

# Support for Resettling Refugees: The Role of Fixed Versus Growth Mind-Sets



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## Abstract

In six studies ( $N = 2,340$ ), we identified one source of people's differential support for resettling refugees in their country—their beliefs about whether the kind of person someone is can be changed (i.e., a *growth mind-set*) or is fixed (i.e., a *fixed mind-set*). U.S. and UK citizens who believed that the kind of person someone is can be changed were more likely to support resettling refugees in their country (Studies 1 and 2). Study 3 identified a causal relationship between the type of mind-set people hold and their support for resettling refugees. Importantly, people with a growth mind-set were more likely to believe that refugees can assimilate in the host society but not that they should assimilate, and the belief that refugees can assimilate mediated the relationship between people's mind-sets and their support for resettling refugees (Studies 4–6). The findings identify an important antecedent of people's support for resettling refugees and provide novel insights into the science of mind-sets.

## Keywords

refugees, lay theories, mind-sets, fixed growth, assimilation, open data, open materials, preregistered

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Every day, more than 28,000 people flee their homes because of war or persecution (UN Refugee Agency, 2017). More than 16 million people were displaced at the end of 2015 (Edwards, 2016), but only a small proportion of them were resettled (European Stability Initiative, 2017). In many nations, there is a heated debate among citizens about whether to accept and resettle refugees (Badea, Tavani, Rubin, & Meyer, 2017).

Although many factors might drive whether citizens are willing to open their nation to refugees (e.g., prejudice against refugees, sympathy for refugees, economic and security concerns), citizens' perceptions that refugees are culturally different from the host-nation population may play a role. Refugees' cultural norms, social-interaction styles, and languages are typically different from those that are prevalent in countries that would consider accepting refugees. In response, many host nationals believe that immigrants should shed background cultures and take on the host country's culture, known as the *assimilationist ideology* (Arends-Tóth & Van De Vijver, 2003). Indeed, host nationals who believe that immigrants should assimilate are less likely to support immigration

(Bastian & Haslam, 2008; Verkuyten, 2011). Research has also examined host nationals' attitudes toward immigrants based on immigrants' desire to assimilate. This body of work has found that high social-dominance orientation predisposes host nationals to prefer immigrants portrayed as wanting to assimilate (Guimond, De Oliveira, Kamiesjki, & Sidanius, 2010), whereas right-wing authoritarianism (which is associated with a preference for distinctions between groups; Thomsen, Green, & Sidanius, 2008) predisposes host nationals to prefer immigrants portrayed as not wanting to assimilate.

We argue that past research has overlooked a critical question: Do people believe that immigrants can assimilate? We propose that beliefs about whether immigrants can assimilate, which posits that immigrants have the ability to adapt to the host culture, are a distinct and critical factor that shapes host nationals' outlook on

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immigrants and refugees. Indeed, immigrants to a new nation do need to adapt to at least some of the host country's norms, behaviors, and languages in order to thrive as full participants in the country's social and economic systems (Dovidio & Gaertner, 2000). Thus, we predicted that if host nationals believe that immigrants have the ability to change, they would be more likely to welcome refugees in their country.

We argue that our novel construct—whether immigrants can assimilate—is conceptually distinct from the two previously studied dimensions of assimilation—whether they should assimilate and whether they want to assimilate. The distinction between whether immigrants can assimilate and should assimilate is the difference between an ability and an obligation, respectively, which are theoretically orthogonal. For example, host nationals might believe that immigrants possess the ability to assimilate but are not obligated to do so. Alternatively, people could think that immigrants have an obligation to assimilate but might not have the ability to do so. Similarly, the distinction between whether immigrants can assimilate and whether they want to assimilate is the difference between an ability and a desire, respectively, which can also be theoretically orthogonal. For example, immigrants may want to assimilate whether or not they have the ability to do so, and immigrants can have the ability to assimilate but may or may not want to do so.

If people who believe that immigrants can assimilate are more likely to support resettling refugees in their country, a key question arises: What is the psychological basis of this belief that immigrants can assimilate? We argue that people's beliefs about whether immigrants can assimilate are driven by their broader lay theories about the kind of person someone is (*kind-of-person mind-sets*). People can believe that the kind of person someone is either can be changed (*growth mind-set*) or is fixed (*fixed mind-set*; Chiu, Hong, & Dweck, 1997; Levy, Stroessner, & Dweck, 1998). Extensive research has identified people's mind-sets about the kind of person someone is as powerful drivers of their attitudes and behaviors in intergroup contexts (Carr, Rattan, & Dweck, 2012). For example, people with a growth mind-set are less likely to form stereotypes (Levy, Plaks, Hong, Chiu, & Dweck, 2001), are more likely to engage with members of out-groups (Neel & Shapiro, 2012; Rattan & Dweck, 2010), and are less likely to display prejudice toward negatively stereotyped groups (Hong et al., 2004).

In the context of refugees, we propose that the more people believe that the kind of person someone is can be changed, the more they would believe that refugees can adapt, assimilate, and thrive in the host country. Given that host nationals have positive attitudes toward

immigrants who can adapt, assimilate, and thrive in the host country (Van Oudenhoven, Prins, & Buunk, 1998), we reasoned that the more people believe that the kind of person someone is can be changed, the more they would support resettling refugees in their country. We emphasize a key distinction: Our prediction is that the difference between holding a fixed or growth mind-set would drive the degree to which citizens perceive that refugees can assimilate, not the extent to which refugees should assimilate, the assimilationist ideology studied in past research (Berry & Kalin, 1995; Rosenthal & Levy, 2010).

Past work has distinguished between (a) fixed and growth mind-sets about the kind of person someone is and (b) essentialist beliefs (Levy, Chiu, & Hong, 2006; Plaks, Levy, Dweck, & Stroessner, 2004). Conceptually, the two types of beliefs differ in their dimensionality, generality, and target. Fixed and growth mind-sets are unidimensional, domain-specific beliefs about the malleability of individuals' characteristics (e.g., whether individuals' intelligence is fixed or can be changed). In contrast, essentialist beliefs are multidimensional, domain-general beliefs about whether groups are defined by inherent essences (including the dimensions of naturalness, immutability, discreteness, informativeness, coherence, and exclusivity; Bastian & Haslam, 2008; Haslam, Rothschild, & Ernst, 2000; Prentice & Miller, 2007). Past research has found that the more people hold essentialist beliefs, the more they believe that immigrants should assimilate and, thus, the less they support immigration (Bastian & Haslam, 2008; Verkuyten, 2011). Importantly, we predicted that the more people hold growth mind-sets about the kind of person someone is, the more they believe that immigrants can assimilate but not that immigrants should assimilate. If supported, this prediction would underscore both the conceptual and empirical differences between mind-sets and essentialism. We conducted six studies to test our hypotheses.

## Study 1

Study 1 tested whether the more people hold a growth mind-set, the more likely they are to support resettling refugees in their country. Mind-sets are conceptualized as domain-specific constructs (Dweck, 2000, 2006). We focused on kind-of-person mind-sets because we theorized that these mind-sets shape host nationals' views of whether refugees would be able to adapt culturally. However, it is important to ensure that this is the appropriate domain to focus on (Rattan & Georgeac, 2017). Therefore, we also measured people's mind-sets about the malleability of intelligence because intelligence is a general ability that is often considered to be

transferable across cultures (Lynn & Vanhanen, 2002) and, thus, not as relevant to the question of refugees' ability to adapt culturally. We hypothesized that host nationals' kind-of-person mind-sets but not their intelligence mind-sets would predict their support for resettling refugees.

## Method

The hypotheses, power analysis, sample size, participant-inclusion criteria, and method for this study were preregistered on the Open Science Framework (<https://osf.io/eryy6/register/5730e99a9ad5a102c5745a8a>). In all studies, we report all participants, conditions, and measures. This study was conducted in early December 2016, about 3 months after President Obama updated the U.S. refugee policy to increase the number of refugees accepted in the United States by 30%.

**Power analysis.** Because we did not have any prior data to conduct a power analysis, we conducted a pilot study with 187 participants from Amazon Mechanical Turk (MTurk) who were U.S. residents. We used the same measures as in the main study and regressed participants' support for resettling refugees on their kind-of-person mind-set, mind-set about intelligence, and political orientation. Using G\*Power software (Faul, Erdfelder, Lang, & Buchner, 2007), we computed a power analysis for a  $t$  test for a linear bivariate regression (one group, size of slope). We entered the following values: slope for experimental hypothesis ( $H_1$ ) = 0.57,  $\alpha$  = .05 (two-tailed), power = 80%, slope for null hypothesis ( $H_0$ ) = 0,  $SD_x$  = 0.99,  $SD_y$  = 2.01. This analysis indicated that we would need to recruit 94 participants. However, because it takes a minimum sample size of 250 to obtain stable correlations (Schönbrodt & Perugini, 2013), we decided to recruit 400 participants.

**Participants.** A survey seeking 400 U.S. residents was posted on MTurk. In response, 414 participants completed the survey. We excluded 9 participants who were not U.S. citizens and 1 participant who was not residing in the United States, per our preregistered selection criteria. All participants completed the study from unique Internet protocol (IP) addresses. The final sample consisted of 404 participants (251 women, 150 men, 3 others; mean age = 36.05 years; 324 European Americans, 30 African Americans, 13 Latin Americans, 11 Asian Americans, 1 Native American, 7 belonging to other races, and 18 multiracial).

**Procedure.** We presented participants with the following paragraph detailing the latest refugee resettlement policy of the United States at that time, which was announced by the U.S. president in September 2016:

The United States will strive to take in 110,000 refugees from around the world in the coming year, the White House said recently. This would be a nearly 30% increase from the number of refugees allowed in over the previous year. The 110,000 goal covers a 12-month period that starts October 2016 to September 2017. In the previous 12 months, the U.S. goal was to take in 85,000 refugees, and in the three years before that, the target was 70,000 refugees per year.

We then administered four items to measure participants' support for resettling refugees, each measured on a 7-point scale: (a) "How much do you agree that the US should take in 110,000 refugees in the next 12 months?" (*strongly disagree* to *strongly agree*), (b) "How much do you support the policy that the US should take in 110,000 refugees in the next 12 months?" (*strongly against* to *strongly support*), (c) "Do you think that the United States is taking in too many refugees?" (reverse-coded; *definitely not* to *definitely yes*), and (d) "Do you think that the United States is taking in too few refugees?" (*definitely not* to *definitely yes*). Responses to these items were averaged ( $\alpha$  = .96). These items were adapted from unpublished research conducted by Au and Savani (2016).

We measured participants' mind-sets about the kind of person someone is using an established eight-item scale (Levy et al., 1998; sample item: "The kind of person someone is, is something basic about them, and it can't be changed very much"). We also measured participants' mind-set about intelligence (fixed vs. growth) using the standard eight-item scale (Dweck, 2000; sample item: "People have a certain amount of intelligence, and they can't really do much to change it"). For both scales, all items were scored such that higher numbers indicated stronger growth kind-of-person mind-sets or mind-sets about intelligence. Both scales had high reliability (kind of person:  $\alpha$  = .94, intelligence:  $\alpha$  = .96).

We randomly assigned half of the participants to respond to the resettling refugees measure first and the other half of participants to complete the mind-sets measures first. Finally, because the question of accepting refugees is a highly politicized issue, we measured participants' political orientation using three items, each measured on a 7-point scale ranging from *strongly conservative* to *strongly liberal* (Item 1), *strongly right* to *strongly left* (Item 2), and *strongly Republican* to *strongly Democrat* (Item 3). The three items had high reliability ( $\alpha$  = .96).

## Results

The descriptive statistics for all variables included in this study are provided in Table S1 in the Supplemental

Material available online. We conducted a linear regression with participants' support for resettling refugees as the dependent measure and their kind-of-person mind-sets, mind-sets about intelligence, and political orientation as independent variables, per our preregistered analyses. This analysis revealed that participants' mind-sets about intelligence were not associated with their support for resettling refugees,  $b = -0.0032$ , 95% confidence interval (CI) =  $[-0.15, 0.14]$ ,  $SE = 0.074$ ,  $\beta = -0.0020$ ,  $t(400) = -0.043$ ,  $p = .97$ . Participants with a more liberal political orientation were more likely to support resettling refugees,  $b = 0.77$ , 95% CI =  $[0.68, 0.86]$ ,  $SE = 0.046$ ,  $\beta = 0.63$ ,  $t(400) = 16.75$ ,  $p < .001$ , consistent with prior research (Altemeyer, 1998). Most importantly for the current research and as predicted, the more people held a growth mind-set about the kind of person someone is, the more they supported resettling refugees in their country,  $b = 0.26$ , 95% CI =  $[0.10, 0.42]$ ,  $SE = 0.082$ ,  $\beta = 0.14$ ,  $t(400) = 3.17$ ,  $p = .0016$ . Although an unstandardized coefficient of 0.26 is relatively small, on the basis of the standardized coefficients, the effect of kind-of-person mind-sets was 22.22% that of political orientation, which one would expect to be the dominant predictor given the political nature of the issue (for additional analyses, see the Supplemental Material). These results offer initial support for the hypothesis that people's attitudes toward resettling refugees in their country are related to their type of mind-set (fixed vs. growth) about the kind of person someone is.

## Study 2

The goal of Study 2 was to provide a replication of the findings of Study 1 in another country facing an increase in refugees at the time of the study—the United Kingdom.

### Method

The hypotheses, power analysis, sample size, participant-inclusion criteria, and method for this study were preregistered on the Open Science Framework (<https://osf.io/4p2a6/register/5730e99a9ad5a102c5745a8a>). This study was conducted in January 2017, soon after the UK Office for National Statistics reported that the number of asylum seekers claiming refugee status in the United Kingdom had gone up for the sixth consecutive year (Travis, 2016).

**Power analysis.** We conducted a pilot study with 273 participants born and residing in the United Kingdom, using the same independent variables as and a similar dependent variable to those in the main study. We regressed participants' support for providing aid to refugees rather than deporting them on their type of mind-set about the

kind of person someone is and about intelligence. Using G\*Power software (Faul et al., 2007), we computed a power analysis for a  $t$  test for a linear bivariate regression (one group, size of slope). We entered the following values: slope  $H_1 = 0.30$ ,  $\alpha = .05$  (two-tailed), power = 80%, slope  $H_0 = 0$ ,  $SD_x = 1.09$ ,  $SD_y = 2.30$ . This analysis indicated that we would need to recruit 386 participants.

**Participants.** A survey seeking 386 participants who were born and residing in the United Kingdom was posted on Prolific Academic. Although 386 participants completed the survey, we excluded 3 participants who were not born in the United Kingdom, per our preregistered criteria. The final sample thus consisted of 383 participants (231 women, 151 men, 1 other; mean age = 37.25 years; 345 Europeans, 10 Africans, 13 Asians, 12 participants of other races, 2 multiracial, and 1 undisclosed).

**Procedure.** We presented participants with the following paragraph detailing the ongoing refugee crisis in Europe:

More than a million migrants and refugees crossed into Europe in 2015, sparking a crisis as countries struggled to cope with the influx, and creating division in the EU over how best to deal with resettling people. The conflict in Syria continues to be by far the biggest driver of migration. But the ongoing violence in Afghanistan and Iraq, abuses in Eritrea, as well as poverty in Kosovo, are also leading people to look for new lives elsewhere.

Next, we measured participants' support for resettling refugees using four items measured on 10-point bipolar scales: (a) "Do you think that migrants should be immediately deported back to the last country they were in?" (1 = *Migrants should be immediately deported back to the last country they were in*, 10 = *Migrants should NOT be immediately deported back to the last country they were in*), (b) "Do you think that migrants should be immediately confined in high security jail-like Immigrant Removal centres until their asylum applications have been processed?" (1 = *Migrants should be immediately confined in Immigrant Removal centres*, 10 = *Migrants should NOT be immediately confined in Immigrant Removal centres*), (c) "Do you think that the UK government should provide temporary shelter and accommodation for the migrants?" (reverse-coded; 1 = *The government should provide temporary shelter for the migrants*, 10 = *The government should NOT provide temporary shelter for the migrants*), and (d) "Do you think that the UK government should provide financial assistance to migrants who have been granted asylum?" (reverse-coded; 1 = *The government should provide financial assistance to migrants who have been granted*

asylum, 10 = *The government should NOT provide financial assistance to migrants who have been granted asylum*). Responses to these items were averaged ( $\alpha = .86$ ).

We measured participants' mind-sets about the kind of person someone is ( $\alpha = .94$ ) and about intelligence ( $\alpha = .97$ ) using the same scales as in Study 1. As in Study 1, we randomly assigned half of the participants to respond to the resettling-refugees measure first and the other half of participants to complete the mind-sets measures first.

## Results

The descriptive statistics for all variables included in this study are provided in Table S2 in the Supplemental Material. We conducted a regression with participants' support for resettling refugees as the dependent measure and their kind-of-person mind-sets and mind-sets about intelligence as the independent variables, per our preregistered analyses. As in Study 1, participants' mind-sets about intelligence were unrelated to their support for resettling refugees,  $b = -0.043$ , 95% CI =  $[-0.27, 0.18]$ ,  $SE = 0.11$ ,  $\beta = -0.021$ ,  $t(380) = -0.38$ ,  $p = .70$ . Importantly, providing converging support for our hypothesis, results showed that the more people had a growth mind-set about the kind of person someone is, the more they supported resettling refugees in the United Kingdom,  $b = 0.63$ , 95% CI =  $[0.36, 0.89]$ ,  $SE = 0.13$ ,  $\beta = 0.26$ ,  $t(380) = 4.64$ ,  $p < .001$  (for additional analyses, see the Supplemental Material). Thus, the results provide converging support for our hypothesis in another country facing an increase in refugees.

## Study 3

This study tested whether holding a fixed versus growth mind-set about the kind of person someone is exerts a causal impact on people's support for resettling refugees.

## Method

The hypotheses, power analysis, method, sample size, and preselection rules for this study were preregistered on the Open Science Framework (<https://osf.io/8hsbb/register/5730e99a9ad5a102c5745a8a>). This study was conducted in February 2017, soon after President Trump issued a new policy reducing the number of refugees to be accepted in the United States by more than 50%, barring all refugees from entering the United States for the next 4 months, and barring all refugees originating from Syria from entering the United States indefinitely.

**Power analysis.** To conduct the power analysis, we used the effect size from Study 5 by Chiu et al. (1997), as

the current study used the same experimental manipulation. Using G\*Power software (Faul et al., 2007), we computed a power analysis for a  $t$  test comparing two independent means, Cohen's  $d = 0.61$ ,  $\alpha = .05$  (two-tailed), power = 80%, allocation ratio across conditions = 1, which indicated that we would need to recruit a minimum of 88 participants. However, to ensure that the study was highly powered, we decided to recruit 400 participants.

**Participants.** A survey seeking 400 U.S. residents was posted on MTurk. In response, 410 participants completed the survey. Four participants who were not U.S. citizens and 6 participants who were not U.S. residents were excluded from analyses, per our preregistered selection criteria. Further, because this experiment required the participants to read a long article, we also included attention-check questions (Oppenheimer, Meyvis, & Davidenko, 2009). Specifically, participants responded to two questions in which the answers were mentioned within the questions. Seventy-five participants who failed the attention check were excluded from the analyses, per our preregistered selection criteria. All participants completed the survey from unique IP addresses. The final sample consisted of 325 participants (181 women, 141 men, 1 other, 2 undisclosed; mean age = 37.5 years; 251 European Americans, 16 African Americans, 10 Latin Americans, 16 Asian Americans, 4 Native Americans, 4 belonging to other races, and 24 multiracial).

**Procedure.** Each participant was randomly assigned to either the fixed-mind-set condition or the growth-mind-set condition. Adapting an existing manipulation of people's kind-of-person mind-sets (Chiu et al., 1997), we presented participants with an article that had purportedly appeared in a scientific journal. In the fixed-mind-set condition, the article cited research arguing that people's characteristics are mostly fixed over time, whereas in the growth-mind-set condition, the article cited research arguing that people's characteristics can change over time. Next, to strengthen the experimental manipulation, we asked all participants to complete two writing tasks: "Please summarize the main idea expressed in this article," and "In the space below, please give one or two examples from your own experience that support the main theme of the article."

We conducted a manipulation check by administering a three-item measure of kind-of-person mind-sets (Chiu et al., 1997), to which participants responded on a 6-point scale ranging from *strongly disagree* to *strongly agree*. Higher numbers indicate greater agreement with the fixed belief.

Next, we presented participants with the following paragraph detailing the United States's most recent refugee policy issued by President Trump:

The US recently revised its policy toward refugees. The US was supposed to take in 110,000 refugees this year. However, the President just signed an order that stopped all refugees from entering the US for the next 4 months. Further, the President indefinitely blocked Syrian refugees from entering the US. Further, when the US restarts taking in refugees, the total number of refugees settled in the US this year would be reduced from the current 110,000 to 50,000.

We then administered four items, each measured on a 7-point scale: (a) “How much do you agree with the policy that no refugees can enter the US for the next 4 months?” (*strongly disagree* to *strongly agree*), (b) “How much do you support the policy that Syrian refugees are indefinitely barred from entering the US?” (*strongly against* to *strongly support*), (c) “How much do you agree with the policy that the US should take in only 50,000 refugees rather than 110,000 refugees this year?” (*strongly disagree* to *strongly agree*), and (d) “How much do you agree with the policy that the US should not take in any refugees from predominantly Muslim countries?” (*strongly disagree* to *strongly agree*). Responses to these items were averaged ( $\alpha = .96$ ) and reverse-scored such that higher numbers indicate more support for resettling refugees. Finally, we measured participants’ political orientation using the same items as in Study 1 ( $\alpha = .94$ ).

## Results

Participants in the growth-mind-set condition indicated lower agreement with the manipulation-check items,  $M = 2.71$ , 95% CI = [2.53, 2.89],  $SD = 1.16$ , compared with those in the fixed-mind-set condition,  $M = 4.46$ , 95% CI = [4.26, 4.67],  $SD = 1.31$ ,  $t(323) = 12.74$ ,  $p < .001$ , Cohen’s  $d = 1.41$ , 95% CI = [1.17, 1.66], indicating that our manipulation was successful in nudging participants to agree with the presented beliefs.

We conducted a linear regression with participants’ support for resettling refugees as the dependent measure and their experimental condition (0 = fixed mind-set, 1 = growth mind-set) and political orientation as independent variables, per our preregistered analysis plan. As expected, participants with a more liberal orientation were more likely to support resettling refugees,  $b = 0.94$ , 95% CI = [0.85, 1.032],  $SE = 0.046$ ,  $\beta = 0.75$ ,  $t(322) = 20.24$ ,  $p < .001$ . As hypothesized, a significant effect of experimental condition indicated that participants in the growth-mind-set condition were more likely to support resettling refugees than those in the fixed-mind-set condition,  $b = 0.32$ , 95% CI = [0.017, 0.63],  $SE = 0.16$ ,  $\beta = 0.077$ ,  $t(322) = 2.078$ ,  $p = .038$ ,

Cohen’s  $d = 0.23$ , 95% CI = [0.012, 0.45], providing evidence for the causal influence of mind-sets on people’s support for resettling refugees.

In an additional regression, we added an interaction between condition and political orientation, which was nonsignificant,  $b = -0.026$ , 95% CI = [-0.21, 0.16],  $SE = 0.094$ ,  $\beta = 0.013$ ,  $t(322) = 0.28$ ,  $p = .78$ , indicating that the mind-set manipulation had a similar effect on participants across the political-orientation spectrum.

## Study 4

Study 4 examined the mechanism underlying the relationship between people’s mind-sets about the kind of person someone is and their support for resettling refugees. We hypothesized that a growth mind-set would lead people to think that refugees can more easily assimilate into the host country’s culture, which would increase their support for resettling refugees in their country.<sup>1</sup>

## Method

This study was conducted in January 2017, before any changes in the refugee resettlement policy were made under the new presidential administration.

**Power analysis.** This study was conducted before Study 3. Thus, we conducted a power analysis based on the effect size from Study 5 by Chiu et al. (1997). This analysis indicated that we would need to recruit a minimum of 88 participants for 80% power. However, to ensure that the study was highly powered, we decided to recruit 500 U.S. participants.

**Participants.** A survey seeking 500 U.S. residents was posted on MTurk. In response, 506 participants completed the survey. We excluded 12 participants who were not U.S. citizens and 1 participant who was not a U.S. resident, per our predetermined criteria. Further, as in Study 3, we excluded 69 participants who failed the attention check. The final sample consisted of 424 participants (273 women, 149 men, 1 other, 1 undisclosed; mean age = 37.40 years; 333 European Americans, 29 African Americans, 11 Latin Americans, 22 Asian Americans, 1 Native American, 10 belonging to other races, and 18 multiracial).

**Procedure.** Each participant was randomly assigned to either the fixed-mind-set condition or the growth-mind-set condition. We used the same procedure as in Study 3 to manipulate people’s mind-sets (fixed vs. growth) about the kind of person someone is. We also asked participants to respond to the manipulation-check items used in Study 3.

Next, we measured the hypothesized mediator—participants’ beliefs about how well refugees can

assimilate in society—using five items: (a) “To what extent do you think refugees can assimilate in the society?” (b) “To what extent do you think refugees can blend in the society?” (c) “To what extent do you think refugees can fit in the society?” (d) “To what extent do you think refugees can become a part of mainstream society?” (e) “To what extent do you think refugees will become more American in their attitudes and values over time?” Participants responded to these items on a 7-point scale ranging from *not at all* to *extremely*. Responses to these items were averaged ( $\alpha = .93$ ).

To measure the dependent variable, we presented participants with the same paragraph as in Study 1 detailing the latest refugee resettlement policy of the United States at that time. This policy was announced by President Obama in September 2016 and was still in force in January 2017 under President Trump’s administration, when the study was conducted. We presented participants with the same four items as in Study 1 to measure their support for resettling refugees ( $\alpha = .95$ ). Finally, we measured participants’ political orientation using the same three items as in the previous studies ( $\alpha = .96$ ).

## Results

**Manipulation check.** Participants in the growth-mind-set condition endorsed the fixed-mind-set manipulation-check measures less than those in the fixed-mind-set condition—fixed:  $M = 4.51$ , 95% CI = [4.35, 4.66],  $SD = 1.13$ , growth:  $M = 2.56$ , 95% CI = [2.37, 2.76],  $SD = 1.44$ ,  $t(425) = 15.43$ ,  $p < .001$ , Cohen’s  $d = 1.49$ , 95% CI = [1.28, 1.71], indicating that our manipulation was successful.

**Link between independent variables and mediator.** We first ran a regression with participants’ belief that refugees can assimilate in society as the dependent variable and experimental condition (0 = fixed mind-set, 1 = growth mind-set) and political orientation as the independent variables. Participants with a more liberal orientation were more likely to believe that refugees can assimilate,  $b = 0.40$ , 95% CI = [0.32, 0.47],  $SE = 0.040$ ,  $\beta = 0.44$ ,  $t(421) = 10.32$ ,  $p < .001$ . As predicted, a significant effect of condition indicated that participants in the growth-mind-set condition were more likely than those in the fixed-mind-set condition to believe that refugees can assimilate,  $b = 0.49$ , 95% CI = [0.24, 0.75],  $SE = 0.13$ ,  $\beta = 0.16$ ,  $t(421) = 3.77$ ,  $p < .001$ , Cohen’s  $d = 0.37$ , 95% CI = [0.17, 0.56].

**Link between independent and dependent variables.** A regression with participants’ support for resettling refugees as the dependent measure and experimental condition (0 = fixed mind-set, 1 = growth mind-set) and

political orientation as the independent variables found no direct effect of experimental condition on participants’ support for resettling refugees,  $b = 0.17$ , 95% CI = [−0.09, 0.44],  $SE = 0.14$ ,  $\beta = 0.045$ ,  $t(421) = 1.28$ ,  $p = .20$ , Cohen’s  $d = 0.12$ , 95% CI = [−0.066, 0.31]. As in the previous studies, participants with a more liberal orientation were more likely to support resettling refugees,  $b = 0.76$ , 95% CI = [0.68, 0.84],  $SE = 0.040$ ,  $\beta = 0.68$ ,  $t(421) = 18.87$ ,  $p < .001$ . Although the direct effect of the same experimental manipulation on participants’ support for resettling refugees emerged in Study 3, it did not emerge in the present study. At the same time, the direct effect does not have to be observed for an indirect effect to be supported (e.g., Hayes, 2009; MacKinnon, Krull, & Lockwood, 2000; Shrout & Bolger, 2002).

**Link between the mediator and dependent variable.** Next, we ran a regression with participants’ support for resettling refugees as the dependent variable and their belief that refugees can assimilate and their political orientation as independent variables. Participants with a more liberal orientation were more likely to support resettling refugees,  $b = 0.56$ , 95% CI = [0.48, 0.63],  $SE = 0.040$ ,  $\beta = 0.49$ ,  $t(421) = 14.27$ ,  $p < .001$ . As predicted, the more participants believed that refugees can assimilate, the more they supported resettling refugees,  $b = 0.51$ , 95% CI = [0.43, 0.60],  $SE = 0.043$ ,  $\beta = 0.41$ ,  $t(421) = 11.85$ ,  $p < .001$ .

**Test for mediation.** Next, we tested whether there is an indirect effect of fixed-growth mind-sets on support for resettling refugees through the belief that refugees can assimilate, with political orientation as the covariate. A bootstrapping analysis with 5,000 samples using Model 4 of Hayes’s (2018) PROCESS macro indicated a positive indirect effect of the growth-mind-set condition versus the fixed-mind-set condition on increased support for resettling refugees, mediated through a stronger belief that refugees can assimilate in society,  $b = 0.26$ ,  $SE = 0.073$ , 95% CI = [0.12, 0.41]. These results provide evidence for the hypothesized mechanism: Compared with those exposed to the idea that the kind of person someone is is fixed, participants exposed to the idea that the kind of person someone is can be changed were more likely to believe that refugees can assimilate in the new society, which predicted their greater support for resettling refugees in their country.

## Study 5

Study 5 tested whether people’s fixed-growth mind-sets would be associated with their beliefs about whether refugees can assimilate to the host country’s culture but not their beliefs about whether refugees should

assimilate. We further tested whether the belief that immigrants can assimilate and the belief that they should assimilate are independent constructs.

## Method

**Participants.** Because this study included new measures, we did not have a basis for conducting power analysis. Therefore, before conducting the survey, we decided on a sample size of 400. A survey seeking 400 U.S. residents was posted on MTurk. In response, 453 participants completed the survey. All responses were from unique IP addresses. We excluded 31 participants who were not U.S. citizens and 1 participant who was not a U.S. resident, per our predetermined criteria. The final sample consisted of 421 participants (248 women, 171 men, 2 others; mean age = 37.56 years; 304 European Americans, 27 African Americans, 26 Latin Americans, 2 Native Americans, 25 Asian Americans, 10 belonging to other races, 17 multiracial, and 4 undisclosed).

**Procedure.** First, participants responded to three items measuring their kind-of-person mind-sets (Chiu et al., 1997;  $\alpha = .90$ ). Next, participants responded to five items assessing the extent to which they believed that refugees can assimilate in American society: (a) "To what extent do you think refugees can assimilate in American society?" (b) "To what extent do you think refugees can blend in American society?" (c) "To what extent do you think refugees can fit in American society?" (d) "To what extent do you think refugees can become a part of mainstream American society?" and (e) "To what extent do you think refugees can become more American in their attitudes and values over time?" Participants responded to these items on a 7-point scale ranging from *not at all* to *extremely* ( $\alpha = .95$ ). Participants also responded to five items assessing the extent to which they believed that refugees should assimilate in American society. These were the exact same items as the previous measure except that the word "can" was replaced with "should" ( $\alpha = .95$ ). Finally, we measured participants' political orientation as in the previous studies ( $\alpha = .93$ ).

## Results

We first conducted confirmatory factor analyses to test whether the two constructs—the belief about whether refugees can assimilate in American society and the belief about whether refugees should assimilate in American society—are distinct. A two-factor model fitted the data, root-mean-square error of approximation (RMSEA) = 0.10, comparative fit index (CFI) = .97,  $\chi^2(34) = 170.01$ , better than a one-factor model, RMSEA = 0.39, CFI = .51,  $\chi^2(35) = 2,315.28$ , as evidenced by a significant decrease in the chi-square

value,  $\Delta\chi^2(1) = 2,145.26$ ,  $p < .001$ , indicating that these two constructs are distinct from each other.

Next, we regressed participants' beliefs about whether refugees can assimilate in American society on their kind-of-person mind-sets and political orientation. Participants' kind-of-person mind-sets significantly predicted their belief about whether refugees can assimilate in American society, consistent with our predictions,  $b = 0.30$ , 95% CI = [0.20, 0.41],  $SE = 0.053$ ,  $\beta = 0.24$ ,  $t(418) = 5.74$ ,  $p < .001$ . Participants' political orientation was also a significant predictor,  $b = 0.40$ , 95% CI = [0.32, 0.48],  $SE = 0.041$ ,  $\beta = 0.41$ ,  $t(418) = 9.71$ ,  $p < .001$ .

Finally, we regressed participants' beliefs about whether refugees should assimilate in American society on their kind-of-person mind-sets and political orientation. Consistent with our predictions, results showed that whereas political orientation was a significant predictor,  $b = -0.15$ , 95% CI = [-0.24, -0.060],  $SE = 0.046$ ,  $\beta = -0.16$ ,  $t(418) = -3.27$ ,  $p = .0012$ , participants' kind-of-person mind-sets did not predict their beliefs that refugees should assimilate in American society,  $b = -0.015$ , 95% CI = [-0.13, 0.103],  $SE = 0.060$ ,  $\beta = -0.012$ ,  $t(418) = -0.25$ ,  $p = .80$ . These results suggest that although people's kind-of-person mind-sets are related to their beliefs about whether refugees can assimilate, they are unrelated to their beliefs about whether refugees should assimilate in the host culture.

## Study 6

Study 6 sought to integrate the findings of Study 4, which found that people who believe that refugees can assimilate have more positive attitudes toward refugees, with the findings of past research, which found that people who believe that immigrants should assimilate have more negative attitudes toward immigrants (Bastian & Haslam, 2008). We predicted that people's beliefs about whether refugees can assimilate (i.e., their ability to assimilate), but not their beliefs about whether refugees should assimilate (i.e., their obligation to assimilate), would underlie the relationship between people's fixed-growth mind-sets and their support for refugees.

## Method

The study was conducted in June 2017, immediately after the U.S. Supreme Court's interim ruling on President Trump's executive order on refugees.

**Participants.** Because this study included a new between-participants manipulation (can assimilate vs. should assimilate), we did not have a basis for conducting a power analysis. Therefore, before conducting the survey, we decided on a sample size of 400. A survey seeking 400 U.S. residents was posted on MTurk. In



response, 403 participants completed the survey. We excluded multiple responses from the same IP address (six in total), 6 participants who were not U.S. citizens, and 8 participants who were not U.S. residents, per our predetermined criteria. The final sample consisted of 383 participants (participants' gender was not recorded because of a technical issue; mean age = 34.5 years; 293 European Americans, 23 African Americans, 13 Latin Americans, 24 Asian Americans, 8 belonging to other races, and 22 multiracial). Each participant was randomly assigned to either the can-assimilate condition or the should-assimilate condition.

**Procedure.** We first measured participants' fixed-growth mind-sets about the kind of person someone is using the same scale as in Study 1 ( $\alpha = .95$ ). Participants in the can-assimilate condition responded to the five items mentioned in the previous study assessing the extent to which they believed that refugees can assimilate in American society ( $\alpha = .96$ ). Those in the should-assimilate condition responded to the five items mentioned in the previous study assessing the extent to which they believed that refugees should assimilate in American society ( $\alpha = .93$ ).

Thereafter, we presented participants with the refugee policy issued by President Trump, along with the Supreme Court's ruling upholding the president's ban on refugees with some qualifications. Specifically, participants read the following paragraph:

The US recently revised its policy toward refugees. The US was supposed to take in 110,000 refugees this year. However, the President signed a revised executive order in March that stopped all refugees from entering the US for the next 120 days. The Supreme Court recently upheld the President's ban on refugees who do not have a "bona fide" (legitimate) relationship with US citizens or organizations. Further, when the US starts taking in refugees, the total number of refugees settled in the US this year would be reduced from the current 110,000 to 50,000.

We then measured participants' support for resettling refugees in their country using four items measured on 7-point scales: (a) "How much do you agree with the policy that the US should take in only 50,000 refugees rather than 110,000 refugees this year?" (reverse-coded; *strongly disagree* to *strongly agree*), (b) "How much do you agree with the policy that the US should not take in any refugees?" (reverse-coded; *strongly disagree* to *strongly agree*), (c) "Do you think that the United States is taking in too many refugees?" (reverse-coded; *definitely not* to *definitely yes*), and (d) "Do you think that the United States is taking in too few refugees?" (*definitely not* to *definitely yes*). Responses to these items were averaged ( $\alpha = .94$ ).

Further, to ensure that our dependent measure is distinct from participants' general support for multiculturalism, which has been extensively examined in past research (Arends-Tóth & Van De Vijver, 2003; Verkuyten & Brug, 2004), we also measured participants' belief in multiculturalism using the multiculturalism-ideology scale ( $\alpha = .91$ ; Arends-Tóth & Van De Vijver, 2003). Finally, we measured participants' political orientation as in the previous studies ( $\alpha = .94$ ).

## Results

The descriptive statistics for all variables included in this study are provided in Tables S3 and S4 in the Supplemental Material. To test which of the two assimilation beliefs—can assimilate or should assimilate—mediated the relationship between participants' kind-of-person mind-sets and their support for resettling refugees, we conducted separate analyses within the can-assimilate and should-assimilate conditions.

In the can-assimilate condition, the more the participants had growth mind-sets, the more they believed that refugees can assimilate,  $r = .28$ , 95% CI = [.11, .43],  $p < .001$ , and the more they supported resettling refugees,  $r = .26$ , 95% CI = [.14, .40],  $p < .001$ . Further, the more participants believed that refugees can assimilate, the more they supported resettling refugees,  $r = .70$ , 95% CI = [.61, .77],  $p < .001$ . See the Supplemental Material for analyses controlling for political orientation, which do not render any significant results nonsignificant. Next, we conducted a mediation analysis using PROCESS Model 4 (Hayes, 2018) with participants' support for resettling refugees as the dependent variable, their kind-of-person mind-set as the independent measure, their belief that refugees can assimilate in society as the mediator, and their political orientation as a covariate. A bootstrapping analysis with 5,000 samples found that the direct effect of kind-of-person mind-sets on the support for resettling refugees was mediated by participants' beliefs that refugees can assimilate in society,  $b = 0.22$ ,  $SE = 0.064$ , 95% CI = [0.099, 0.35].

In the should-assimilate condition, participants' fixed-growth mind-sets were unrelated to their beliefs about whether refugees should assimilate,  $r = -.054$ , 95% CI = [-.20, .085],  $p = .45$ . People with growth mind-sets were more likely to support resettling refugees,  $r = .19$ , 95% CI = [.055, .33],  $p = .007$ . The more participants believed that refugees should assimilate, the less they supported resettling refugees,  $r = -.32$ , 95% CI = [-.47, -.16],  $p < .001$ , consistent with prior research (Bastian & Haslam, 2008; Verkuyten, 2011). Again, see the Supplemental Material for additional analyses controlling for political orientation. Next, we conducted a parallel mediation analysis using PROCESS Model 4 (Hayes, 2018) but using whether immigrants should

assimilate as the mediator. As predicted, a bootstrapping analysis with 5,000 samples found that the belief that refugees should assimilate in society did not mediate the direct effect of kind-of-person mind-sets on the support for resettling refugees,  $b = 0.0074$ ,  $SE = 0.020$ , 95% CI =  $[-0.031, 0.050]$ .

Additional analyses found that participants' support for resettling refugees and their support for multiculturalism were distinct constructs, and the pattern and significance of the results reported above did not change when we controlled for the effect of multiculturalism on support for resettling refugees (for details, see the Supplemental Material). These results suggest that people with a growth mind-set are more likely to believe that refugees can assimilate and thus are more likely to support resettling refugees. However, people's mind-sets are not related to their beliefs about whether refugees should assimilate, the classic assimilationist ideology that is associated with lower support for resettling refugees.

## General Discussion

Six studies provide converging evidence for the idea that the more people believe that the kind of person someone is can be changed, the more likely they are to believe that refugees can assimilate and thus express greater support for resettling refugees in their country. These findings held across diverse methods (correlational and experimental studies), in two countries (the United States and the United Kingdom), and with reference to different refugee policies, including those proposed by President Obama to increase the number of refugees to be resettled in the United States and those proposed by President Trump to decrease the number of refugees to be resettled in the United States.

Past research has extensively studied the assimilationist-diversity ideology—the idea that immigrants are obligated to assimilate—and found that it predicts a variety of negative attitudes toward immigrants (Verkuyten & Brug, 2004). This ideology is problematic because it demands that immigrants must adopt the new host culture at the expense of their home nation's culture, despite the finding that it is possible for immigrants to successfully adapt to new cultures without giving up their home culture (Berry, 1992). The present research thus advances theoretical understanding in intergroup relations by identifying a lay belief—kind-of-person growth mind-sets—that shapes a distinct response to refugees: acknowledging refugees' ability to assimilate without obligating them to assimilate and thus increasing people's willingness to resettle refugees. The current work also contributes to distinguishing mind-sets (fixed vs. growth) and essentialist beliefs by showing that they are associated with distinct beliefs about assimilation.

In this work, we studied attitudes toward refugees as a broad identity group. Future research can investigate whether people's support for resettling refugees is contingent on the specific type of refugees being considered. For example, people's support for refugees from different groups might vary on the basis of the stereotypes (Fiske, Cuddy, Glick, & Xu, 2002), or degree of inferiority or foreignness (Zou & Cheryan, 2017), associated with that group. Future research can also investigate whether minority groups within a host nation differ in how their mind-sets shape their support for refugee resettlement (for exploratory analyses with the current samples, see the Supplemental Material). Finally, Study 3 found that people's support for resettling refugees increased immediately after they read an article communicating a growth mind-set, but the effect of this experimental manipulation is likely short lived. This study might also have suffered from an experimenter-demand effect if participants guessed our hypothesis about the relationship between (a) the fixed or growth mind-set article and (b) the subsequent questions about resettling refugees. Future research can investigate ways to produce a more durable change in people's mind-sets using a more demand-free method and assess whether this has a lasting impact on people's attitudes.

Citizens' attitudes toward resettling refugees shape the life outcomes of more than 3 million people annually (UN Refugee Agency, 2015). Thus, it is critical for psychological science to better understand what shapes people's outlook on resettling refugees. The current research answers this call by linking people's kind-of-person mind-sets to their outlook on refugees' ability to adapt and, thus, their attitudes toward resettling refugees. The findings suggest that people's kind-of-person mind-sets might be relevant not just to interpersonal judgments in intergroup contexts (Carr et al., 2012; Hong et al., 2004) but also to a set of policy attitudes that have the potential to shape millions of lives.



### Action Editor

Ayşe K. Uskul served as action editor for this article.

### Author Contributions

K. Savani conceptualized the research idea. All the authors contributed to the study designs. S. Madan and K. Savani collected the data. S. Madan and S. Basu analyzed the data with input from K. Savani and A. Rattan. All the authors wrote the manuscript and approved the final manuscript for submission.

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The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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## Supplemental Material

Additional supporting information can be found at <http://journals.sagepub.com/doi/suppl/10.1177/0956797618813561>

## Open Practices



All data and materials have been made publicly available via the Open Science Framework and can be accessed at <https://osf.io/9ej2c/>. The design and analysis plans for the first three studies were pre-registered at the OSF and can be found at <https://osf.io/eryy6/register/5730e99a9ad5a102c5745a8a> (Study 1), <https://osf.io/4p2a6/register/5730e99a9ad5a102c5745a8a> (Study 2), and <https://osf.io/8hsbb/register/5730e99a9ad5a102c5745a8a> (Study 3), respectively. The remaining studies were not preregistered. The complete Open Practices Disclosure for this article can be found at <http://journals.sagepub.com/doi/suppl/10.1177/0956797618813561>. This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at <http://www.psychologicalscience.org/publications/badges>.

## Note

1. In another study, we found that the relationship between fixed versus growth mind-sets and support for a disadvantaged group was stronger when the disadvantaged group was refugees, who are perceived as culturally different from the general populace, rather than homeless people, who are culturally more similar to the host population and for whom cultural assimilation may not be as relevant. More details about this study can be requested from the authors.

## References

- Altemeyer, B. (1998). The other "authoritarian personality." In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 47–92). San Diego, CA: Academic Press.
- Arends-Tóth, J., & Van De Vijver, F. J. (2003). Multiculturalism and acculturation: Views of Dutch and Turkish-Dutch. *European Journal of Social Psychology, 33*, 249–266.
- Au, E. W. M., & Savani, K. (2016). [The choice mind-set and support for refugees]. Unpublished raw data.
- Badea, C., Tavani, J. L., Rubin, M., & Meyer, T. (2017). Self-affirmation, political value congruence, and support for refugees. *Journal of Applied Social Psychology, 47*, 355–365.
- Bastian, B., & Haslam, N. (2008). Immigration from the perspective of hosts and immigrants: Roles of psychological essentialism and social identity. *Asian Journal of Social Psychology, 11*, 127–140.
- Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration, 30*, 69–85.
- Berry, J. W., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada: An overview of the 1991 national survey. *Canadian Journal of Behavioural Science, 27*, 301–320.
- Carr, P. B., Rattan, A., & Dweck, C. S. (2012). Implicit theories shape intergroup relations. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 45, pp. 127–165). San Diego, CA: Academic Press.
- Chiu, C. Y., Hong, Y. Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology, 73*, 19–30.
- Dovidio, J. F., & Gaertner, S. L. (2000). Aversive racism and selection decisions: 1989 and 1999. *Psychological Science, 11*, 315–319.
- Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development*. New York, NY: Psychology Press.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.
- Edwards, A. (2016, June 20). *Global forced displacement hits record high*. Retrieved from UN Refugee Agency website: <http://www.unhcr.org/news/latest/2016/6/5763b65a4/global-forced-displacement-hits-record-high.html>
- European Stability Initiative. (2017). *The refugee crisis through statistics: A compilation for politicians, journalists and other concerned citizens*. Retrieved from <https://www.esiweb.org/pdf/ESI%20-%20The%20refugee%20crisis%20through%20statistics%20-%2030%20Jan%202017.pdf>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175–191.
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878–902.
- Guimond, S., De Oliveira, P., Kamiesjki, R., & Sidanius, J. (2010). The trouble with assimilation: Social dominance and the emergence of hostility against immigrants. *International Journal of Intercultural Relations, 34*, 642–650.
- Haslam, N., Rothschild, L., & Ernst, D. (2000). Essentialist beliefs about social categories. *British Journal of Social Psychology, 39*, 113–127.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*, 408–420.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). New York, NY: Guilford.

- Hong, Y. Y., Coleman, J., Chan, G., Wong, R. Y., Chiu, C. Y., Hansen, I. G., . . . Fu, H. Y. (2004). Predicting intergroup bias: The interactive effects of implicit theory and social identity. *Personality and Social Psychology Bulletin*, *30*, 1035–1047.
- Levy, S. R., Chiu, C. Y., & Hong, Y. Y. (2006). Lay theories and intergroup relations. *Group Processes & Intergroup Relations*, *9*, 5–24.
- Levy, S. R., Plaks, J. E., Hong, Y. Y., Chiu, C. Y., & Dweck, C. S. (2001). Static versus dynamic theories and the perception of groups: Different routes to different destinations. *Personality and Social Psychology Review*, *5*, 156–168.
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, *74*, 1421–1436.
- Lynn, R., & Vanhanen, T. (2002). *IQ and the wealth of nations*. Westport, CT: Greenwood.
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science*, *1*, 173–181.
- Neel, R., & Shapiro, J. R. (2012). Is racial bias malleable? Whites' lay theories of racial bias predict divergent strategies for interracial interactions. *Journal of Personality and Social Psychology*, *103*, 101–120.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, *45*, 867–872.
- Plaks, J. E., Levy, S. R., Dweck, C. S., & Stroessner, S. J. (2004). In the eye of the beholder: Lay theories and the perception of group entitativity, variability, and essence. In V. Yzerbyt, C. M. Judd, & O. Corneille (Eds.), *The psychology of group perception: Perceived variability, entitativity, and essentialism* (pp. 127–146). New York, NY: Psychology Press.
- Prentice, D. A., & Miller, D. T. (2007). Psychological essentialism of human categories. *Current Directions in Psychological Science*, *16*, 202–206.
- Rattan, A., & Dweck, C. S. (2010). Who confronts prejudice? The role of implicit theories in the motivation to confront prejudice. *Psychological Science*, *21*, 952–959.
- Rattan, A., & Georgeac, O. A. M. (2017). Understanding intergroup relations through the lens of implicit theories (mindsets) of malleability. *Social and Personality Psychology Compass*, *11*(4), Article e12305. doi:10.1111/spc3.12305
- Rosenthal, L., & Levy, S. R. (2010). The colorblind, multicultural, and polycultural ideological approaches to improving intergroup attitudes and relations. *Social Issues and Policy Review*, *4*, 215–246.
- Schönbrodt, F. D., & Perugini, M. (2013). At what sample size do correlations stabilize? *Journal of Research in Personality*, *47*, 609–612.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *7*, 422–445.
- Thomsen, L., Green, E. G. T., & Sidanius, J. (2008). We will hunt them down: How social dominance orientation and right-wing authoritarianism fuel ethnic persecution of immigrants in fundamentally different ways. *Journal of Experimental Social Psychology*, *44*, 1455–1464.
- Travis, A. (2016, December 1). Immigration to UK hit record levels prior to Brexit vote, data shows. *The Guardian*. Retrieved from <https://www.theguardian.com/uk-news/2016/dec/01/immigration-to-uk-hit-record-levels-in-run-up-to-brexit-vote-latest-figures-show>
- UN Refugee Agency. (2015). *Global trends: Forced displacement in 2015*. Retrieved from UN Refugee Agency website: <http://www.unhcr.org/statistics/unhcrstats/576408cd/unhcr-global-trends-2015.html>
- UN Refugee Agency. (2017, June 19). *Figures at a glance*. Retrieved from UN Refugee Agency website: <http://www.unhcr.org/figures-at-a-glance.html>
- Van Oudenhoven, J. P., Prins, K. S., & Buunk, B. P. (1998). Attitudes of minority and majority members towards adaptation of immigrants. *European Journal of Social Psychology*, *28*, 995–1013.
- Verkuyten, M. (2011). Assimilation ideology and outgroup attitudes among ethnic majority members. *Group Processes & Intergroup Relations*, *14*, 789–806.
- Verkuyten, M., & Brug, P. (2004). Multiculturalism and group status: The role of ethnic identification, group essentialism and protestant ethic. *European Journal of Social Psychology*, *34*, 647–661.
- Zou, L. X., & Cheryan, S. (2017). Two axes of subordination: A new model of racial position. *Journal of Personality and Social Psychology*, *112*, 696–717.