2014) and are optimistic about others (Boseovski, 2010), they could view immigrants as being able and willing to change. Second, because children view many characteristics as immutable (Gelman, 2003), they could view immigrants as being unable and unwilling to change. Third, because children can distinguish ability from desire (Lane, 2020), they could hold different views regarding immigrants' ability and desire to change. Our results supported the first possibility: children strongly agreed that immigrants could, and wanted to, adopt the norms of their new country. In conjunction with evidence suggesting that adults may not always share these views (Paxton & Mughan, 2006; Piontkowski et al., 2002; Suarez-Orozco & Suarez-Orozco, 2001), these results suggest that, at least in some domains, the view that others can and want to change wanes with age.

Second, the current research also contributes to work on essentialism by probing the consequences of different messages about identity immutability. Participants felt more positively



and behaved more pro-socially toward characters who were able and willing to change. Importantly, information about characters' *desires* played a greater role in shaping children's attitudes and behaviors than did information about characters' *abilities*: the effect size associated with differences in attitudes toward characters who wanted (versus did not want) to adopt the norms of their new country ( $\eta_p^2=.43$ ) was substantially larger than the effect size associated with differences in attitudes toward characters who could (versus could not) adopt such norms ( $\eta_p^2=.08$ ). A similar pattern of results emerged for participants' sharing behaviors: the effect size associated with differences in the number of resources shared with characters who wanted (versus did not want) to adopt the norms of their new country ( $\eta_p^2=.40$ ) was substantially larger than the effect size associated with differences in the number of resources shared with characters who could (versus could not) adopt such norms ( $\eta_p^2=.10$ ). Thus, perceptions regarding unwillingness to change may shape children's attitudes and behaviors toward immigrants more strongly than perceptions regarding a lack of ability to change. Such an interpretation dovetails with preliminary evidence suggesting that information about desires, versus abilities, may be more important in shaping children's social evaluations (Lin et al., 2019).

Finally, the current work extends research investigating the link between attitudes and behaviors. Both attitudes and behaviors influence intergroup relations (Allport, 1954); thus, the present work included measures capturing both variables. Children's attitudes toward a given character generally predicted their behavior toward that character. Most correlation coefficients measuring the link between attitudes and behaviors in the current work were "moderate" to "large" in size (above .30, Cohen, 1988). This finding contrasts with prior research suggesting that correlation coefficients measuring the link between attitudes and behaviors are often

relatively small (see Wallace et al., 2005, for a review of effect sizes reported in studies testing adults) and raises the possibility that the attitude-behavior link wanes over development.

In addition to these theoretical contributions, the present findings may have translational implications. Our results suggest that children favor immigrants who possess the ability and desire to assimilate over those who do not. Given these results, one way to attenuate anti-immigrant sentiment during childhood may include teaching children that some immigrants possess the ability and desire to assimilate. However, this approach may not be ideal because it does not work toward reducing children's pro-assimilationist preferences (Alba & Nee, 2003). Thus, it is paramount to consider the practical implications of this work alongside the possible broader goal of reducing pro-assimilationist views.

While the current work makes several contributions, additional questions remain ripe for inquiry. One fruitful future direction includes examining the extent to which children's judgments depend on *why* immigrants express (dis-)interest in changing certain aspects of their identities. For example, in future work, children can evaluate an immigrant who does not want to assimilate because she thinks doing so will be inauthentic or go against her "true" identity. Children and adults value authenticity (Silver, Newman, & Small, in press) and may report positivity toward immigrants who are disinterested in assimilating because doing so would go against their "true" identities. Future work can test this possibility.

Additionally, future research can measure the extent to which children essentialize immigrants' identities using a different paradigm. Some scholars have examined essentialist reasoning by probing the extent to which people view changes in certain characteristics as reflecting changes in personal identity (Heiphetz et al., 2018; Tobia, 2016). This method uses the following logic: if participants view changing an individual's characteristic as changing who the

person is overall, then participants view the characteristic in question as essential to identity. For example, in one study (Heiphetz et al., 2018), children and adults reported that changes to widely shared moral beliefs would elicit more change to identity than would changes to other mental states (e.g., preferences). The authors interpreted these findings as evidence that people view moral characteristics as especially essential to identity. Future studies can unite the current work with this past scholarship by comparing children's views of identity change following different types of transformations, including changes in moral characteristics and national group membership (via immigration). Doing so can extend work on psychological essentialism by clarifying the extent to which children essentialize national group membership relative to another quality, such as moral characteristics.

### **Conclusion**

Using immigration as an example domain, we probed the extent to which children's immutability concepts reflect beliefs about others lacking the ability and, separately, the desire to change. Children expected that immigrants wanted to and were able to adopt the norms of their new country. Moreover, children's pro-social responses to immigrants more strongly depended on information about their desire, versus their ability, to change. This work highlights the need to study sub-components of a specific pillar of essentialist thought (i.e., separating the immutability component of essentialism into perceptions regarding people's perceived desire and, separately, perceived ability to change), partially because essentialism impacts social cognition and behavior differently across sub-components.

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