Predicting and Shifting Attitudes Toward Immigrants and Immigration: Testing a Model and Communication Strategy

Tejaswinhi Srinivas

University of Denver

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Predicting and Shifting Attitudes toward Immigrants and Immigration:

Testing a Model and Communication Strategy

A Dissertation

Presented to

the Faculty of Social Sciences

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Doctor of Philosophy

by

Tejaswinhi Srinivas

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Advisor: Anne P. DePrince, Ph.D.
Research in intergroup relations has found evidence for economic and moral explanations for negative attitudes toward immigrants and immigration (NATII), and has evaluated various communication strategies for shifting these attitudes. However, no research to date has provided a cultural explanation for NATII, or tested and compared the impact of communication strategies for reducing NATII, in the American context. This study extended prior research in three ways. First, we tested a model that linked various psychosocial factors together (i.e., right-wing authoritarianism, intergroup contact, cultural essentialism, and symbolic threat) to provide a cultural explanation for NATII. Second, we tested the effect of a particular communication strategy (i.e., involving familiar American national identity messages based on the Common Ingroup Identity Model (CIIM)) on NATII and related model variables (i.e., symbolic threat). Third, we tested the model and communication strategy in relation to two different immigrant groups in the American context (i.e., undocumented Latino immigrants and Syrian refugees). The study sample \( n = 562 \) was recruited through Amazon Mechanical Turk and closely approximated the demographic composition of the native-born, adult United States population. Results of path and ANCOVA analyses revealed three key findings. First, we found support for a model that provides a viable and meaningful cultural explanation for NATII, whereby symbolic threat emerged as a partial mediator of
relationships between right-wing authoritarianism and NATII, and intergroup contact and NATII. Second, we did not find support for the effect of a communication strategy based on the CIIM in reducing symbolic threat or NATII. Third, we found support for a significant effect of immigrant group of focus on symbolic threat and NATII, such that slightly different versions of the model held in relation to undocumented Latino immigrants versus Syrian refugees. We discuss the implications of these findings for future research that evaluates explanations for NATII and interventions for reducing NATII.
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Chapter One: Introduction

Waves of people fleeing violence, poverty, and persecution across the world have contributed to recent worldwide levels of migration that rival those seen in World War II and its aftermath (United Nations, 2017). The United States has been among the top ten destination countries for immigrants, and Americans believe that immigration is among the most important issues facing the nation (Gallup, 2018; Zong, Batalova, & Hallock, 2018). Since the 2016 American presidential election, immigration issues have remained in the limelight, aided by recent high-profile events including President Trump’s executive orders on border security, interior enforcement, and refugees, and the administration’s plans to phase out Deferred Action for Childhood Arrivals (DACA). Despite the increased focus, Americans appear ambivalent about the societal impacts of immigration (Pew Research Center, 2015), and Congress has repeatedly struggled and failed to pass comprehensive immigration reform. Successful efforts toward immigration reform can benefit from research that improves our understanding of Americans’ attitudes toward immigrants and immigration, including the factors that help predict these attitudes, as well as the kinds of communication strategies that can help shift these attitudes.
Chapter Two: Background

Over the past two decades, research in social psychology and other social sciences has made great strides in illuminating factors that predict individuals’ attitudes toward immigrants and immigration, and lesser but important strides in identifying strategies that can help shift these attitudes. Notably, extant research has fallen short of linking various factors together to provide a “cultural” explanation for negative attitudes toward immigrants and immigration (NATII, hereafter) in the American context. A cultural explanation would account for how and why native-born American citizens may perceive foreign-born immigrants as bringing norms and values that are dissimilar from, or incompatible with, those of the host society. Moreover, no research to date (of which we are aware) has tested and compared the impact of various communication strategies to reduce NATII in the American context.

The primary aims of the present study were to (1) test a model that links various psychosocial factors together to provide a cultural explanation for NATII, (2) test the effect of a particular communication strategy on reducing NATII and related model variables, and (3) test the model and communication strategy in relation to two different immigrant groups in the American context. The following sections review the research literature on factors that predict NATII, communication strategies that help reduce
NATII, and immigrant groups in the American context, and explain how the present study builds on this research.

Prior Research on Psychosocial Factors Predicting NATII

Research in the social sciences has identified a range of individual-level, psychosocial factors that predict NATII. Within the field of intergroup relations, growing efforts have been devoted to linking these factors together in larger explanatory models. For example, researchers have linked factors from diverse literatures on personality-like traits, zero-sum beliefs, dehumanization, and intergroup emotions, finding empirical support for models that provide two main explanations for NATII. “Economic” explanations suggest that individuals perceive they are in competition with immigrants over scarce resources (e.g., Esses, Dovidio, Jackson, & Armstrong, 2001). “Moral” explanations suggest that individuals perceive immigrants as rule-breakers who unfairly cheat the system (e.g., Esses, Veenvliet, Hodson, & Mihic, 2008; Louis, Esses, & Lalonde, 2013). Missing from the literature is consideration of a model that suggests a “cultural” explanation, whereby individuals perceive immigrants as bringing norms and values that are dissimilar from, or incompatible with, those of the host society. This omission is especially surprising given the proliferation of cultural explanations in popular discourse on immigrants and immigration (e.g., Polakow-Suransky, 2017; Tracinski, 2015).

Model Providing a Cultural Explanation for NATII

The present study tested a model that provides a cultural explanation for NATII, drawing on factors from multiple research literatures relevant to intergroup relations
including personality-like traits, intergroup contact, social cognition, and threat perceptions. Specifically, the model links together right-wing authoritarianism, intergroup contact, cultural essentialism, and symbolic threat as factors that predict NATII. Figure 1 presents an illustration of the hypothesized model. The subsections below each begin with the specific prediction made in the hypothesized model, and then reference the relevant literature to provide a theoretical and empirical justification for the role of each of the factors within the model.

**Figure 1**

*Hypothesized Model Providing a Cultural Explanation for NATII*

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**The role of symbolic threat.** We predicted that symbolic threat would be positively associated with NATII. A component of Integrated Threat Theory (ITT; Stephan & Stephan, 2000), symbolic threat refers to differences in norms or values posed by a social group other than one’s own (i.e., an outgroup), that one’s own social group (i.e., the ingroup) perceives as a threat to its worldview (Falomir-Pichastor & Mugny, 2013; Stephan, Ybarra, Martínez, Schwarzwald, & Tur-Kaspa, 1998; Tajfel, Billig, Bundy, & Flament, 1971). Prototypical examples of symbolic threat include perceived differences in norms and values regarding childrearing, acceptability of violence, preferred language of communication, and preferred religious practice. Symbolic threat has been associated with negative attitudes toward unauthorized immigrants to the US
(Murray & Marx, 2013; Pearson, 2010); specific immigrant groups including Mexican, Cuban, Asian, Rwandan, and East Timorese immigrants to the US (Stephan, Renfro, Esses, Stephan, & Martin, 2005; Stephan, Ybarra, & Bachman, 1999); immigrants in general to the US and New Zealand (Leong, 2008; Wilson, 2001); and refugees to the US and Australia (Murray & Marx, 2013; Schweitzer, Perkoulidis, Krome, Ludlow, & Ryan, 2005).

The role of cultural essentialism. We predicted that cultural essentialism would be positively associated with NATII via symbolic threat. Following the psychological definition of essentialism within the literature on social cognition (e.g., Haslam, Bastian, & Bissett, 2004), cultural essentialism refers to a pattern of thinking about culture as having some fixed, underlying essence that determines the identity of members of a cultural group, rendering them fundamentally alike and allowing various inferences to be drawn about their characteristics. Building on psychological conceptualizations of essentialist thinking about social groups (Bastian & Haslam, 2008; Haslam, Rothschild, & Ernst, 2002; Rangel & Keller, 2011), a cultural essentialist understanding of groups implies that cultural group membership has some natural basis, imbuing group members with certain necessary, immutable, discrete, and stable characteristics that result from birth and socialization within a particular culture; and that group membership has an entitative or reified quality, with group members jointly possessing a coherent, unified, and homogenous set of characteristics.

No study to date (of which we are aware) has specifically considered the role of cultural essentialism in predicting NATII. However, various kinds of essentialist beliefs
(e.g., about personality traits, ingroup national identity, outgroup identity) have been associated with negative attitudes toward Asian immigrants to Australia (Bastian & Haslam, 2008); negative attitudes toward asylum seekers to the UK (Pehrson, Brown, & Zagefka, 2009); and fear-related xenophobia toward Muslim immigrants to Norway (Ommundsen, Yakushko, Veer, & Ulleberg, 2013). Because cultural essentialism specifically taps essentialist beliefs about culture, and because culture encompasses multiple social groups into which immigrants may fall (e.g., ethnicity, religion), cultural essentialism may be better at capturing beliefs related to NATII than are essentialist beliefs about personality traits or other social categories.

Theory supports the potential role of symbolic threat as a mediator between cultural essentialism and NATII. Individuals higher in cultural essentialism are more likely to view both their own ingroup and outgroups as natural and reified entities. They may believe that being American involves the preservation and continuation of core, deeply ingrained, largely invariant cultural values (e.g., upholding Judeo-Christian values, retaining English as the sole national language). They may also believe that American values are, for example, different from the values Latino immigrants possess by virtue of Latino cultural membership, or that Syrian refugees possess by virtue of Syrian cultural membership. Individuals higher in cultural essentialism may thus be more likely to perceive immigrants as culturally dissimilar others. Recognition of cultural dissimilarity may then increase symbolic threat, including perceptions of immigrants as threatening the solidarity and integrity of the host culture, competing for cultural dominance, and rupturing the sense of existential security provided by a stable national-
cultural identity (Bassett, 2010; Esses et al., 2001; Falomir-Pichastor & Frederic, 2013; Smeekes & Verkuyten, 2014). These perceptions may in turn increase NATII, leading to less favorable views of immigrants and endorsement of more restrictive immigration policy.

In contrast, individuals lower in cultural essentialism may be more likely to view cultures as fluid, complex, and dynamic, to regard individuals as bearers of different and unique aspects of their own and other cultures to which they are exposed, and to see points of convergence and compatibility across cultures. These sentiments may lessen perceptions of symbolic threat and open up possibilities for genuine integration of immigrants with diverse cultural origins. For example, individuals lower in cultural essentialism may see American culture as evolving and becoming enriched through absorption of immigrant customs, cuisines, and languages, and American dedication to tolerance and secularism as allowing for acceptance of diverse immigrant populations. They may also be more likely to see people as defined not simply by aspects of their cultural origin, but also aspects of multiple and intersecting identities including gender, sexual orientation, class, profession, and so on, as well as exercising some agency in what aspects define them.

**The role of right-wing authoritarianism.** We predicted that right-wing authoritarianism would be positively associated with NATII via cultural essentialism and symbolic threat. Typically considered a personality-like trait, right-wing authoritarianism refers to submissiveness to authorities perceived as established and legitimate, adherence to societal conventions and norms, and hostility toward perceived deviants (Altemeyer,
Right-wing authoritarianism has been associated with negative attitudes toward asylum seekers to Australia (Anderson, Stuart, & Rossen, 2015; Nickerson & Louis, 2008); unauthorized immigrants to the US (Bassett, 2010); and legal immigrants to the US (Oyamot, Fisher, Deason, & Borgida, 2012).

Theory and evidence support the potential role of cultural essentialism and symbolic threat as mediators in the relationship between right-wing authoritarianism and NATII. Individuals higher in right-wing authoritarianism exemplify more rigid preferences regarding societal conventions and group hierarchy, and may also be more likely to hold rigid views on the nature of social categories such as culture. They may be more likely to perceive that an outgroup presents a symbolic threat by virtue of construing the ingroup and outgroup as separate, natural, and reified entities whose fundamental difference is itself threatening to traditional social conventions and group hierarchy. Essentialist beliefs may also legitimize right-wing authoritarianism, allowing ingroup members to find justification for the status quo and social hierarchy by means of attributing their group status to group-inherent, superior, and essential features (Yzerbyt, Corneille, & Estrada, 2001). Furthermore, “social threat” has been found to mediate the relationship between right-wing authoritarianism and negative attitudes toward outgroups (Duckitt, 2006; Cohrs & Asbrock, 2009). In these studies, social threat appears similar to symbolic threat, operationalized by items assessing threats to social values, norms, traditions, security, and stability.

**The role of intergroup contact.** We predicted that intergroup contact would be negatively associated with NATII via cultural essentialism and symbolic threat. The
Intergroup Contact Hypothesis suggests that contact with outgroup members that meets certain prescribed conditions (e.g., equality, cooperation) may serve to challenge prejudicial attitudes (Allport, 1979). An implication of this hypothesis is that lack of, or less frequent contact with, outgroups may serve to maintain originally prejudicial attitudes. Consistent with this implication, decreased contact with immigrants has been associated with negative attitudes toward immigrants to New Zealand and Europe (Leong, 2008; McLaren, 2003).

Theory and evidence support the potential role of cultural essentialism and symbolic threat as mediators in the relationship between intergroup contact and NATII. In situations of low knowledge of others—as happens with less contact—essentialism may serve as a placeholder belief with adaptive value (Medin & Ortony, 1989), allowing for quick inferences based on whatever limited knowledge one has about others’ group membership. For example, a Trump supporter in a largely White, rural community, having very little contact with immigrants or Muslims, may be more likely to support a ban on Muslim immigration. This stance may be based on essentialist beliefs about Muslims arrived at through limited accessible information, which recently may stem from media reporting on Islamist terrorism. In a context of less intergroup contact, and limited but negative information about immigrants, confirmation bias may orient attention toward additional negative information that reinforces essentialist conclusions. Less intergroup contact may also function to maintain cultural essentialist thinking about the ingroup, allowing individuals to preserve a narrow vision of who fits within the ingroup and what defines the ingroup’s worldview. A natural consequence of less intergroup
contact, narrow and homogenous views of outgroup and ingroup norms and values may combine to make perceptions of symbolic threat more likely. In contrast, intergroup contact of greater frequency and better quality (e.g., as through positive interactions or friendships) may undermine cultural essentialist thinking through increased opportunities for disconfirmation of generalized negative information, exposure to heterogeneity of outgroup norms and values, recognition of commonalities across ingroup and outgroup norms and values, and even possible reappraisal and widening of ingroup conceptualizations. Furthermore, symbolic threat has been found to mediate associations between increased intergroup contact and more positive attitudes toward immigrants in New Zealand (Ward & Masgoret, 2006); decreased intergroup contact and desire for social distance toward Muslim immigrants to Australia (Ata, Bastian, & Lusher, 2009); and increased intergroup contact and ethnic tolerance toward immigrants to Denmark (Frølund Thomsen, 2012).

**The role of sociodemographic characteristics.** We predicted that certain sociodemographic characteristics (i.e., age, education, income, gender, race/ethnicity, political orientation, and family history of immigration) would be significantly associated with NATII, and that we would need to control for their effect when testing the model. Prior research has identified a range of sociodemographic characteristics that have been associated with NATII. These include older age (Dustmann & Preston, 2005; Murray & Marx, 2013); lower socioeconomic status, in the form of less formal education and lower income (Hooghe & de Vroom, 2015; Pederson et al., 2005); male gender (Pedersen, Attwell, & Haveli, 2005; Schweitzer et al., 2005); White or Caucasian race/ethnicity
(Diaz et al., 2011; Lee, Ottati, & Hussein, 2001; Murray & Marx, 2013); and conservative political orientation (Bassett, 2010; de Zuniga, Correa, & Valenzuela, 2012; Pederson et al., 2005; Wilson, 2001). Research has not specifically considered associations between family history of immigration and NATII. However, it seems reasonable to consider that individuals with a more recent family history of immigration (e.g., having a parent or grandparent who was an immigrant) may be less susceptible to NATII than are individuals with more distant family history, or no remembered family history, of immigration. In sum, the present study aimed to test a model that links together right-wing authoritarianism, intergroup contact, cultural essentialism, and symbolic threat to provide a cultural explanation for NATII, controlling for the effect of various sociodemographic characteristics on NATII.

**Prior Research on Communication Strategies to Reduce NATII**

In addition to testing a model that provides a cultural explanation for NATII, the present study aimed to test the effect of a particular communication strategy in reducing NATII and related model variables. Identifying what factors predict NATII, and how these factors link together to provide different explanations for NATII, can help improve our understanding of Americans’ attitudes toward immigrants and immigration. Deciphering how particular communication strategies might work to shift these attitudes represents a crucial next step in advancing immigration reform efforts that seek to translate Americans’ attitudes into sound progressive policy.

A small but growing body of research has explored various strategies for reducing NATII. Strategies that have gained some empirical support tend to derive theoretical
insight from the Common Ingroup Identity Model (CIIM). According to the CIIM, intergroup bias can be reduced if members of the ingroup can be compelled to engage in a recategorization process whereby they conceive of themselves as part of a larger, superordinate group that includes former outgroup members, incorporating outgroup members into their representations of the ingroup itself (Gaertner & Dovidio, 2012).

Missing from this literature is a rigorous comparison of different messages based on the CIIM, and the testing of these messages on NATII and variables associated with NATII, within the American context.

**The Effect of a Communication Strategy Based on the CIIM**

The present study tested and compared the effect of two different messages based on the CIIM on NATII and symbolic threat, in the American context. Specifically, both messages involved familiar descriptions of American national identity: one emphasizing a common national identity, and the other emphasizing a common human identity, across native-born residents and foreign-born immigrants. The subsections below provide a theoretical and empirical justification for testing the two messages.

**Historical message.** The first kind of American national identity message was the historical message, which emphasized a common national identity including both native-born residents and foreign-born immigrants. Research has shown that brief, editorial-like narratives emphasizing a common national identity based on a shared history of immigration have been associated with more positive attitudes toward immigrants to Canada, as compared with a neutral control condition (e.g., Esses et al., 2001; Esses, Wagner, Wolf, Preiser, & Wilbur, 2006). The historical message tested here portrayed
immigration as central to the history of the US, as a prototypical characteristic of American-ness relevant to the life stories of virtually all Americans and their forefathers. It thereby framed immigrants as “one of us” rather than “one of them.”

The historical message is a familiar American national identity message deployed by the media and used in immigration reform campaigns and political speeches. For example, an advertisement produced by the National Immigration Forum Action Fund (2015), and appearing during the September 2015 Republican Primary debates, seemed to promote a historical national identity message. It featured Ronald Reagan describing his vision for the US as a “shining city on a hill…teeming with people of all kinds, living in harmony and peace.” Likewise, President Obama’s remarks at a naturalization ceremony held at the National Archives in December 2015 referred to immigration as “our origin story,” the “core of our national character,” and “our oldest tradition” (The White House, 2015).

**Humanitarian message.** The second kind of American national identity message was the humanitarian message, which emphasized a national identity that honors humanitarian values, including treating immigrants with compassion and respect as fellow human beings. This message did not promote a common national identity, but a common human identity or common humanity across native-born residents and foreign-born immigrants. No research to date (of which we are aware) has tested the effect of messages emphasizing a common humanity across native-born residents and foreign-born immigrants. However, research has shown that endorsement of humanitarian values has been associated with more positive attitudes toward legal immigrants to the US (Oyamot
et al., 2012); and endorsement of religious tolerance (one type of humanitarian value) has been associated with less opposition to Muslim immigrants’ expressive rights in the Netherlands (Smeekes & Verkuyten, 2014). Furthermore, the humanitarian message is compatible with conceptions of the US as a nation that upholds universal, post-Enlightenment principles of benevolence and respect (Oyamot et al., 2012). Immigration reform campaigns and editorialists who urge against tearing families apart through deportation, and encourage acceptance of refugees, often evoke a humanitarian narrative of American national identity (e.g., Downes, 2015; Kristof, 2015).

**Effects on NATII and symbolic threat.** Based on theory and prior research, we predicted that both the historical and humanitarian messages would be associated with lower NATII, relative to a control condition that did not involve priming with a national identity message. We also predicted that these messages would be associated with lower symbolic threat, given that our model hypothesized significant and direct associations between symbolic threat and NATII. Finally, we predicted that the historical message would be associated with lower symbolic threat and NATII than would the humanitarian message. The historical message may be more compelling than the humanitarian message for two reasons. First, conceiving of immigration as central to national identity seems more uniquely American than conceiving of humanitarianism as central to national identity. The US is rare among modern Western democracies for having the world’s largest immigrant population (Pew Research Center, 2015). In contrast, humanitarianism is a value that virtually all modern Western democracies purport to espouse. Second, the status of the US as a nation of immigrants may have somewhat greater factual basis than
notions of American commitment to humanitarianism. Especially in the current atmosphere of highly contentious and politicized rhetoric around immigration, it may be easier to dismiss the ongoing relevance of humanitarian concerns that would urge permissive attitudes toward immigration, than to dismiss the simple fact that the US was built through waves of immigration. In sum, the present study aimed to test the effect of two familiar American national identity messages, both based on the CIIM, on symbolic threat and NATII.

Two Immigrant Groups in the American Context

The third aim of the present study specified the context of our research. Specifically, the present study aimed to test both the model providing a cultural explanation for NATII (aim 1), and the communication strategy based on the CIIM (aim 2), in relation to two different immigrant groups relevant to the American context. The US has seen waves of immigration from different regions across the world, and the foreign-born have sought residence as legal immigrants, undocumented immigrants, asylum seekers, and refugees (Zong et al., 2018). Two specific US immigrant groups that have received a preponderance of media attention, and for whom public opinion appears to be especially divided, include undocumented Latino immigrants and Syrian refugees (Murray & Marx, 2013; Segovia & DeFever, 2010; Talev, 2015).

To date, no study (of which we are aware) has evaluated NATII in relation to both these groups, or compared NATII and other key model variables across the groups. We predicted that the hypothesized model suggesting a cultural explanation for NATII would hold for both immigrant groups, and that the effect of familiar American national identity
messages would also hold for both immigrant groups. Due to the lack of research evaluating or comparing key model variables in these groups, we did not have more specific hypotheses about differences in particular variables or differences in structural parameters across these groups, but considered such differences in exploratory analyses.
Chapter Three: Present Study

The present study had three main aims: (1) to test a model that links various psychosocial factors together to provide a cultural explanation for NATII; (2) to test the effect of a particular communication strategy (i.e., familiar American national identity messages based on the CIIM) on NATII and related model variables (i.e., symbolic threat), and (3) to test the model and communication strategy in relation to two different immigrant groups in the American context (i.e., undocumented Latino immigrants and Syrian refugees). Related to aim 1, we hypothesized that (a) the model would achieve good fit to the data; (b) right-wing authoritarianism, lower intergroup contact, cultural essentialism, and symbolic threat would be associated with NATII, through either direct or indirect effects; (c) cultural essentialism would mediate the relationship between right-wing authoritarianism and symbolic threat, and between lower intergroup contact and symbolic threat; and (d) symbolic threat would mediate the relationship between cultural essentialism and NATII. If our hypothesized model did not achieve adequate fit to the data or provide a meaningful explanation for NATII, we would consider alternate models, as one of our main purposes was to discern the existence of a model that could provide a cultural explanation for NATII. Related to aim 2, we hypothesized that (e) the experimental intervention involving exposure to either the historical or humanitarian American national identity messages would be associated with lower symbolic threat and
NATII relative to a control with no exposure; and (f) the intervention involving exposure to the historical national identity message would be associated with lower symbolic threat and NATII relative to the intervention involving exposure to the humanitarian national identity message. Related to aim 3, exploratory analyses would test the effect of immigrant group of focus and its interaction with experimental intervention on symbolic threat and NATII, and the effect of immigrant group of focus on model fit and structural parameters.
Chapter Four: Method

Participants

The current convenience sample \((n = 562)\) comprised US residents, 18 years or older, recruited through Amazon Mechanical Turk (MTurk). A total of 639 participants were recruited as described in the Procedure section below. Through the data cleaning process, which involved examining the data for quality control, cases that met either of the following two criteria were removed. The first criterion was repeated completion of the pre-survey screening questionnaire (e.g., a participant completing the pre-survey screening questionnaire three times to pass eligibility requirements for the survey), or discrepant responses to demographic screening items versus demographic survey items (e.g., a participant who indicated a different sex or race on the screening versus the survey items). Repeated completion of the screening questionnaire and discrepant responses likely resulted from participants attempting to gain eligibility for the survey and corresponding compensation, as through fabricating their demographic responses. Fifty-seven cases were removed to minimize the impact of possible fabrication on data quality. The second criterion was failure to pass four out of five attention checks distributed throughout the survey. Twenty cases were removed to minimize the impact of poorer attention on data quality. The resulting sample closely approximated the demographic composition of the native-born, adult US population in terms of sex, age,
race, ethnicity, and region of residence. Participants reported ages ranging from 18 to 81, with a mean age of 42.45 (SD = 14.81). Table 1 presents additional demographic information for the current sample.

Table 1
Selected Demographic Characteristics for Study Sample

<table>
<thead>
<tr>
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<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>263 (46.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>299 (53.2%)</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>466 (82.9%)</td>
</tr>
<tr>
<td>Hispanic, Latino, or Spanish origin</td>
<td>34 (6.0%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>71 (12.6%)</td>
</tr>
<tr>
<td>Asian</td>
<td>15 (2.7%)</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>9 (1.6%)</td>
</tr>
<tr>
<td>Middle Eastern or North African</td>
<td>2 (0.4%)</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Other race, ethnicity, or origin</td>
<td>5 (0.9%)</td>
</tr>
<tr>
<td>Geographic region of residence</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>98 (17.4%)</td>
</tr>
<tr>
<td>Midwest</td>
<td>115 (20.5%)</td>
</tr>
<tr>
<td>South</td>
<td>219 (39.0%)</td>
</tr>
<tr>
<td>West</td>
<td>129 (23.0%)</td>
</tr>
</tbody>
</table>

Note. Total percentage for race/ethnicity exceeds 100%, because participants could endorse more than one race/ethnicity category. Race/ethnicity response choices were adapted from a Census Bureau experiment testing a new approach to asking about race/ethnicity, as reported in Cohn, 2015.

Procedure

The University of Denver Institutional Review Board (IRB) Committee approved all study procedures.

Recruitment and consent. MTurk is an online crowdsourcing service that provides a platform for conducting survey and experimental research (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). The study was advertised on MTurk as a Human Intelligence Task (HIT) titled “Social Attitudes
“Survey” that would take approximately 45-60 minutes to complete. HIT is the terminology MTurk uses to designate surveys and other tasks on its platform. Participants saw a brief and general description of the survey that avoided mentioning immigration issues specifically, so as not to attract participants with more polarized views. The description read as follows: “Complete a survey (~45-60 minutes) that asks about your attitudes toward important social issues facing the United States.”

Potential participants were required to meet the following inclusion criteria in order to access a more detailed description of the survey, and ultimately the survey link: (a) being 18 years or older, (b) residing in the US, (c) having an approval rating of at least 95% for previous HITs, (d) having completed more than 500 previous HITs, and (e) not having taken the survey already. MTurk automatically determined inclusion criteria (a) through (d). Creation of an MTurk account is restricted to those who certify that they are adults 18 years or older, and MTurk account data specify participants’ country of residence and HIT frequency and performance level. For inclusion criterion (e), the author wrote and entered code into the survey interface to restrict survey access to MTurk participants who had not previously taken the survey. Inclusion criteria (c) and (d) were specified to facilitate quality control. They were consistent with recommendations for researchers using MTurk, as participants who have completed a greater number of HITs and who have received high rates of work approval are more likely to demonstrate greater attention on HIT tasks (Peer, Vosgerau, & Acquisti, 2014).

MTurk participants who met the above inclusion criteria were able to read a more detailed description of the survey that described the general purpose (i.e., surveying
“attitudes toward important social issues facing the United States”); the contents (i.e., screening questions for eligibility, followed by questionnaires with attention checks distributed throughout); and the process for receiving compensation. Participants could then click on a link to be routed to a screening questionnaire in Qualtrics that was meant to evaluate the following three additional inclusion criteria: (f) US citizenship status, (g) birth in the US, and (h) meeting preset demographic quotas. Quotas were calculated based on data from the US Census Bureau on the demographic composition of the native-born, adult US population in terms of sex, age, race, ethnicity, and region of residence. Along with inclusion criterion (b), criteria (f) through (h) were specified to facilitate recruitment of a sample more representative of the native-born US population than a typical college undergraduate or general internet sample. Qualtrics automatically evaluated participants’ responses to screening questions to determine eligibility. Participants who were not eligible received a message thanking them for completing the screening questionnaires and explaining they were not eligible for the survey. Participants who were eligible were routed to an informed consent form that provided details on study purpose, participation, risks and benefits, compensation, confidentiality, researcher contact information, and institutional review board contact information. To verify consent and proceed to the survey, participants needed to check a box to indicate they agreed to participate.

Survey. Following consent, participants were randomized to one of three experimental conditions by means of a randomizer within Qualtrics software: the control condition (Con), the intervention condition involving exposure to the historical national
identity message (His), or the intervention condition involving exposure to the humanitarian national identity message (Hum). Additionally, participants were randomized to conditions in which certain measures (i.e., symbolic threat and one indicator of NATII) were tied to either of the two immigrant groups of focus: undocumented Latino immigrants (ULI) or Syrian refugees (SR). Thus, participants were randomized to one of six conditions: Con-ULI, Con-SR, His-ULI, His-SR, Hum-ULI, or Hum-SR.

For all conditions, the first part of the survey comprised questionnaires on sociodemographic characteristics, right-wing authoritarianism, intergroup contact, and cultural essentialism. For the intervention conditions, the second part of the survey comprised instructions about reading an editorial and writing a brief summary of the editorial; the editorial itself, which corresponded with either the historical or humanitarian message intervention; and instructions and space to write a brief, three-sentence summary of the editorial. The two control conditions did not receive the second part of the survey. Instructions about writing an editorial summary prior to reading were meant to facilitate increased attention, and instructions about writing an editorial summary following the reading were meant to facilitate cognitive accessibility of the intervention message. For all conditions, the third part of the survey comprised questionnaires on symbolic threat and NATII. To protect against ordering effects, questionnaires in the first and third parts of the survey were programmed to appear in a random order, and items within those questionnaires were also programmed to appear in
a random order. The survey included five validation items distributed throughout to evaluate participant attention.

**Compensation.** Following survey completion, participants received $3 in compensation credited to their MTurk account. In the MTurk marketplace, typical rates for a 60 minute survey are $3 per hour (Fort, Adda, & Cohen, 2011).

**Data collection.** All data were collected over a span of 20 days (between April 9 and April 28, 2017). Of note, there were no major immigration-related events in the US that occurred during this period, with the exception of a district court judge ruling that President Trump’s executive order withholding federal funds from sanctuary cities was unconstitutional (Phillips, 2017). On average, participants completed the survey in 33.4 minutes ($SD = 21.6$).

**Intervention check.** Participant summaries for the editorial (involving exposure to either the historical or humanitarian national identity messages) were examined to evaluate participant attention to the experimental intervention. Summaries were evaluated to reflect acceptable attention, provided that the participant had referenced at least one part of the message. This was a check to ensure that participants had read the message. All summaries in the sample were evaluated as reflecting acceptable attention.

**Measures**

**Right-wing authoritarianism.** Right-wing authoritarianism was measured with a short-form version of the Right-Wing Authoritarianism Scale (Altemeyer, 1988), which assesses support for authority and tradition. The original scale comprised 22 items. The short-form version comprised eight items, including four positively-scored items (e.g.,
“Obedience and respect for authority are the most important values children should learn”), and four reverse-scored items (e.g., “Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people”). The short-form version has been employed in recent studies (e.g., Anderson et al., 2015; Nickerson & Louis, 2008). Participants responded to each item on a scale ranging from “1 = strongly disagree” to “7 = strongly agree.” Responses to the eight items were summed and divided by the total number of item responses for that scale to produce an overall mean score, with higher scores reflecting greater right-wing authoritarianism. Cronbach’s alpha was excellent (.91).

**Intergroup contact.** Intergroup contact was measured with four items adapted from other studies that have measured self-reported intergroup contact (e.g., McLaren, 2003; Voci & Hewstone, 2003; Stephan, Diaz-Loving, & Duran, 2000). Three items assessed quality of contact with those from a perceived cultural outgroup. Participants saw the following prompt: “Generally, when you meet people from a culture different from your own, how would you describe the meeting?” Participants then responded to the prompt on response scales indicating three different adjectives, with scales ranging from “1 = not at all pleasant” to “7 = very pleasant,” “1 = not at all cooperative” to “7 = very cooperative,” and “1 = not at superficial” to “7 = very superficial.” The item corresponding with the third response scale was reverse scored. One remaining item assessed quantity of contact with those from a perceived cultural outgroup. Participants saw the following prompt: “Generally, during your daily routine, how frequently do you have direct contact (including dialogue) with people you consider to be of a different
culture from your own?” Participants then responded to the prompt on a scale ranging from “1 = not at all” to “7 = very frequently.” Following the method in Voci and Hewstone (2003), responses to the three quality of contact items were summed and divided by the total number of item responses to produce an overall mean score. Cronbach’s alpha was acceptable (.77). This mean score was then multiplied by the quantity of contact item score to produce a single index of intergroup contact that simultaneously reflected quality and quantity of contact, with lower scores indicating less and more negative intergroup contact.

**Cultural essentialism.** Cultural essentialism was measured with a scale adapted for this study from scales on essentialist beliefs about social categories and beliefs in social determinism (Haslam, Rothschild, & Ernst, 2000; Rangel & Keller, 2011). The scale comprised nine items corresponding with key features of essentialism: naturalness, centrality/necessity, immutability, discreteness, and stability, which together compose the natural basis dimension; and informativeness, uniformity, inherence, and exclusivity, which together compose the reified or entiative quality dimension. Sample items included the following: “Culture is a central aspect of personality—it defines who you are,” and “People from the same culture behave very similarly.” Participants responded to each item on a scale ranging from “1 = strongly disagree” to “7 = strongly agree.” One item was reverse scored. Because the cultural essentialism scale was a newer measure adapted for this study, an exploratory factor analysis using principal axis factoring with varimax (orthogonal) rotation was conducted to determine the factor structure and the potential need to remove items with lower factor loadings. The Kaiser-Meyer Olkin Measure of
Sampling Adequacy (KMO = .87) and Bartlett’s Test of Sphericity (p = .00) demonstrated that the sample was factorable for cultural essentialism. Using Kaiser’s criterion resulted in extraction of two factors. However, one factor contained only one item, and the other factor contained all items, with all item loadings above .30 (ranging from .45 to .80). Additionally, the scree plot indicated retaining one factor. Consequently, one factor for the Cultural Essentialism Scale was retained. Responses to the nine items were summed and divided by the total number of item responses for that scale to produce an overall mean score, with higher scores reflecting greater cultural essentialism. Cronbach’s alpha was good (.83).

**Symbolic threat.** Symbolic threat was measured with the Symbolic Threat Scale (Stephan et al., 1999), which assesses appraisals of differences in norms, beliefs, or values perceived to constitute a threat to the ingroup’s worldview. The scale comprised seven items (e.g., “Immigration/refugee resettlement is undermining American culture”). Participants responded to each item on a scale ranging from “1 = strongly disagree” to “7 = strongly agree.” Three items were reverse scored. Responses to the seven items were summed and divided by the total number of item responses for that scale to produce an overall mean score, with higher scores reflecting greater symbolic threat. Cronbach’s alpha was good (.89). Depending on assigned condition, item responses were tied to undocumented Latino immigrants or Syrian refugees as the immigrant group of focus.

**Negative attitudes toward immigrants and immigration (NATII).** Negative attitudes toward immigrants and immigration (NATII) were measured with three scales. One short-form scale assessed societal impacts of immigration, with items adapted from
public opinion polls utilized in other research on NATII, including the Southwest Poll (used in Wang, 2012); the General Social Survey MEUS module (used in Alba, Rumbaut, & Marotz, 2005); and the European Social Survey migration and minority module (used in Card, Dustmann, & Preston, 2005). The scale comprised six items (e.g., “Immigrants/refugees make things worse in terms of crime”). Participants responded to each item on a scale ranging from “1 = strongly disagree” to “7 = strongly agree.” One item was reverse scored. Responses to the six items were summed and divided by the total number of item responses for that scale to produce an overall mean score, with higher scores reflecting greater perceived negative impact of immigration. Cronbach’s alpha was excellent (.95).

A second, long-form measure developed for this study assessed attitudes toward a range of specific government policies concerning immigration. The measure comprised 27 items, preceded by the prompt: “The US government (or state government where applicable) should implement the following policies.” Sample items included the following: “Path to citizenship for parents of undocumented children,” and “Halting the admittance of Syrian refugees.” Participants responded to each item on a scale ranging from “1 = strongly disagree” to “7 = strongly agree.” Fourteen items were reverse scored. Because the scale on government policies concerning immigration was new and specifically developed for this study, an exploratory factor analysis using principal axis factoring with varimax (orthogonal) rotation was conducted to determine the factor structure and the potential need to remove items with lower factor loadings. The Kaiser-Meyer Olkin Measure of Sampling Adequacy (KMO = .97) and Bartlett’s Test of
Sphericity ($p = .00$) demonstrated that the sample was factorable for government policies concerning immigration. Using Kaiser’s criterion resulted in extraction of three factors. However, one factor contained all items, with all item loadings above .30 (ranging from .47 to .84). Additionally, the scree plot indicated retaining one factor. Consequently, one factor for the scale on government policies concerning immigration was retained.

Responses to the 27 items were summed and divided by the total number of item responses for that scale to produce an overall mean score, with higher scores reflecting greater immigration policy restrictiveness. Cronbach’s alpha was excellent (.97).

A third scale assessed attitudes toward a particular immigrant group (i.e., either undocumented Latino immigrants or Syrian refugees, as specified by the assigned condition), using a basic thermometer rating from “$0^0 = extremely unfavorable$” to “$100^0 = extremely favorable$.” This thermometer rating has been used successfully in prior studies on attitudes toward immigrants (e.g., Esses et al., 2006, 2008; Louis et al., 2013). Participants slid a marker to indicate their rating. Responses were subtracted from 100 to produce an immigrant unfavorability score, with higher scores reflecting more unfavorable attitudes toward the particular immigrant group.

Bivariate correlations among the three scale scores were high (ranging from .75 to .87). Consequently, the three scale scores were standardized and averaged to create a composite score for NATII, with higher scores reflecting higher NATII.

**Sociodemographic characteristics.** Seven sociodemographic characteristics were assessed through participants’ responses to items on age, education, income, gender, ethnicity, political orientation, and family history of immigration. These indicators were
treated as potential control variables, as described in the Statistical Analysis section below. Age was assessed through participants’ numeric text entries. Education was assessed through participants’ responses to a scale ranging from “1 = less than high school” to “8 = postgraduate or professional degree.” Household income (for the year 2016) was assessed through participants’ responses to a scale ranging from “1 = less than $10,000” to “12 = more than $150,000.” Household size was assessed through participants’ numeric text entries. Consistent with the Pew Research Center guideline in Kocchar and Cohn (2011), adjusted income was computed by dividing household income by the square root of household size. Political orientation was assessed through participants’ responses to a scale ranging from “1 = very liberal” to “5 = very conservative.” Items on education, income, and political orientation were adapted from Pew Research Center Demographic Questions (2015). Gender was coded as a dichotomous variable based on participants’ responses to an item on gender identity, with 1 = male or transgender male and 0 = female, transgender female, genderqueer/gender-nonconforming, and other. Ethnicity was coded as a dichotomous variable based on participants’ responses to items on race and ethnicity, with 1 = White/Caucasian, and 0 = non-White (racial/ethnic minority). Gender and ethnicity were coded in this way so that scores of “1” would reflect categories (i.e., male, White/Caucasian race/ethnicity) that background research (cited above) has shown to be associated with NATII. Family history of immigration was coded based on participants’ responses to items on the first generation of their family to have immigrated to the US on either parents’ side, with 1 = yes and 0 = no for having one or more parents or grandparents as an immigrant.
Materials

The historical and humanitarian national identity messages were constructed to be comparable in terms of reading level, word count, length and number of sentences, and length and number of paragraphs, and to contain frequent parallel phrasing.

**Historical message.** In the historical condition, participants read a narrative adapted from President Obama’s remarks at the National Archives naturalization ceremony in December 2015. To prevent contamination of responses, we did not specify the source of the narrative. Additionally, because the remarks did not receive wide circulation, it is unlikely that participants were familiar with the content. The narrative read as follows (with forward slashes indicating paragraph divisions):

“The United States is a nation born of immigrants. Immigration is our origin story. For more than two centuries, immigration has remained the core of our national character. It is our oldest tradition. It is the essence of who we are. / Unless your family is Native American, all of our families come from someplace else. From the far reaches of many lands. The Pilgrims themselves were the first refugees. Eight signers of the Declaration of Independence were immigrants. We celebrate this history—this heritage—as an immigrant nation. / In the Mexican immigrant of today, we see the Irish Catholic immigrant of a century ago. In the Syrian seeking refuge today, we should see the Jewish refugee of World War II. / In these would-be Americans, we see our own American stories—our forefathers, our parents, our grandparents, our aunts, our uncles, our cousins—who packed up what they could, and scraped together what they had. And their paperwork wasn’t always in order. And they set out for a place that was more than just a piece of land, but the most novel idea the world had yet seen. / The United States is an exceptional nation, and immigration is our unique inheritance.”

**Humanitarian message.** In the humanitarian condition, participants read the following narrative (with forward slashes indicating paragraph divisions):
“The United States is a nation that welcomes immigrants. Welcoming immigrants is central to our humanitarian ideals. For more than a century, the Statue of Liberty has proclaimed our message of welcome to the rest of the world. Our message of humanitarianism is a firm commitment to principles of tolerance and care. To treat people with the compassion they deserve as human beings. This is what makes America a beacon of hope. This is what makes America a refuge for those fleeing violence, poverty, and persecution. / In the Mexican immigrant of today, we see a fellow human being—someone who wants to feed their kids and keep them safe. In the Syrian seeking refuge today, we see a fellow human being—someone fleeing warfare and political persecution. / These people—these “huddled masses yearning to be free”—set out for a place that is more than just a piece of land, but the embodiment of an idea. A place where they could find respect and dignity. / The United States is an exceptional nation, and our capacity to embrace those who arrive at our shores is a testament to our humanitarian values, and a lesson to the rest of the world.”

**Statistical Analyses**

**Overview of preliminary analyses.** Descriptive analyses were conducted to examine mean, standard deviation, range, skew, and kurtosis for continuous variables, and frequencies for categorical variables, including for both model variables and sociodemographic characteristics serving as potential control variables. Chi-square and one-way ANOVA analyses were conducted to test significant associations between experimental condition and categorical and continuous sociodemographic characteristics, respectively, and thereby evaluate independence of experimental conditions. Multiple regression analyses were conducted to identify which of the seven sociodemographic characteristics significantly predicted NATII, and should thus be retained as control variables in the main analyses testing the model. Bivariate correlations were conducted to examine associations among variables included in the main analyses. All preliminary analyses were conducted using IBM SPSS Statistics 24.
**Overview of main analyses.** The hypothesized model was tested using a structural equation modeling (SEM) framework. Analyses first focused on evaluating overall model fit of the hypothesized model, employing fit indices including the chi-square statistic, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Standardized Root Mean Square Residual (SRMR). As recommended by Hu and Bentler (1999), the following standards were employed to evaluate acceptable fit: chi-square $p$ values at or above .05, RMSEA below .06, CFI above .95, and SRMR below .08. When comparing non-nested models, the Akaike Information Criterion (AIC) was evaluated instead. These same criteria for evaluating goodness of fit were employed for subsequent analyses, as relevant.

When evaluating fit of the hypothesized model, right-wing authoritarianism and intergroup contact were assumed to covary with one another. Paths were added to the model when suggested by modification indices and as consistent with the background research cited above, which indicated possible direct associations between non-mediating variables (i.e., right-wing authoritarianism, intergroup contact) and the endogenous variable (i.e., NATII). These modifications resulted in an updated version of the hypothesized model rather than a separate model altogether, because the updated version retained the hypothesized structural paths and simply added direct effects from non-mediating variables to the exogenous variable. The updated version was tested and evaluated for fit, including as compared with the original version of the hypothesized model. If the updated version achieved adequate and better fit than the original version, the effect of control variables were added, retaining paths that represented significant
direct effects between control variables and model variables. This resulted in a final
version of the model that was tested and evaluated for fit. Significance of direct and
indirect effects were examined to investigate associations among key model variables and
the role of cultural essentialism and symbolic threat as mediating variables.

In light of the study goal to discern a model that could provide a meaningful
explanation for NATII, two alternate models were also tested and evaluated for fit. The
first alternate model considered cultural essentialism as a non-mediating variable similar
to right-wing authoritarianism and intergroup contact, with its effect on NATII mediated
by symbolic threat. The second alternate model removed cultural essentialism from the
model and retained all other model variables, including symbolic threat as a mediating
variable. Similar to the process for the hypothesized model, the two alternate models
were tested and evaluated for fit, paths were added to each model when suggested by
modification indices and consistent with the background research cited above, the
updated versions of the model were tested and evaluated for fit and compared to the
original versions of the alternate models, and the effect of control variables were added to
result in a final version of each alternate model that was tested and evaluated for fit.
Significance of direct and indirect effects were examined to investigate associations
among key model variables and the role of potential mediating variables. Model fit and
explanatory power were examined to evaluate which of the three models (i.e., the
hypothesized model or the two alternate models) to accept for further analyses.

ANCOVA analyses were conducted to test the effect of the experimental
intervention (i.e., national identity messages), the effect of immigrant group of focus (i.e.,
undocumented Latino immigrants, Syrian refugees), and the interaction of experimental intervention and immigrant group of focus on symbolic threat and NATII. Based on results of the ANCOVA analyses, a multiple-group SEM analysis was conducted to test differences in structural parameters across two subgroups, each corresponding with the two different immigrant groups of focus. Testing for cross-group invariance involved evaluating and comparing the fit of two models: (a) a baseline model wherein no constraints were specified, and (b) a model where all paths were constrained to be invariant between the groups. Significance of direct and indirect paths in the unconstrained model were examined to investigate the role of symbolic threat as a mediating variable in relationships between right-wing authoritarianism and NATII, and lower intergroup contact and NATII, separately for each of the immigrant groups. Paths in the constrained model were unconstrained one at a time to result in partially constrained model versions. Fit of the partially constrained model versions were compared to fit of the fully constrained model to test which paths were moderated by immigrant group of focus.

All SEM analyses were conducted using MPlus 7, with models estimated using robust maximum likelihood (MLR) estimation, and missing data handled using full information maximum likelihood (FIML) estimation. ANCOVA analyses were conducted using IBM SPSS Statistics 24.
Chapter Five: Results

Preliminary Analyses

Table 2 presents descriptive statistics for continuous and categorical variables, including both model variables and sociodemographic characteristics serving as potential control variables. Skew and kurtosis were satisfactory for all continuous variables. Table 3 presents results of chi-square analyses testing significant associations between experimental condition and categorical sociodemographic characteristics, and Table 4 presents results of one-way ANOVA analyses testing significant associations between experimental condition and continuous sociodemographic characteristics. Analyses demonstrated no significant associations, and thus no evidence for non-independence of experimental conditions. Table 5 presents the results of multiple regression analyses testing significant associations between the seven sociodemographic characteristics serving as potential control variables and NATII. The table details regression coefficients. The full model was significant \( F(7, 528) = 44.85, p < .001, R^2 = .37 \).

Political orientation emerged as a significant predictor of NATII, and education and gender each showed a trend for significance as predictors of NATII. Consequently, political orientation, education, and gender were retained as control variables in the main analyses testing the model (as described below). Table 6 presents bivariate correlations for variables included in the main analyses.
Table 2
Descriptive Statistics for Model Variables and Sociodemographic Characteristics

<table>
<thead>
<tr>
<th>Continuous model variables</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right-wing authoritarianism</td>
<td>2.94</td>
<td>1.46</td>
<td>1.00 – 7.00</td>
<td></td>
</tr>
<tr>
<td>Intergroup contact</td>
<td>9.39</td>
<td>3.55</td>
<td>2.67 – 18.52</td>
<td></td>
</tr>
<tr>
<td>Cultural essentialism</td>
<td>4.40</td>
<td>.96</td>
<td>1.00 – 7.00</td>
<td></td>
</tr>
<tr>
<td>Symbolic threat</td>
<td>3.62</td>
<td>1.38</td>
<td>1.00 – 7.00</td>
<td></td>
</tr>
<tr>
<td>NATII</td>
<td>.00</td>
<td>.93</td>
<td>-1.54 – 2.03</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continuous sociodemographic characteristics</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>42.45</td>
<td>14.81</td>
<td>18.00 – 81.00</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>5.17</td>
<td>1.53</td>
<td>1.00 – 8.00</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>3.76</td>
<td>1.96</td>
<td>.50 – 11.00</td>
<td></td>
</tr>
<tr>
<td>Political orientation</td>
<td>2.57</td>
<td>1.06</td>
<td>1.00 – 5.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categorical sociodemographic characteristics</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>263</td>
<td>46.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>423</td>
<td>75.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant parent/grandparent</td>
<td>175</td>
<td>31.1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3
Chi-Square Analyses Testing the Effect of Experimental Condition on Categorical Sociodemographic Characteristics

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>Con-ULI</th>
<th>Con-SR</th>
<th>His-ULI</th>
<th>His-SR</th>
<th>Hum-ULI</th>
<th>Hum-SR</th>
<th>Chi-square test of independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43</td>
<td>49</td>
<td>52</td>
<td>41</td>
<td>44</td>
<td>34</td>
<td>$\chi^2(5) = 6.90$</td>
</tr>
<tr>
<td>Not male</td>
<td>51</td>
<td>47</td>
<td>41</td>
<td>53</td>
<td>52</td>
<td>55</td>
<td>$p &gt; .05$</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>79</td>
<td>71</td>
<td>70</td>
<td>66</td>
<td>72</td>
<td>65</td>
<td>$\chi^2(5) = 3.57$</td>
</tr>
<tr>
<td>Not White/Caucasian</td>
<td>15</td>
<td>23</td>
<td>20</td>
<td>24</td>
<td>21</td>
<td>21</td>
<td>$p &gt; .05$</td>
</tr>
<tr>
<td>Family history of immigration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant parent/grandparent</td>
<td>27</td>
<td>31</td>
<td>21</td>
<td>40</td>
<td>32</td>
<td>24</td>
<td>$\chi^2(5) = 10.14$</td>
</tr>
<tr>
<td>No immigrant parent/grandparent</td>
<td>67</td>
<td>65</td>
<td>72</td>
<td>54</td>
<td>64</td>
<td>65</td>
<td>$p &gt; .05$</td>
</tr>
</tbody>
</table>

n = 562
p > .05
Table 4
ANOVA Analyses Testing the Effect of Experimental Condition on Continuous Sociodemographic Characteristics

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>809.95</td>
<td>5</td>
<td>161.99</td>
<td>.74</td>
<td>.60</td>
</tr>
<tr>
<td>Education</td>
<td>7.22</td>
<td>5</td>
<td>1.44</td>
<td>.61</td>
<td>.69</td>
</tr>
<tr>
<td>Income</td>
<td>11.58</td>
<td>5</td>
<td>2.31</td>
<td>.60</td>
<td>.70</td>
</tr>
<tr>
<td>Political orientation</td>
<td>4.03</td>
<td>5</td>
<td>.81</td>
<td>.71</td>
<td>.61</td>
</tr>
</tbody>
</table>

Table 5
Regression Model Testing the Effect of Potential Control Variables on NATII

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.00</td>
<td>.00</td>
<td>-.02</td>
<td>-.49</td>
</tr>
<tr>
<td>Education</td>
<td>-.04</td>
<td>.02</td>
<td>-.07</td>
<td>-1.90^</td>
</tr>
<tr>
<td>Income</td>
<td>.00</td>
<td>.02</td>
<td>.00</td>
<td>.02</td>
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<tr>
<td>Political orientation</td>
<td>.53</td>
<td>.03</td>
<td>.60</td>
<td>16.78***</td>
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<td>Gender</td>
<td>.11</td>
<td>.07</td>
<td>.06</td>
<td>1.66^</td>
</tr>
<tr>
<td>Race/ethnicity</td>
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<td>.08</td>
<td>.02</td>
<td>.95</td>
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<tr>
<td>Family history of immigration</td>
<td>.07</td>
<td>.07</td>
<td>.03</td>
<td>.95</td>
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</tbody>
</table>
^p < .10; *p < .05; **p < .01; ***p < .001.

Table 6
Bivariate Correlations among Variables in Main Analyses

<table>
<thead>
<tr>
<th>IC</th>
<th>CE</th>
<th>ST</th>
<th>NATII</th>
<th>POL</th>
<th>GEN</th>
<th>EDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWA</td>
<td>-.13**</td>
<td>.38**</td>
<td>.63**</td>
<td>.65**</td>
<td>.62**</td>
<td>-.02</td>
</tr>
<tr>
<td>IC</td>
<td>-.10*</td>
<td>-.24**</td>
<td>-.27**</td>
<td>-.11**</td>
<td>-.19**</td>
<td>.04</td>
</tr>
<tr>
<td>CE</td>
<td>.30**</td>
<td>.27**</td>
<td>.24**</td>
<td>.05</td>
<td>.01</td>
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<tr>
<td>ST</td>
<td>.85**</td>
<td>.50**</td>
<td>.12**</td>
<td>-.09*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NATII</td>
<td>.59**</td>
<td>.10*</td>
<td>.08^</td>
<td>-.02</td>
<td></td>
<td></td>
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<tr>
<td>POL</td>
<td>.08^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEN</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. RWA = Right-wing authoritarianism; IC = Intergroup contact; CE = Cultural essentialism; ST = Symbolic threat; NATII = Negative attitudes toward immigrants and immigration; POL = Political orientation; GEN = Gender; EDU = Education.
*np < .10; *p < .05; **p < .01; ***p < .001.
Main Analyses

Model fit and direct and indirect effects. Version 1 of the hypothesized model achieved poor fit to the data \[\chi^2(5) = 316.84, p = .00; \text{RMSEA} = .33, 90\% \text{ CI (.30 – .37); CFI} = .73; \text{SRMR} = .18\]. As suggested by modification indices, and consistent with the background research cited above, paths were added to the model in version 2, representing direct effects from right-wing authoritarianism and intergroup contact to symbolic threat. Version 2 of the hypothesized model achieved poor fit to the data \[\chi^2(3) = 57.68, p = .00; \text{RMSEA} = .18, 90\% \text{ CI (.14 – .22); CFI} = .95; \text{SRMR} = .03\]. However, version 2 fit the data significantly better than version 1 \[\chi^2 \text{ difference} = 259.16, df \text{ difference} = 2, p < .001\]. Again, as suggested by modification indices and consistent with the background research cited above, additional paths were added to the model, representing direct effects from right-wing-authoritarianism and intergroup contact to NATII. Version 3 of the hypothesized model achieved good fit to the data \[\chi^2(1) = 1.67, p = .20; \text{RMSEA} = .04, 90\% \text{ CI (.00 – .12); CFI} = 1.00; \text{SRMR} = .01\]. Additionally, version 3 fit the data significantly better than version 2 \[\chi^2 \text{ difference} = 56.01, df \text{ difference} = 2, p < .001\]. The effect of control variables was added to version 3 of the hypothesized model, and the resulting final version achieved good fit to the data \[\chi^2(8) = 6.97, p = .54; \text{RMSEA} = .00, 90\% \text{ CI (.00 – .05); CFI} = 1.00; \text{SRMR} = .01\], and the lowest AIC as compared with the other versions \[\text{final version AIC} = 8405.55; \text{version 1 AIC} = 9222.84; \text{version 2 AIC} = 8967.68; \text{version 3 AIC} = 8915.67\].

Table 7 presents direct and indirect effects for final versions of the hypothesized model and two alternate models, and Figure 2 presents diagrams of these final versions.
For the final version of the hypothesized model, examination of direct effects revealed that right-wing authoritarianism was positively associated with cultural essentialism, symbolic threat, and NATII; intergroup contact was negatively associated with symbolic threat and NATII; cultural essentialism showed a trend for positive, significant association with NATII; and symbolic threat was positively associated with NATII. Examination of indirect effects revealed that symbolic threat mediated the relationship between right-wing authoritarianism and NATII, and between lower intergroup contact and NATII. Cultural essentialism did not emerge as a mediating variable. Consequently, two alternate models were tested and evaluated for fit.

The first alternate model considered cultural essentialism as a non-mediating variable similar to right-wing authoritarianism and intergroup contact, with its effect on NATII mediated by symbolic threat. Version 1 of the first alternate model achieved poor fit to the data [χ²(3) = 57.68, p = .00; RMSEA = .18, 90% CI (.14 – .22); CFI = .95; SRMR= .03]. As suggested by modification indices, and consistent with the background research cited above, paths were added to the model in version 2, representing direct effects from right-wing authoritarianism and intergroup contact to NATII. Version 2 of the first alternate model achieved good fit to the data [χ²(1) = 1.67, p = .20; RMSEA = .04, 90% CI (.00 – .12); CFI = 1.00; SRMR= .01]. Additionally, version 2 fit the data significantly better than version 1 [χ² difference = 56.01, df difference = 2, p < .001]. The effect of control variables was added to version 2 of the first alternate model, and the resulting final version achieved good fit to the data [χ²(7) = 4.86, p = .68; RMSEA = .00, 90% CI (.00 – .04); CFI = 1.00; SRMR= .01], and the lowest AIC as compared with the
other versions [final version AIC = 8405.44; version 1 AIC = 8967.68; version 2 AIC = 8915.67].

For the final version of the first alternate model, examination of direct effects revealed that right-wing authoritarianism was positively associated with symbolic threat and NATII; intergroup contact was negatively associated with symbolic threat and NATII; cultural essentialism showed a trend for positive, significant association with NATII; and symbolic threat was positively associated with NATII. Examination of indirect effects revealed that symbolic threat mediated the relationship between right-wing authoritarianism and NATII, and between lower intergroup contact and NATII, and showed a trend for significantly mediating the relationship between cultural essentialism and NATII.

The second alternate model removed cultural essentialism from the model altogether and retained all other model variables, including symbolic threat as a mediating variable. Version 1 of the second alternate model achieved poor fit to the data [$\chi^2(2) = 56.01, p = .00; \text{RMSEA} = .22, 90\% \text{ CI (.17} - .27); \text{CFI} = .95; \text{SRMR}=.04$]. As suggested by modification indices, and consistent with the background research cited above, paths were added to the model in version 2, representing direct effects from right-wing authoritarianism and intergroup contact to NATII. Because version 2 was a just-identified model, it was not possible to evaluate model fit. The effect of control variables was added to version 2 of the second alternate model, and the resulting final version achieved good fit to the data [$\chi^2(4) = 2.41, p = .66; \text{RMSEA} = .00, 90\% \text{ CI (.00} - .05);$]
CFI = 1.00; SRMR= .01], and the lowest AIC as compared with the other versions [final version AIC = 6967.79; version 1 AIC = 7508.29; version 2 AIC = 7456.29].

For the final version of the second alternate model, examination of direct effects revealed that right-wing authoritarianism was positively associated with symbolic threat and NATII; intergroup contact was negatively associated with symbolic threat and NATII; and symbolic threat was positively associated with NATII. Examination of indirect effects revealed that symbolic threat mediated the relationship between right-wing authoritarianism and NATII, and between lower intergroup contact and NATII.

For the remaining analyses, the second alternate model was retained over the hypothesized model and first alternate model for three main reasons: (1) it achieved better relative fit when compared to the hypothesized model and the first alternate model, as indicated by lowest AIC, (2) it demonstrated greater parsimony, and (3) it demonstrated greater explanatory power for relationships among model variables, as evidenced by significant associations for all direct and indirect effects.
### Table 7

**Standardized Path Coefficients for Best-Fitting Hypothesized and Alternate Models**

<table>
<thead>
<tr>
<th></th>
<th>Hypothesized model, Final version</th>
<th>First alternate model, Final version</th>
<th>Second alternate model, Final version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>( SE )</td>
<td>( \beta )</td>
</tr>
<tr>
<td><strong>Direct effects, model variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA ( \rightarrow ) CE</td>
<td>( .37^{***} )</td>
<td>( .04 )</td>
<td></td>
</tr>
<tr>
<td>RWA ( \rightarrow ) ST</td>
<td>( .49^{***} )</td>
<td>( .04 )</td>
<td>( .49^{***} )</td>
</tr>
<tr>
<td>RWA ( \rightarrow ) NATII</td>
<td>( .09^{**} )</td>
<td>( .03 )</td>
<td>( .09^{**} )</td>
</tr>
<tr>
<td>IC ( \rightarrow ) CE</td>
<td>( -.05 )</td>
<td>( .04 )</td>
<td></td>
</tr>
<tr>
<td>IC ( \rightarrow ) ST</td>
<td>( -.14^{***} )</td>
<td>( .03 )</td>
<td>( -.14^{***} )</td>
</tr>
<tr>
<td>IC ( \rightarrow ) NATII</td>
<td>( -.07^{***} )</td>
<td>( .02 )</td>
<td>( -.07^{***} )</td>
</tr>
<tr>
<td>CE ( \rightarrow ) ST</td>
<td>( .06^{\wedge} )</td>
<td>( .03 )</td>
<td>( .06^{\wedge} )</td>
</tr>
<tr>
<td>ST ( \rightarrow ) NATII</td>
<td>( .68^{***} )</td>
<td>( .03 )</td>
<td>( .68^{***} )</td>
</tr>
<tr>
<td><strong>Direct effects, control variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POL ( \rightarrow ) RWA</td>
<td>( .63^{***} )</td>
<td>( .03 )</td>
<td>( .63^{***} )</td>
</tr>
<tr>
<td>POL ( \rightarrow ) IC</td>
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<td>( .04 )</td>
<td>( -.09^* )</td>
</tr>
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<td>POL ( \rightarrow ) CE</td>
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<td></td>
<td>( .24^{***} )</td>
</tr>
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<td>POL ( \rightarrow ) ST</td>
<td>( .16^{***} )</td>
<td>( .04 )</td>
<td>( .16^{***} )</td>
</tr>
<tr>
<td>POL ( \rightarrow ) NATII</td>
<td>( .19^{***} )</td>
<td>( .03 )</td>
<td>( .19^{***} )</td>
</tr>
<tr>
<td>GEN ( \rightarrow ) RWA</td>
<td>( -.08^* )</td>
<td>( .03 )</td>
<td>( -.09^{**} )</td>
</tr>
<tr>
<td>GEN ( \rightarrow ) IC</td>
<td>( -.18^{***} )</td>
<td>( .04 )</td>
<td>( -.18^{***} )</td>
</tr>
<tr>
<td>GEN ( \rightarrow ) ST</td>
<td>( .09^{**} )</td>
<td>( .03 )</td>
<td>( .09^{**} )</td>
</tr>
<tr>
<td>EDU ( \rightarrow ) RWA</td>
<td>( -.07^* )</td>
<td>( .03 )</td>
<td>( -.08^* )</td>
</tr>
<tr>
<td><strong>Indirect effects, model variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA ( \rightarrow ) CE ( \rightarrow ) ST ( \rightarrow ) NATII</td>
<td>( .01 )</td>
<td>( .01 )</td>
<td></td>
</tr>
<tr>
<td>RWA ( \rightarrow ) ST ( \rightarrow ) NATII</td>
<td>( .33^{***} )</td>
<td>( .03 )</td>
<td>( .33^{***} )</td>
</tr>
<tr>
<td>IC ( \rightarrow ) CE ( \rightarrow ) ST ( \rightarrow ) NATII</td>
<td>( .00 )</td>
<td>( .00 )</td>
<td></td>
</tr>
<tr>
<td>IC ( \rightarrow ) ST ( \rightarrow ) NATII</td>
<td>( -.10^{***} )</td>
<td>( .02 )</td>
<td>( -.10^{***} )</td>
</tr>
<tr>
<td>CE ( \rightarrow ) ST ( \rightarrow ) NATII</td>
<td>( .04^{\wedge} )</td>
<td>( .02 )</td>
<td>( .04^{\wedge} )</td>
</tr>
</tbody>
</table>

*p < .10; *p < .05; **p < .01; ***p < .001.
Figure 2

Hypothesized Model, Final Version

First Alternate Model, Final Version

Second Alternate Model, Final Version

Note. All models above include the effect of control variables. However, for ease of display, control variables and associated paths are not displayed. Nested paths that were added according to modification indices and background research appear in gray.
Effect of experimental intervention and immigrant group of focus. Table 8 presents descriptive statistics for symbolic threat and NATII by each of the six conditions, as well as by experimental intervention and immigrant group of focus. Table 9 presents results of ANCOVA analyses testing the effect of experimental intervention, immigrant group, and their interaction on symbolic threat and NATII. Controlling for political orientation, gender, and education, there was no significant effect of the experimental intervention on symbolic threat or NATII. However, there was a significant effect of immigrant group on symbolic threat and NATII. Symbolic threat scores were lower for conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees (Mean Difference = -.37, SE = .10, 95% CI = -.57 – -.18). NATII scores were higher for conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees (Mean Difference = .13, SE = .06, 95% CI = .01 – .26).

Based on the significant effect of immigrant group of focus on symbolic threat and NATII, a multiple-group analysis was conducted to test differences in structural parameters between conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees. In the test for cross-group invariance in structural parameters, the baseline model, wherein no constraints were specified, achieved adequate fit to the data [$\chi^2(8) = 14.15$, ns; RMSEA = .05, 90% CI (.00 – .10); CFI = 1.00; SRMR= .02]. Constraining the structural parameters in the model to be equal across conditions corresponding with the immigrant groups resulted in a model that achieved poor fit to the
data on certain fit indices, and acceptable fit on other fit indices $\chi^2(14) = 28.14, p = .01; \ RMSEA = .06, 90\% CI (.03 – .09); CFI = .99; SRMR = .03$. Overall model fit of the constrained model was significantly worse than that of the unconstrained, baseline model $[\chi^2 \text{ difference } = 13.99, df \text{ difference } = 6, p = .03]$, providing evidence against the null hypothesis that the structural parameters were the same across conditions corresponding with the immigrant groups.

Table 10 presents estimates of the direct and indirect effects of unconstrained models for conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees, and Figure 3 presents diagrams of the unconstrained models. For conditions in which responses were tied to undocumented Latino immigrants, examination of direct effects revealed that right-wing authoritarianism was positively associated with symbolic threat; intergroup contact was negatively associated with symbolic threat; and symbolic threat was positively associated with NATII. Unlike the final version of the second alternate model, neither right-wing authoritarianism nor intergroup contact were directly associated with NATII. For conditions in which responses were tied to Syrian refugees, examination of direct effects revealed that right-wing authoritarianism was positively associated with symbolic threat and NATII; intergroup contact was negatively associated with symbolic threat and NATII; and symbolic threat was positively associated with NATII. These effects mirrored the significant effects in the final version of the second alternate model. For conditions corresponding with either of the immigrant groups of focus, examination of indirect
effects revealed that symbolic threat mediated the relationship between right-wing authoritarianism and NATII, and between lower intergroup contact and NATII.

Table 11 presents the results of comparisons between partially constrained models in which one main model path was unconstrained, and the fully constrained model in which structural parameters were constrained to be equal across conditions corresponding with the immigrant groups. Comparisons demonstrated that immigrant group of focus moderated the relationship between right-wing authoritarianism and NATII.
Table 8
Descriptive Statistics for Symbolic Threat and NATII by Condition, Experimental Intervention, and Immigrant Group

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>Symbolic Threat Mean</th>
<th>SD</th>
<th>NATII Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control – undocumented Latino immigrants</td>
<td>93</td>
<td>3.36</td>
<td>1.35</td>
<td>-.01</td>
<td>.91</td>
</tr>
<tr>
<td>Control – Syrian refugees</td>
<td>95</td>
<td>3.78</td>
<td>1.37</td>
<td>-.10</td>
<td>.92</td>
</tr>
<tr>
<td>Historical – undocumented Latino immigrants</td>
<td>91</td>
<td>3.39</td>
<td>1.24</td>
<td>.03</td>
<td>.93</td>
</tr>
<tr>
<td>Historical – Syrian refugees</td>
<td>93</td>
<td>4.05</td>
<td>1.35</td>
<td>.09</td>
<td>.87</td>
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<td>Humanitarian – undocumented Latino immigrants</td>
<td>94</td>
<td>3.46</td>
<td>1.36</td>
<td>.08</td>
<td>1.01</td>
</tr>
<tr>
<td>Humanitarian – Syrian refugees</td>
<td>86</td>
<td>3.64</td>
<td>1.56</td>
<td>-.15</td>
<td>.95</td>
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<tr>
<td>Control conditions overall</td>
<td>188</td>
<td>3.57</td>
<td>1.38</td>
<td>-.06</td>
<td>.91</td>
</tr>
<tr>
<td>Historical conditions overall</td>
<td>184</td>
<td>3.72</td>
<td>1.33</td>
<td>.06</td>
<td>.90</td>
</tr>
<tr>
<td>Humanitarian conditions overall</td>
<td>180</td>
<td>3.54</td>
<td>1.46</td>
<td>-.03</td>
<td>.99</td>
</tr>
<tr>
<td>Undocumented Latino Immigrant conditions overall</td>
<td>278</td>
<td>3.40</td>
<td>1.32</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td>Syrian refugee conditions overall</td>
<td>274</td>
<td>3.83</td>
<td>1.43</td>
<td>-.05</td>
<td>.92</td>
</tr>
</tbody>
</table>

Table 9
ANCOVA Testing the Effect of Immigrant Group, Experimental Intervention, and their Interaction on Symbolic Threat and NATII

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>df</th>
<th>Symbolic Threat Mean Square</th>
<th>F</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
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<td>Experimental intervention</td>
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<td>1.01</td>
<td>.73</td>
<td>2</td>
<td>.34</td>
<td>.62</td>
</tr>
<tr>
<td>Immigrant group</td>
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<td>19.20</td>
<td>13.82***</td>
<td>1</td>
<td>2.41</td>
<td>4.33*</td>
</tr>
<tr>
<td>Experimental intervention x Immigrant group</td>
<td>2</td>
<td>3.04</td>
<td>2.19</td>
<td>2</td>
<td>1.06</td>
<td>1.90</td>
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<td>Political orientation</td>
<td>1</td>
<td>251.02</td>
<td>180.73***</td>
<td>1</td>
<td>166.55</td>
<td>299.25***</td>
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<td>Gender</td>
<td>1</td>
<td>7.82</td>
<td>5.63*</td>
<td>1</td>
<td>1.20</td>
<td>2.15</td>
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<tr>
<td>Education</td>
<td>1</td>
<td>5.84</td>
<td>4.21*</td>
<td>1</td>
<td>1.57</td>
<td>2.83^</td>
</tr>
</tbody>
</table>

*p < .10; ^p < .05; **p < .01; ***p < .001.
### Table 10

**Standardized Path Coefficients for Unconstrained Models for Immigrant Groups**

<table>
<thead>
<tr>
<th></th>
<th>Unconstrained model for ULI</th>
<th>Unconstrained model for SR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Direct effects, model variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA → ST</td>
<td>.56***</td>
<td>.05</td>
</tr>
<tr>
<td>RWA → NATII</td>
<td>.02</td>
<td>.04</td>
</tr>
<tr>
<td>IC → ST</td>
<td>-.16***</td>
<td>.05</td>
</tr>
<tr>
<td>IC → NATII</td>
<td>-.04</td>
<td>.03</td>
</tr>
<tr>
<td>ST → NATII</td>
<td>.73***</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Direct effects, control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POL → RWA</td>
<td>.80***</td>
<td>.06</td>
</tr>
<tr>
<td>POL → IC</td>
<td>-.50**</td>
<td>.19</td>
</tr>
<tr>
<td>POL → ST</td>
<td>.06</td>
<td>.08</td>
</tr>
<tr>
<td>POL → NATII</td>
<td>.23***</td>
<td>.03</td>
</tr>
<tr>
<td>GEN → RWA</td>
<td>-.15</td>
<td>.13</td>
</tr>
<tr>
<td>GEN → IC</td>
<td>-1.14***</td>
<td>.40</td>
</tr>
<tr>
<td>GEN → ST</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>EDU → RWA</td>
<td>-.07^</td>
<td>.04</td>
</tr>
<tr>
<td>Indirect effects, model variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA → ST → NATII</td>
<td>.41***</td>
<td>.04</td>
</tr>
<tr>
<td>IC → ST → NATII</td>
<td>-.11***</td>
<td>.04</td>
</tr>
</tbody>
</table>

**Note.** ULI = Undocumented Latino immigrants; SR = Syrian refugees.

^p < .10; *p < .05; **p < .01; ***p < .001.

### Table 11

**Comparing Partially Constrained Model Versions with the Fully Constrained Model**

<table>
<thead>
<tr>
<th>Model with unconstrained path</th>
<th>$\chi^2$</th>
<th>$\chi^2$ difference</th>
<th>df difference</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWA → ST</td>
<td>$\chi^2$(13) = 25.23</td>
<td>2.91</td>
<td>1</td>
<td>.88</td>
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<tr>
<td>RWA → NATII</td>
<td>$\chi^2$(13) = 23.57*</td>
<td>4.57</td>
<td>1</td>
<td>.03</td>
</tr>
<tr>
<td>IC → ST</td>
<td>$\chi^2$(13) = 28.12</td>
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<td>1</td>
<td>.89</td>
</tr>
<tr>
<td>IC → NATII</td>
<td>$\chi^2$(13) = 27.89</td>
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<td>1</td>
<td>.62</td>
</tr>
<tr>
<td>ST → NATII</td>
<td>$\chi^2$(13) = 26.95</td>
<td>1.19</td>
<td>1</td>
<td>.28</td>
</tr>
</tbody>
</table>

^p < .10; *p < .05; **p < .01; ***p < .001.
Figure 3

Unconstrained Model for Undocumented Latino Immigrants as Immigrant Group of Focus

Unconstrained Model for Syrian Refugees as Immigrant Group of Focus

Note. All models above include the effect of control variables. However, for ease of display, control variables and associated paths are not displayed.
Chapter Six: Discussion

The present study had three main aims: (1) to test a model that links various psychosocial factors together to provide a cultural explanation for NATII; (2) to test the effect of a particular communication strategy (i.e., familiar American national identity messages based on the CIIM) on NATII and related model variables (i.e., symbolic threat), and (3) to test the model and communication strategy in relation to two different immigrant groups in the American context (i.e., undocumented Latino immigrants and Syrian refugees). Results pointed to the following key findings. First, we found support for a model that provides a viable and meaningful cultural explanation for NATII. Right-wing authoritarianism, lower intergroup contact, and symbolic threat were all significantly associated with NATII, and symbolic threat emerged as a partial mediator of relationships between right-wing authoritarianism and NATII, and lower intergroup contact and NATII. Cultural essentialism did not emerge as being significantly associated with NATII or as a mediator for any model relationships. Second, we did not find support for the effect of the communication strategy based on the CIIM in reducing symbolic threat or NATII. Third, immigrant group of focus had a significant effect on symbolic threat and NATII, and slightly different versions of the model held for conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees.
The sections below provide a detailed delineation of specific findings; explanations for each of the key findings; study strengths and limitations; and future directions.

**Specific Findings Relating to Study Aims**

**Mixed support for aim 1 hypotheses.** Overall, results provided some support for our hypotheses relating to aim 1. Contrary to hypothesis (a), the original version of our hypothesized model did not achieve good fit to the data. However, consistent with hypothesis (a), the final versions of the hypothesized model and first and second alternate models achieved good fit to the data. Contrary to hypothesis (b), cultural essentialism did not emerge as being significantly associated with NATII, either directly or indirectly. However, consistent with hypothesis (b), right-wing authoritarianism, lower intergroup contact, and symbolic threat were associated with NATII through direct or indirect effects. Specifically, right-wing authoritarianism, lower intergroup contact, and symbolic threat were directly related to NATII, and right-wing authoritarianism and lower intergroup contact were also indirectly related to NATII via symbolic threat. Contrary to hypothesis (c), cultural essentialism did not emerge as mediating relationships between right-wing authoritarianism and symbolic threat, or lower intergroup contact and symbolic threat. Contrary to hypothesis (d), symbolic threat did not emerge as mediating the relationship between cultural essentialism and NATII. However, symbolic threat mediated the relationship between right-wing authoritarianism and NATII, and lower intergroup contact and NATII.

Regarding which model to accept, results suggested accepting the final version of the second alternate model over the final versions of the hypothesized model or the first
alternate model. While the final version of the hypothesized model achieved good fit to the data, non-significance of direct and indirect effects involving cultural essentialism resulted in a model that provided a less meaningful explanation for NATII. Removal of non-significant paths would have resulted in cultural essentialism becoming an endogenous rather than an exogenous variable. Similarly, while the final version of the first alternate model achieved good fit to the data, non-significance of direct and indirect paths involving cultural essentialism again resulted in a model that provided a less meaningful explanation for NATII. Removal of non-significant paths would have resulted in cultural essentialism becoming only a covariate with right-wing authoritarianism. In contrast, the final version of the second alternate model achieved good fit to the data, did not include any non-significant paths, and had the lowest AIC in comparison with the other models. Consequently, the second alternate model was retained over the hypothesized model and the first alternate model for three main reasons: (1) it achieved better relative fit when compared to the hypothesized model or first alternate model, (2) it demonstrated greater parsimony, and (3) it demonstrated greater explanatory power for relationships among model variables, as evidenced by significant associations for all direct and indirect effects.

**Lack of support for aim 2 hypotheses.** Overall, results did not provide support for our hypotheses relating to aim 2. Contrary to hypotheses (e) and (f), there was no significant effect of experimental intervention on symbolic threat or NATII scores, either alone or in interaction with immigrant group of focus.
**Significant findings for aim 3 exploratory analyses.** Results for exploratory analyses relating to aim 3 suggested that immigrant group of focus had a significant effect on symbolic threat and NATII, and slightly different versions of the second alternate model held for each of the immigrant groups of focus. For conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees, symbolic threat scores were lower, and NATII scores were higher. Additionally, for conditions in which responses were tied to undocumented Latino immigrants, right-wing authoritarianism and lower intergroup contact did not demonstrate significant direct effects on NATII; rather, symbolic threat fully mediated the relationship between right-wing authoritarianism and NATII, and lower intergroup contact and NATII. For conditions in which responses were tied to Syrian refugees, right-wing authoritarianism and lower intergroup contact demonstrated significant direct effects on NATII; and symbolic threat partially mediated the relationship between right-wing authoritarianism and NATII, and lower intergroup contact and NATII.

**Key Findings**

**Accepting a model providing a cultural explanation for NATII.** We found support for the existence of a model that provides a viable and meaningful cultural explanation for NATII. The second alternate model confirmed and replicated the extant research cited above, which has found associations between right-wing authoritarianism and NATII (Anderson et al., 2015; Bassett, 2010; Nickerson & Louis, 2008; Oyamot et al., 2012); lower intergroup contact and NATII (Leong, 2008; McLaren, 2003), and
higher intergroup contact and lower NATII, both directly and indirectly via symbolic threat (Ata et al., 2009; Cohrs & Asbrock, 2009; Duckitt, 2006; Frølund Thomsen, 2012; Ward & Masgoret, 2006). Building on this research, this study uniquely linked together all three variables—right-wing authoritarianism, intergroup contact, and symbolic threat—in a coherent model predicting NATII. The accepted model pointed to a cultural explanation for NATII whereby rigid preferences regarding societal conventions and group hierarchy, and less contact with culturally dissimilar others, may lead to greater perceived threat of immigrants’ norms and values, which may in turn lead to greater NATII. Notably, the model achieved good fit and explanatory power even in a stringent set of analyses that controlled for variables including political orientation, gender, and education.

Importantly, the model did not support the role of cultural essentialism in predicting NATII. As described above, no study to date has specifically considered the role of cultural essentialism in predicting NATII, and the measure for cultural essentialism was specifically developed for this study through adapting existing measures on essentialist beliefs about social categories. It is possible that our operationalization of cultural essentialism did not adequately measure the construct.

It is also possible that cultural essentialism may not be significantly associated with NATII. Prior research has found that essentialist beliefs about ingroup national identity and outgroup identity have been associated with NATII (Ommundsen et al., 2013; Pehrson et al., 2009). However, whereas essentialist beliefs were specifically tied to particular groups in these studies (i.e., the “English” as an ingroup, and Muslim
immigrants as an outgroup), essentialist beliefs in this study were tied to a more general conceptualization of cultural identity. That is, participants responded to items about how culture determines the identity of cultural group members, rather than about how Latino or Syrian group membership might specifically determine group members’ identity.

Essentialist beliefs about culture writ whole may be too abstract to adequately conceptualize, especially as compared with essentialist beliefs tied to specific social groups defined by nationality, ethnicity, religion, and so on. Additionally, essentialist beliefs about cultural group membership might exist on either end of the political spectrum, from the right to the left. For example, communitarian perspectives on the left, such as those espoused by philosopher Charles Taylor (1994), often call for the preservation of cultural traditions (e.g., Quebecois culture in Canada) through arguing that culture helps define group members’ identity in essentialist (i.e., natural and entititative) ways. Thus, some individuals who hold essentialist views about culture may also hold pro-immigrant views, and may even argue for the preservation of immigrant cultural traditions in ways that maintain the separation of those traditions from host society cultural traditions.

**Null finding for a communication strategy based on the CIIM.** We did not find support for the effect of the communication strategy based on the CIIM in reducing symbolic threat or NATII, either alone or in interaction with immigrant group of focus. It is possible that the experimental intervention did not adequately operationalize messages that were meant to tap the CIIM. The historical and humanitarian American national
identity messages may not have adequately conveyed the insight that immigrants are part of a superordinate national identity or human identity, respectively.

Even with adequate operationalization, it is possible that reading a brief editorial did not offer sufficient priming for participants to engage in a recategorization process whereby they conceived of themselves as part of a larger, superordinate group including immigrants. Prior research has found support for the use of brief editorials in shifting attitudes toward immigrants in the Canadian context (Esses et al., 2001; Esses et al., 2006). The current American context is characterized by saturation with a multiplicity of media messages on immigrants and immigration, such that any one message may have a lesser likelihood of impact. Message format may also have lessened the efficacy of the priming paradigm; reading a short text blurb may not be as compelling as hearing a brief speech or watching an advertisement.

Even with adequate operationalization and priming of the CIIM, it is possible that the experimental intervention did not have the intended effect. Extant research has shown that manipulations involving the CIIM do not always work and can even backfire, especially if the proposed common ingroup representation is perceived as undermining the value of the ingroup or blurring group boundaries, or as being inconsistent with a preset definition one already holds about the ingroup (Hewstone, 1996; Hewstone, Rubin, & Willis, 2002; Rutchick & Eccleston, 2010; Waldzus & Mummendey, 2004). For example, with the historical national identity message, participants may have been immune to persuasion if the idea of the US as a nation of immigrants was inconsistent with the way they may already have conceived of the nation.
Results from exploratory analyses revealed a significant effect of immigrant group of focus on symbolic threat and NATII, such that symbolic threat scores were lower, and NATII scores were higher, for conditions in which responses were tied to undocumented Latino immigrants versus Syrian refugees. These findings may initially seem counterintuitive, since NATII scores might be expected to mirror symbolic threat scores. However, the two constructs are separable, and the significant effect of immigrant group of focus helps highlight potential differences between the two. Whereas undocumented Latino immigrants have been part of the US population for decades and number in the low millions (around six million in 2014) (Gonzalez-Barrera & Krogstad, 2017), Syrian refugees have arrived more recently and number in the low thousands (around 14,000 from 2012-2016) (Merelli, 2017). Newer immigrant groups that have not had much time to integrate may be perceived as holding norms and values of greater difference than immigrant groups who have been integrated within society for much longer. Additionally, assumptions about the Muslim religious background of Syrian refugees may lead to greater perceived differences in norms and values as compared with undocumented Latino immigrants. The scholar Samuel Huntington (1997) has conceptualized Islamic civilization as fundamentally in conflict with Western civilization, with Latin American civilization subsumed under Western civilization. Political commentators and media personalities have often seized on this characterization (Wright, 2015), potentially contributing to greater symbolic threat regarding immigrants of Muslim origin versus other immigrant groups.
Nevertheless, higher NATII scores in relation to undocumented Latino immigrants versus Syrian refugees may indicate that symbolic threat is not the sole driver of attitudes toward immigrants and immigration. Indeed, as reviewed above, other models have suggested economic and moral explanations for NATII (Esses et al., 2001; Esses et al., 2008; Louis et al., 2013). Higher numbers of undocumented Latino immigrants versus Syrian refugees may contribute to greater perceived competition over scarce resources with the former versus the latter, which may in turn contribute to NATII. Undocumented status may also contribute to greater perceived unfairness or illegitimacy of claims by undocumented immigrants versus refugees, which again may then contribute to NATII. Extant research suggests that individuals may hold more negative attitudes toward unauthorized immigrants versus refugees, and that economic and moral factors contribute to these differences (Murray & Marx, 2013).

Corresponding with the significant effect of immigrant group of focus on symbolic threat and NATII, results from exploratory analyses revealed that slightly different versions of the second alternate model held for each of the immigrant groups of focus. For conditions in which responses were tied to undocumented Latino immigrants, symbolic threat fully mediated the relationship between right-wing authoritarianism and NATII, and lower intergroup contact and NATII. For conditions in which responses were tied to Syrian refugees, symbolic threat partially mediated the relationship between right-wing authoritarianism and NATII, and lower intergroup contact and NATII. Given that the overall model achieved adequate fit across the two immigrant groups, and given the slight differences regarding the mediating role of symbolic threat, these results
simultaneously confirm the explanatory power of the model across different immigrant groups of focus, as well as indicating the importance of examining effects separately for each group. That is, regardless of immigrant group of focus, our model appeared to provide a robust cultural explanation for NATII. Nevertheless, examining effects separately by immigrant group may help illuminate slight differences in how psychosocial factors serve to explain NATII.

Strengths

This study demonstrated several key strengths. First, an alternate model closely related to our original hypothesized model achieved good fit to the data and provided a meaningful cultural explanation for NATII. This explanation may help supplement other, economic and moral explanations for NATII. Second, the model confirmed and built on existing research and brought together factors from diverse research literatures on personality-like traits, intergroup contact, and threat perceptions. These factors have broad recognition and utility in the larger field of intergroup relations. Third, NATII was measured using a combination of more basic and in-depth attitudinal ratings, improving on more simplistic measurement of NATII employed in prior research, which has tended to use only the thermometer rating of favorability/unfavorability toward immigrants. Our measurement of NATII may have better paralleled the kinds of perspectives captured in public opinion polling on immigrants and immigration, enhancing the external validity of our findings. Fourth, the study was conducted with a nationwide sample that closely approximated the composition of the native-born, adult US population in terms of sex,
age, race, ethnicity, and region of residence, again enhancing the external validity of our findings.

**Limitations**

Alongside the strengths of this study, several limitations warrant consideration. First, although final versions of the tested models achieved good fit, the cross-sectional nature of the data limited the ability to identify causal or temporal relations among model variables. The placement of the experimental intervention (i.e., after measures on right-wing authoritarianism and intergroup contact, and before measures on symbolic threat and NATII) helped establish some temporal sequence in the effect of model variables, though caution is still merited. Second, all study measures were self-report, allowing for both under- and over-reporting errors. Third, our operationalization of cultural essentialism may not have adequately measured the construct, especially since cultural essentialism was a newer variable adapted from other forms of essentialist beliefs. Fourth, our operationalization of the experimental intervention may not have adequately tapped the CIIM, or may not have served as a sufficient enough priming paradigm. Fifth, models were tested using path analysis, which assumes error-free measurement of variables. Parameter estimates may thus have reflected inherent bias. Sixth, although our sample was more representative of US native-born population demographics than undergraduate samples, recruitment through MTurk may still have resulted in a sample with characteristics different from a truly representative nationwide sample.
Future Directions

Both the strengths and limitations of this study suggest multiple avenues for future research. Given the existence of different kinds of explanations for NATII, including economic, moral, and cultural explanations, the field of intergroup relations may benefit from evaluating the relative explanatory power of each of these explanations in relation to different immigrant groups of focus. Understanding the relative contribution of different explanations would help decipher how best to intervene when attempting to shift attitudes toward immigrants and immigration, including for different immigrant groups. Ideally, further testing of our model or other explanations for NATII would occur in a large, nationally representative sample, using longitudinal data, and measuring variables through a variety of self-report and affective or behavioral methods (e.g., measuring facial expressions or physiological stress levels during intergroup contact, evaluating the choice to sign a petition or send a letter supporting restrictive immigration policies). This would improve external validity of findings, allow for testing of causal claims, reduce reporting errors, and allow for use of more advanced data analytic techniques (e.g., structural equation modeling) to minimize bias. Finally, adequate operationalization, priming, and testing of different kinds of experimental interventions, including those based on the CIIM as well as those directly targeting symbolic threat, will be critical to identifying interventions that can effectively shift people’s attitudes toward immigrants and immigration. Efforts around immigrant advocacy and immigration reform can greatly benefit from evidence-based research on such interventions.
References


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