A dual process approach to understanding prejudice toward Americans in Lebanon: An extension to intergroup threat perceptions and emotions

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Abstract

Using a stratified random sampling procedure, we interviewed 200 residents of Beirut, Lebanon and surrounding areas in order to test predictions of a dual process model of prejudice. We examined the role of social dominance orientation (SDO) and right-wing authoritarianism (RWA) in predicting prejudice toward Americans, mediating the relationships between personality dimensions and prejudice, and predicting intergroup emotions indirectly through intergroup threat perceptions. Three main findings emerged. First, whereas RWA was a positive predictor of prejudice toward Americans, SDO was a negative predictor. Second, RWA mediated a positive relationship between a social conforming personality and prejudice toward Americans; SDO mediated a negative relationship between a tough-minded personality and prejudice. Third, value threat perceptions mediated a positive relationship between RWA and feelings of disgust toward Americans; economic threat perceptions mediated a negative relationship between SDO and anger toward Americans. Applications and extensions of the dual process model in non-Western populations are discussed.

Keywords
dual process models, intergroup processes, prejudice/stereotyping, social dominance orientation

In studying the causes of prejudice, social and personality psychologists have identified two robust individual-level predictors: social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) and right-wing authoritarianism (RWA; Altemeyer, 1996). The two constructs form a “lethal union,” in some cases together accounting for over 50% of individual variance in prejudice (Altemeyer, 1998). According to research on the dual process model, SDO and RWA are indirectly predicted by tough-minded and social conforming personalities through competitive and dangerous worldviews, respectively (Duckitt,
2001, 2006; Duckitt & Sibley, 2007, 2009; Duckitt, Wagner, du Plessis, & Birum, 2002). Specifically, those who have tough-minded personalities are believed to exhibit prejudice against subordinate groups because they are motivated—by their heightened desire for group-based dominance and their view of the world as a competitive jungle—to keep these groups in an inferior position. Through a second pathway, those who have conforming personalities are thought to exhibit prejudice against subordinate groups because they are motivated—by their heightened desire for collective security and social cohesion, and their view of the world as a dangerous place—to keep these groups in a powerless position. There is now abundant evidence supporting these dual pathways to prejudice against subordinate groups among Western populations (see Sibley & Duckitt, 2008, for a recent meta-analysis using samples from North America and Central Europe).

Far less empirical attention has been devoted to examining predictors of prejudice against dominant groups and predictors of intergroup attitudes between Western and non-Western populations. In order to better understand international power relations and their potential for change, it is essential to examine the prejudices of people in subordinate nations toward dominant nations. In addition to its clear military superiority, the United States holds a position of global economic dominance and power, and possesses much greater wealth than most Arab countries (e.g., Hanouz & Khatib, 2010). For example, Lebanon has a lower gross domestic product (GDP) per capita and lower gross national income (GNI) per capita than does the United States (World Bank Group, 2011). As such, the current study examines prejudice against a dominant group (Americans) through the lens of a subordinate group (Lebanese).

A review of research on the dual process model suggests three important and underexplored questions in the psychology of prejudice and its relation to intergroup and international relations. One question is whether SDO and RWA relate to subordinate group members’ prejudice toward dominant outgroups in a complementary way to how established research shows that SDO and RWA relate to dominant group members’ prejudice toward subordinate outgroups. In the present research, we examine this question considering nations as groups. A second question is whether SDO and RWA are predicted by the same personality factors among Western and non-Western populations. A third underexplored question is how the two pathways in the dual process model extend to distinct intergroup threat perceptions and emotions.

Using a random sample of residents of Beirut and surrounding areas, we test two models. In the first model, we examine relationships among personality factors, SDO and RWA, and generalized prejudice toward Americans. This model allows us to examine a dual process model of prejudice toward a dominant national outgroup in a Middle Eastern sample. In the second model, we assess relationships among personality factors, SDO and RWA, perceptions that Americans threaten Arabs’ economic resources and values, and feelings of anger and disgust toward Americans. In this second model, we focus more specifically on distinct intergroup emotions rather than generalized prejudice in order to examine the differential effects of SDO and RWA on specific negative feelings toward a dominant national outgroup through the mediating role of unique intergroup threat perceptions. We now detail the theories on which our predictions are based.

**SDO and RWA as predictors of prejudice**

Although prejudice toward subordinate groups is studied much more extensively than prejudice toward dominant groups, there is evidence that members of subordinate groups (e.g., Black Americans) exhibit prejudice toward dominant groups (e.g., White Americans; Johnson & Lecci, 2003). Unlike the dual process model, social dominance theory distinguishes between the factors motivating prejudice toward dominant and subordinate groups (Sidanius & Pratto, 1999). According to social dominance theory, prejudice toward subordinate groups is motivated by desires to maintain group-based dominance, as evidenced by the positive associations between
SDO and prejudice toward a number of subordinate ethnic, national, gender, and religious groups (see Pratto, Sidanius, & Levin, 2006, for a review). By contrast, prejudice toward dominant groups is motivated by desires to oppose group-based dominance. For example, in Taiwan, negative attitudes toward the USA and Japan, two relatively powerful nations, were found to be associated with low SDO, indicating the importance of a counter dominance orientation in predicting prejudice toward dominant groups (Pratto et al., 2000). Similar relationships have been found in Lebanon. Using a convenience sample of Lebanese university students, Henry and his colleagues found that Lebanese who were lower in SDO (i.e., counter dominance oriented) were more likely to support violence against the West (Henry, Sidanius, Levin & Pratto, 2005; see also Sidanius, Henry, Pratto & Levin, 2004). Thus, in Lebanon, we would expect greater prejudice toward Americans to be predicted by lower SDO, a counter dominance orientation reflecting a desire to attenuate the global hierarchy in which Arabs are subordinated.

Unlike SDO, which we expect will negatively predict Lebanese prejudice toward Americans, we expect RWA to positively predict such prejudice. As RWA expresses a motivation for collective security and social cohesion, it is fundamentally an intragroup motivation; it captures a desire to maintain ingroup norms and traditions. As such, we expect it to predict negative attitudes toward any outgroup perceived as violating ingroup values, regardless of whether the outgroup has more or less power than the ingroup (see also Henry et al., 2005). By contrast, we expect SDO to positively predict prejudice toward subordinate groups but negatively predict prejudice toward dominant groups because SDO is a group-based motivation that captures desires to maintain hierarchical intergroup power relations.

**Personality predictors of prejudice**

The dual process model further suggests that the motivational goals for group-based dominance and social cohesion captured by SDO and RWA, respectively, are made chronically salient for individuals by the personality characteristics of tough-mindedness and social conformity, respectively. These personality characteristics are presumed to be relatively stable predispositions that influence individuals’ general desires for group-based dominance and social cohesion across situations. SDO and RWA are considered ideological attitudes that mediate the effects of the two personality dimensions on prejudice (e.g., Duckitt, 2001; Duckitt & Sibley, 2009). Specifically, those who are socially conforming, or low in openness to experience, are motivated to establish and maintain a secure, stable, and cohesive society; this motivational goal is expressed in higher RWA and the promotion of greater prejudice toward both dominant and subordinate groups. By contrast, those who are tough-minded, or low in agreeableness, are motivated to achieve dominance in a competitive social hierarchy; this motivational goal is expressed in higher SDO and the promotion of more positive attitudes toward dominant groups and more negative attitudes toward subordinate groups.

These predictions of the dual process model have been supported by research using trait adjective measures of tough-mindedness and social conformity (e.g., uncaring/brutal and obedient/conventional, respectively; Duckitt, 2001), as well as by Sibley and Duckitt’s (2008) meta-analysis using the related Big Five personality factors of agreeableness and openness to experience (less agreeable personalities are more tough-minded and personalities less open to experience are more socially conforming; Duckitt & Sibley, 2009). For example, in their meta-analysis of 71 studies conducted in North America and Central Europe (N > 22,000 participants), Sibley and Duckitt found that across the two Western cultural regions, SDO mediated a negative relationship between agreeableness and prejudice, and RWA partially mediated a negative relationship between openness to experience and prejudice. All of the studies included in the meta-analysis appear to have examined prejudice toward subordinate groups (e.g., racism, sexism, and homophobia) in Western countries (e.g., the United
States, Belgium, and Sweden). In addition, the majority of studies used convenience samples of college students.

One goal of the present study is to examine whether the results of Sibley and Duckitt’s (2008) meta-analysis replicate when examining generalized prejudice toward a dominant group (Americans) using a stratified random sample in a Middle Eastern country (Lebanon). For this reason, the first model we test includes measures of personality factors, SDO, RWA, and generalized prejudice that are comparable to those used in the meta-analysis. This first model will allow us to test the theoretical expectation that generalized prejudice against dominant groups involves the same personality predictors that are typically found in dual process models of generalized prejudice against subordinate groups (i.e., tough-mindedness and social conformity) and the same positive mediated pathway through RWA, but a negative mediated pathway through SDO. The second major goal of the study is to build on the dual process model by assessing whether SDO and RWA predict distinct intergroup emotions toward Americans because they heighten perceptions of different kinds of intergroup threats.

**Intergroup threat perceptions and emotions**

Previous research on the dual process model has examined generalized prejudice and prejudice toward particular groups that are perceived to be competitive or dangerous (e.g., Duckitt, 2006). However, only recently has consideration been given to the distinct emotional responses that may result from different perceptions of intergroup threat. According to Cottrell and Neuberg’s (2005) sociofunctional approach to prejudice, the emotional responses to different intergroup threat perceptions function as adaptive mechanisms that stimulate people to act in certain ways to address the source of the perceived threat. For example, the adaptive emotional response to a group perceived as posing a competitive threat to the ingroup’s economic resources should be anger, as anger functions to stimulate movements against the competitive outgroup to achieve the ingroup’s desired resources or outcomes. Here, we merge predictions of the dual process model with those of Cottrell and Neuberg’s sociofunctional approach to prejudice.

According to the dual process model, high SDO individuals tend to value power because it confers an advantage in the competitive world they perceive. Because they desire dominance and superiority, they may be differentially sensitive to threats against the power hierarchy, depending on whether subordinate groups are posing such threats to dominant groups or vice versa. Specifically, high SDO individuals may exhibit more anger toward subordinate groups because they view them as threatening the economic resources of dominant groups. By contrast, low SDO individuals may exhibit more anger toward dominant groups because they perceive them as threatening the economic resources of subordinate groups.

Through the second pathway in the dual process model, high RWA individuals tend to endorse conventional norms and values because adherence to these conventions provides order and stability in the dangerous world they perceive. Because they find comfort in the existing social order, they may be sensitive to threats that could undermine social cohesion and more likely to perceive outgroups with different values, whether dominant or subordinate, as threatening the values and norms of the ingroup. According to Cottrell and Neuberg (2005), the primary adaptive emotional response to a group perceived as contaminating, violating, or threatening the ingroup’s values should be disgust, because disgust functions to stimulate avoidant behaviors that protect the group from the contaminant. In addition to the primary emotional response of disgust, anger is a potential secondary emotional response to value threat perceptions (Neuberg & Cottrell, 2002). As a threat to values potentially blocks the desired outcome of maintaining social cohesion, it could also provoke anger to stimulate actions against the threatening outgroup in order to defend the ingroup’s values. In sum, if the pathway to prejudice through RWA involves a
perceived threat to a society’s values, it may provoke primarily disgust and secondarily anger.

Consistent with the notion that SDO and RWA may lead to distinct intergroup threat perceptions, Duckitt and Sibley (2009) recently proposed that SDO should uniquely predict perceptions of competition over group power and RWA should uniquely predict perceptions of social cohesion threat. However, thus far, only one empirical study has examined the associations among personality dimensions, ideological attitudes, and intergroup threat perceptions and emotions using the dual process model. Examining attitudes toward people of the Muslim world in an American college student sample, Matthews and Levin (2012) found that SDO positively predicted perceptions that Muslims threaten Americans’ economic resources, which subsequently predicted anger toward Muslims but not disgust. By contrast, RWA positively predicted perceptions that Muslims threaten Americans’ values, which most strongly predicted disgust toward Muslims but also predicted anger. Here, we explore the role of intergroup threat perceptions in mediating the relationships between SDO/RWA and intergroup emotions toward a dominant national outgroup (Americans) in a subordinate Middle Eastern nation (Lebanon).

Our integration of the dual process model and sociofunctional approach in the current study contributes to the theoretical development of both perspectives. The dual process model proposes that concerns regarding different kinds of threat play a role in driving prejudice toward competitive versus dangerous groups (or the same group perceived to be competitive versus dangerous; see Duckitt, 2006), but prior to the work of Matthews and Levin (2012), threat perceptions had not been formally tested within a dual process model. Furthermore, while the dual process model has typically examined generalized prejudice as the outcome variable, the sociofunctional and intergroup emotions perspectives have argued that more specific emotional responses are stimulated by particular cognitive threat appraisals (Cottrell & Neuberg, 2005; Mackie, Devos, & Smith, 2000, respectively). If value and economic threat perceptions differentially mediate the relationships between RWA–disgust and SDO–anger, respectively, we will gain two valuable insights. First, the two processes that differentiate the paths to generalized prejudice through RWA and SDO may be better understood as dual pathways to specific intergroup emotions, one to disgust through RWA and one to anger through SDO. Second, the key to understanding the dual pathways between RWA–disgust and SDO–anger may be differentiated intergroup threat perceptions. Specifically, high RWA Lebanese may feel more disgust toward Americans in part because they perceive Americans as threatening Arabs’ cherished values (rather than their economic resources). By contrast, low SDO Lebanese may feel more anger toward Americans in part because they perceive Americans as threatening Arabs’ economic resources (rather than their cherished values).

The present research: Two predicted models

We test two models. In the first model, we examine personality factors, SDO, and RWA as predictors of Lebanese participants’ generalized prejudice toward Americans. We expect that SDO will negatively predict prejudice toward Americans and RWA will positively predict prejudice. We also hypothesize that tough-mindedness will positively predict SDO, and will have an indirect negative effect on prejudice toward Americans through SDO. Further, we hypothesize that social conformity will positively predict RWA, and will have an indirect positive effect on prejudice toward Americans through RWA.

We also model a possible connection between the dual paths to generalized prejudice. Specifically, we expect social conformity to negatively predict tough-mindedness, replicating the connection found within Duckitt’s (2001) dual process model. Tough-mindedness does not tend to be a socially desirable trait. As such, those who have a strong socialconforming personality tend to report less tough-mindedness (Duckitt et al., 2002). This path captures the possibility that those high in social conformity are giving socially
desirable responses to the tough-mindedness items. Regarding a possible association between SDO and RWA, the nature of this relationship varies across cultural contexts and tends to be weaker in societies where political attitudes are not organized along a single left–right dimension (Mirisola, Sibley, Boca, & Duckitt, 2007). As Lebanon has multiple political parties that operate within a dynamic and complex political system (with some government offices reserved for members of specific religious groups), the political system is not arranged along an overtly established left–right dimension. As such, we do not expect SDO and RWA to be strongly related in this cultural context.

In the second model, we extend the dual process model to assess relationships among SDO and RWA, perceptions that Americans threaten Arabs’ economic resources and values, and feelings of anger and disgust toward Americans. We expect that lower levels of SDO among Lebanese participants will predict greater perceptions of economic (but not value) threat from Americans and greater economic threat perceptions will subsequently predict greater feelings of anger (but not disgust) toward Americans. In addition, SDO will have an indirect negative effect on anger through the economic threat perceptions. Regarding the second pathway, we expect that higher levels of RWA among Lebanese participants will predict greater perceptions of value (but not economic) threat from Americans and greater value threat perceptions will most strongly predict disgust toward Americans, but will also predict anger, as anger is a secondary emotion that arises in response to perceptions of value threat. In addition, RWA will have an indirect positive effect on disgust through the value threat perceptions.

We also model a nonrecursive relationship between economic and value threat perceptions, with the two perceptions predicting one another. Sidanius and Pratto (1999) postulated that perceptions of threat from another group may serve as legitimizing myths, or beliefs that help to justify prejudice and discrimination against that group. For example, when a subordinate group perceives its economic resources to be threatened, one way to oppose such dominance could be to derogate the other group’s values (see Matthews & Levin, 2012). We also examine the possibility that perceptions that Americans pose an economic threat may result from perceptions that Americans threaten Arabs’ values and in order to undermine the stability of their social norms and values will attack Arabs’ economic resources. Since both directions are possible in the current sociopolitical context, we model a nonrecursive relationship between the two threat perceptions.

**Method**

**Participants and procedure** Lebanon has historically been, and continues to be, religiously and linguistically diverse, with over 17 religious sects and three widely spoken languages. Under our instructions to include approximately equal numbers of Sunni Muslims, Shia Muslims, and Christians, Zogby International obtained a stratified random sample of 200 Lebanese participants during the spring of 2010 by randomly selecting households within neighborhoods predominated by each religious group in Beirut (n = 160), Tripoli (n = 17), Tyre (n = 12), and Aley (n = 11). Interviewers approached the selected homes and asked if they could interview someone at home. If they were invited to do so, they took an inventory of all family members present and randomly selected one person to ask to be interviewed in a way that ensured that both genders had an equal chance of inclusion, with no one allowed to self-select into the sample. To achieve this, the Kish grid approach was used (e.g., McBurney, 1988). People who agreed to participate were interviewed for about an hour. They received the equivalent of $10.00 for their participation. Interviews were conducted in Arabic by trained residents of the city. The response rate (i.e., number of completed interviews/number of households contacted) was 54.2%. There were 184 participants with complete data on all measures (because only observed cases could be used within our structural equation models, 16 cases with missing data
were excluded from the analyses). Of these, 55 identified as Sunni, 29 Shia, 11 Muslim (without specification of sect), 56 Maronite, 12 Christian Orthodox, 9 Roman Catholic, and 12 Druze. There were 90 men and 94 women, with an average age of 37 years ($M = 37.24, SD = 15.01$). Most people selected by the interviewers were 18 years of age or older. Seven participants were between 14 and 17 years old. The oldest participant was 79 years old.

**Measures** The survey interview protocol was written in English, then translated into Arabic by Zogby International and back-translated into English by a different group at Zogby to ensure equivalence of meaning across the original and back-translated surveys. All measures used in the current study are provided below.

**Personality measures** A social conforming personality was assessed with two items: “I am conforming” and “I am rebellious” (reverse-coded; $1 = \text{strongly disagree}, 2 = \text{disagree}, 3 = \text{neutral}, 4 = \text{agree}, 5 = \text{strongly agree}$). The items were averaged to form a reliable scale ($r = .62, p < .001; \alpha = .75$). A tough-minded personality was also measured with two items on the same 5-point scale: “I am harsh” and “I am caring” (reverse-coded; see Duckitt, 2001, for both personality measures). The items were combined to form a reliable scale ($r = .78, p < .001; \alpha = .87$).

**Ideological attitudes** Space limitations in the interview protocol restricted the number of RWA and SDO items that could be assessed. The three RWA items with the highest interitem correlations from a 20-item RWA scale (Altemeyer, 1996) previously administered in Lebanon (Henry et al., 2005) were chosen for inclusion in the current study. Six items from the full 16-item SDO scale (Pratto et al., 1994) were selected in a similar manner. All RWA and SDO items were measured using the same response options ($1 = \text{strongly disagree}, 2 = \text{disagree}, 3 = \text{neutral}, 4 = \text{agree}, 5 = \text{strongly agree}$) and formed scales with adequate reliability ($\alpha = .66$ and $\alpha = .91$, respectively). The following three RWA items were assessed: “Obedience and respect for authority are the most important virtues children should learn” (RWA1), “Those who have rebelled against established religions are as virtuous as the devout” (reverse-coded; RWA2), and “Young people should be allowed to challenge their parents’ ways, confront established authorities, and in general, criticize the customs and traditions of our society” (reverse-coded; RWA3). SDO was measured with the following six items: “It’s probably a good thing that certain groups are at the top and other groups are at the bottom” (SDO1), “ Inferior groups should stay in their place” (SDO2), “Superior groups should dominate inferior groups” (SDO3), “It would be good if all groups could be equal” (reverse-coded; SDO4), “We should increase social equality” (reverse-coded; SDO5), and “Group equality should be our ideal” (reverse-coded; SDO6). RWA and SDO were modeled as latent variables, with each of their measured items (RWA1–RWA3 and SDO1–SDO6, respectively) serving as manifest indicators for the latent constructs.

**Generalized prejudice toward Americans** We operationalized generalized prejudice toward Americans using the classic tripartite definition encompassing feelings, cognitions, and behaviors (Fiske, 1998). Specifically, the following measures were used: (a) negative affect toward Americans (i.e., general feelings of unfavorability; Moreno & Bodenhausen, 2001), (b) negative stereotypes of Americans (i.e., cognitions regarding low warmth and trustworthiness; Cuddy, Fiske, & Glick, 2007), and (c) support for harmful behaviors toward Americans (i.e., support for violence; Cottrell & Neuberg, 2005; Cuddy et al., 2007). We chose to include measures of all three dimensions so that our findings would not be limited to one particular operationalization of prejudice. Strong associations have been shown among these dimensions (e.g., Cuddy et al., 2007), especially within conflictual intergroup contexts (e.g., Spanovic, Lickel, Denson, & Petrovic, 2010). However, theory and research suggest that these distinct components serve unique functions (Cottrell & Neuberg, 2005; Dovidio, Esses, Beach, & Gaertner, 2002; Mackie & Smith, 2002).
As such, we modeled the three measures separately (as manifest variables) and assessed their loadings on a latent factor of generalized prejudice.

Negative affect toward Americans was assessed with two items. Participants were asked to indicate how favorable or unfavorable they feel about “Americans” and “the American government” (1 = very unfavorable, 2 = unfavorable, 3 = neutral, 4 = favorable, 5 = very favorable; items were reverse-coded so that higher numbers indicate more negative affect). The two items were averaged to form a reliable scale (r = .77, p < .001; α = .86). Negative stereotypes of Americans were measured with two items: “How trustworthy are Americans?” and “How warm are Americans?” (1 = not at all, 2 = slightly, 3 = somewhat, 4 = much, 5 = very much; items were reverse-coded so that higher numbers indicate more negative stereotypes). The two items were combined to form a reliable scale (r = .76, p < .001; α = .86). Support for violence toward Americans was assessed with two items. Participants were asked how much they support or oppose each of the following actions against Americans: “killing civilians” and “attacking military targets” (1 = strongly oppose, 2 = oppose, 3 = neutral, 4 = support, 5 = strongly support). The two items were averaged to form a scale with adequate reliability (r = .42, p < .001; α = .52).

Intergroup threat perceptions Based on research that value differences may be perceived as threats (e.g., Stephan, Ybarra, Martinez, Schwarzwald, & Tur-Kaspa, 1998), and using previously validated measures of value threat perceptions (Cottrell & Neuberg, 2005), we selected two items to assess perceived value threat on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree): “Americans, as a group, possess values that directly oppose the values of Arabs” and “Americans, as a group, hold values that are morally inferior to the values of Arabs.” The two items formed a scale with adequate reliability (r = .45, p < .001; α = .60). Economic threat perceptions were assessed with two questions on the same 5-point scale (Cottrell & Neuberg, 2005): “Americans, as a group, take economic resources away from Arabs” and “Americans, as a group, limit the economic opportunities available to Arabs.” The two items were combined to form a reliable scale (r = .79, p < .001; α = .88).

Intergroup emotions Participants were asked to indicate how strongly they feel “disgust” and “anger” toward Americans. They responded to each emotion on a 5-point scale (1 = not at all, 2 = slightly, 3 = somewhat, 4 = much, 5 = very much).

Perceived group power Participants were asked to rate the perceived power of the United States and Arab nations in general on a scale ranging from 0 (absolutely no power) to 100 (the most power possible). A paired-samples t test indicated that they thought the USA (M = 83.58, SD = 12.50) had more power than Arab nations in general (M = 50.38, SD = 21.99), t(183) = 17.39, p < .001. Importantly, these results confirm our expectation that Americans are considered to be the dominant group and Arabs are considered the subordinate group in this intergroup context.

Results
To assess the two predicted models, we conducted structural equation analyses with Amos 19.0 (Arbuckle, 2010), using maximum likelihood estimation of parameters. Hu and Bentler (1999) suggested that researchers utilize several goodness-of-fit indices to determine the overall fit of a model. Within our models, we utilized the $\chi^2/df$, the comparative fit index (CFI), the normed fit index (NFI), and the root mean square error of approximation (RMSEA). Table 1 provides the correlations and descriptive statistics for all the variables.

Personality, ideological attitudes, and prejudice Figure 1 provides the standardized path coefficients for the first model. The two ideological attitudes, SDO and RWA, were modeled as latent variables with each of their six and three measured items, respectively, serving as manifest indicators for the latent constructs. Covariances
Table 1. Descriptive statistics and correlations between variables (N = 184)

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<td>5. Negative affect toward Americans</td>
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<td>6. Negative stereotypes of Americans</td>
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<td>7. Support for violence toward Americans</td>
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<td>8. Perception of value threat</td>
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<td>9. Perception of economic threat</td>
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<td>10. Disgust</td>
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<td>11. Anger</td>
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Note. ***p < .001. All items were measured on scales ranging from 1–5, with higher numbers indicating greater levels of the constructs.
were included between the error terms of the three negatively worded SDO items (SDO4–SDO6). Xin and Chi (2010) recommended the addition of these covariances to account for a negative wording effect and improve measurement of the SDO construct. Generalized prejudice against Americans was also modeled as a latent variable with three 2-item indicators: negative affect, negative stereotypes, and support for violence. When only two items were used to assess a variable in the model, we averaged the two items to create one manifest variable. The personality dimensions were both measured with 2-item manifest variables. To simplify presentation of the model, none of the variables’ error terms are shown in the figure.

The model fit indices indicated that our proposed model showed an adequate overall fit to the data ($\chi^2 = 186.72$, $df = 71$, $\chi^2/df = 2.63$, CFI = 0.93, NFI = 0.90, RMSEA = .09). The proportion of variance accounted for in each of the criterion variables ($R^2$) is provided in Figure 1. In examining the individual paths in the model, we found strong support for each of the predicted relationships (all $p$s < .001). First, SDO negatively predicted generalized prejudice toward Americans ($\beta = -.36$) and RWA positively predicted prejudice ($\beta = .68$). The two ideological attitudes together accounted for a substantial 70% of the variance in generalized prejudice toward Americans. Second, a tough-minded personality predicted higher levels of SDO ($\beta = .79$), single-handedly explaining 62% of the variance in SDO, and a social conforming personality predicted higher levels of RWA ($\beta = .42$), accounting for 18% of its variance. As expected, social conformity negatively predicted
Mediation analyses To determine whether the personality measures had indirect effects on generalized prejudice through the ideological attitudes (i.e., SDO and RWA), we modeled follow-up mediation analyses using Amos 19.0 (Arbuckle, 2010). These models contained only the variables of interest in each mediation analysis. We first examined the path from tough-mindedness to latent prejudice through SDO, controlling for the effect of RWA on the manifest indicators of latent prejudice. Results indicated a significant indirect negative effect of tough-mindedness on prejudice through SDO when the effect of RWA on prejudice was taken into account ($Z = -3.11, p = .002$). The direct path from tough-mindedness to prejudice, controlling for SDO and RWA, was marginally significant ($\beta = -.21, p = .07$). We then assessed the path from social conformity to latent prejudice through RWA, controlling for the effect of SDO on the manifest indicators of latent prejudice. Results indicated a significant indirect positive effect of social conformity on prejudice through RWA when the effect of SDO on prejudice was taken into account ($Z = 3.53, p < .001$). The direct path from social conformity to prejudice, controlling for RWA and SDO, was not significant ($\beta = -.10, p = .20$). These results show that SDO and RWA fully mediate the effects of their respective personality predictors (tough-mindedness and conformity) on generalized prejudice.

Alternative model testing We also tested two alternative models. In the first alternative model, we switched the positions of the personality variables and ideological attitudes in order to examine whether the ideological attitudes are more appropriately modeled as predictors of the personality dimensions. Specifically, this alternative model tested the extent to which RWA predicted social conformity, SDO predicted tough-mindedness, and both personality variables predicted prejudice. The original path from social conformity to tough-mindedness was also included. This alternative model yielded a poorer fit than the original hypothesized model ($\chi^2 = 311.71, df = 71, \chi^2/df = 4.39, CFI = 0.86, NFI = 0.83, RMSEA = .14$), indicating that the ideological attitudes are more appropriately modeled as outcomes of the personality dimensions. In the second alternative model, we switched the positions of the ideological attitudes and prejudice in order to examine whether the ideological attitudes are more appropriately modeled as outcomes of generalized prejudice. This alternative model yielded a poorer fit than the original hypothesized model ($\chi^2 = 264.02, df = 71, \chi^2/df = 3.72, CFI = 0.88, NFI = 0.84, RMSEA = .12$), indicating that the ideological attitudes are more appropriately modeled as predictors of generalized prejudice.

Taken together, this first set of analyses demonstrates the viability of a dual process model of generalized prejudice toward a dominant national outgroup using a Middle Eastern sample. As expected, SDO mediated a negative relationship between tough-mindedness and prejudice toward Americans; RWA mediated a positive relationship between social conformity and prejudice toward Americans.

Intergroup threat perceptions and emotions In our second set of analyses, we focused more specifically on the effects of SDO and RWA on distinct negative emotions toward Americans through the mediating role of unique intergroup threat perceptions. We examined relationships among the personality dimensions of tough-mindedness and social conformity, ideological attitudes of SDO and RWA, economic and value threat perceptions, and emotions of anger and disgust toward Americans (see Figure 2). The intergroup threat perceptions and emotions were all measured with manifest variables. The model fit indices indicated that our proposed model
showed an adequate overall fit to the data ($\chi^2 = 215.53$, $df = 83$, $\chi^2 / df = 2.60$, CFI = 0.93, NFI = 0.89, RMSEA = .09). The model accounted for 59% of the variance in perceptions of economic threat from Americans and 54% of the variance in anger toward Americans. In addition, 69% of the variance in perceptions of value threat from Americans and 46% of the variance in disgust toward Americans were accounted for by the model. The proportion of variance accounted for in each of the criterion variables ($R^2$) is provided in Figure 2. As expected, people lower in SDO perceived greater economic threat from Americans ($\beta = -.60$, $p < .001$), and greater perceptions of economic threat predicted stronger feelings of anger toward this group ($\beta = .62$, $p < .001$). We considered whether perceived economic threat directly contributed to disgust, but modification indices did not suggest the addition of a path from economic threat to disgust. Subsequent analyses adding this path also demonstrated there was no direct effect of economic threat perceptions on disgust when controlling for value threat perceptions ($\beta = .01$, $p = .84$), which supports the proposition that economic threat perceptions are uniquely associated with anger. In addition, and as expected, higher levels of RWA predicted greater perceptions of value threat from Americans ($\beta = .75$, $p < .001$). Greater perceptions of value threat most strongly predicted disgust toward Americans ($\beta = .68$, $p < .001$), but as hypothesized, also significantly predicted anger toward Americans ($\beta = .18$, $p = .002$). In addition, there was a nonrecursive relationship between the
threat perceptions. Value threat perceptions significantly predicted economic threat perceptions ($\beta = .31, p < .001$), and economic threat perceptions also marginally predicted value threat perceptions ($\beta = .13, p = .06$). Post hoc modification indices suggested adding a covariance between the error terms of anger and disgust. The addition of the covariance resulted in a small but significant improvement in model fit ($\chi^2 = 209.57, df = 82, \chi^2 / df = 2.56, CFI = 0.93, NFI = 0.89, RMSEA = .09, \chi^2_{\text{diff}} = 5.96, df = 1, p = .01$).

**Mediation analyses** To determine whether the indirect effects from the ideological attitudes to their corresponding intergroup emotions through the threat perceptions were significant, we modeled follow-up mediation analyses using Amos 19.0 (Arbuckle, 2010). These models contained only the variables of interest in each mediation analysis. Results indicated that economic threat perceptions significantly mediated the relationship between latent SDO and anger toward Americans ($Z \beta_p < .001$); the direct path from latent SDO to anger was also significant ($\beta = -.27, p < .001$), indicating only partial mediation. Value threat perceptions significantly mediated the relationship between latent RWA and disgust toward Americans ($Z \beta_p = 2.24, p = .03$); the direct path from latent RWA to disgust was also significant ($\beta = .41, p = .01$), indicating only partial mediation. Value threat perceptions only marginally mediated the relationship between RWA and anger toward Americans ($Z = 1.77, p = .08$) and the direct path from latent RWA to anger was only marginally significant ($\beta = .32, p = .07$).

**Alternative model testing** Two a priori alternative models were also tested. First, we considered an alternative model in which we switched the positions of the ideological attitudes and threat perceptions. This assessed the possibility that threat perceptions may be more accurately modeled as predictors of ideological attitudes, consistent with the notion that levels of SDO and RWA may change in response to perceptions of intergroup threat (e.g., Morrison, Fast, & Ybarra, 2009). Specifically, this alternative model tested the extent to which value threat perceptions mediated the relationship between social conformity and RWA and the extent to which economic threat perceptions mediated the relationship between tough-mindedness and SDO. In addition, rather than the threat perceptions predicting intergroup emotions, RWA was modeled as predicting disgust and anger, and SDO was modeled as predicting anger. The path from social conformity to tough-mindedness and the nonrecursive paths between the threat perceptions remained the same as those contained in the original model. This alternative model yielded a poorer fit than the original hypothesized model ($\chi^2 = 276.17, df = 83, \chi^2 / df = 3.33, CFI = 0.89, NFI = 0.85, RMSEA = .11$), indicating that threat perceptions are more accurately modeled as outcomes of ideological attitudes.

Second, we considered an alternative model in which disgust and anger were aggregated to form one negative emotion ($r = .48, p < .001; \alpha = .62$). This alternative model would be consistent with a view of prejudice as a general negative emotion rather than a differentiated set of specific intergroup emotions that result from particular intergroup threat perceptions. Value threat perceptions and economic threat perceptions were modeled as predicting this negative emotion, and all remaining paths were identical to those found in the original model. Value threat perceptions and economic threat perceptions significantly predicted the negative emotion ($\beta = .54, p < .001; \beta = .32, p < .001$; respectively). However, the model did not show a better overall fit to the data than the original model ($\chi^2 = 199.75, df = 70, \chi^2 / df = 2.85, CFI = 0.92, NFI = 0.89, RMSEA = .10; \chi^2_{\text{diff}} = 15.78, df = 13, p = .26$).

**Discussion**

Previous research on the dual process model in the West has demonstrated that there are two distinct pathways to prejudice: one path through tough-mindedness, a view of the world as a competitive place, and SDO; and a second path through social conformity, a view of the world as a dangerous place, and RWA (Duckitt, 2001;
Duckitt et al., 2002; Sibley & Duckitt, 2008). These pathways have typically been examined in the context of dominant group members’ attitudes toward subordinate groups. The current study extends this literature in three ways. First, we assess the extent to which SDO and RWA predict prejudice toward a dominant national outgroup rather than the domestic subordinate outgroups typically studied in the prejudice literature. Second, we examine the degree to which SDO and RWA mediate the relationships between personality dimensions and generalized prejudice in a Middle Eastern sample. Both of these goals were accomplished by examining a model in which generalized prejudice toward Americans was predicted by tough-minded and social conforming personalities through SDO and RWA, respectively. Our third goal was to measure the extent to which SDO and RWA predict distinct intergroup emotions indirectly through unique intergroup threat perceptions. Here, we were interested not in the predictors of generalized prejudice toward Americans, but in the predictors of specific intergroup emotions toward Americans: anger and disgust. As such, we conducted a second set of analyses in which anger and disgust toward Americans were predicted by SDO and RWA, respectively, through corresponding economic and value threat perceptions. We now discuss how our findings extend the literature regarding these three purposes in turn.

According to social dominance and dual process predictions, respectively, prejudice toward Americans should be higher among Lebanese lower in SDO, who are motivated by their counterdominance orientation to diminish the global hierarchy in which Arabs are subordinated, and among Lebanese higher in RWA, who are driven by their security motivation to protect the society’s norms and values. Using a convenience sample of Lebanese university students, Henry et al. (2005) found evidence consistent with these expectations: Lebanese students who were lower in SDO and higher in RWA were more likely to support groups who commit violence against the West (i.e., support organizations categorized as “terrorist” by the U.S. Department of State). The current study extended the generalizability of these findings by examining a random sample of Lebanese, adding a measure of perceived power to confirm the expectation that Americans are perceived to have more power than Arabs, and using a better measure of prejudice toward Americans: a latent factor indicated by negative feelings, negative stereotypes, and support for negative behaviors, the three main channels through which intergroup prejudice is expressed. As expected, lower levels of SDO and higher levels of RWA were associated with more prejudice toward Americans. Furthermore, the two ideological attitudes together accounted for 70% of the variance in prejudice, a substantial amount of explained variance for two brief measures of psychological constructs.

The present focus on prejudice against a powerful group has implications for extending research on prejudice and intergroup relations. Without more thorough examination of how less powerful groups view dominant groups, theories cannot account for the full range of prejudice expression, especially the motivations, beliefs, and feelings that may motivate less powerful groups to contest or challenge intergroup dominance. Here we saw that a stratified random sample of Lebanese participants felt, on average, “much” anger toward Americans ($M = 4.03, SD = 1.15$ on a 5-point scale) and “somewhat” disgusted by Americans ($M = 2.78, SD = 1.66$ on a 5-point scale). Such emotions are theorized to motivate actions that could change the tenor of intergroup relations (Cottrell & Neuberg, 2005; van Zomeren, Postmes, & Spears, 2008). In particular, social dominance theory views negative feelings, stereotypes, and behaviors toward powerful groups as aspects of intergroup power dynamics that may be hierarchy attenuating, or produce intergroup conflict, or both (e.g., Pratto et al., 2006). Considering not only how group prejudices maintain and justify social hierarchy, but how they delegitimize and attenuate it will deepen our understanding of intergroup power dynamics. Social dominance theory argues that intergroup power dynamics and the possibilities for social change must be taken into account...
when considering how prejudice may be har-nessed to maintain, or to attenuate, group-based hierarchy.

The second major contribution of the current study was to situate these relationships between the ideological attitudes of SDO and RWA and prejudice toward a dominant group within a dual process model of the personality predictors of prejudice (Duckitt, 2001; Duckitt et al., 2002). Nearly all of the previous research on the dual process model has examined personality variance in the tendencies toward prejudice in the West, in which it is generally assumed that the culture’s individualistic orientation contributes to variability in individuals’ expressions of sociopo-itical attitudes and personality characteristics. Thus, it is important to know whether substantial variability in the personality characteristics of social conformity and tough-mindedness and the ideological attitudes of RWA and SDO exist in non-Western contexts, and whether the two sets of constructs relate in similar ways across Western and non-Western cultural contexts. Our study was among the first to address this question. We found that tough-mindedness positively predicted SDO (explaining a substantial 62% of its variance). We also found that social conformity positively predicted RWA (explaining a more modest 18% of its variance). These positive pathways between the personality characteristics and corresponding ideological attitudes replicate those found in the West (Sibley & Duckitt, 2008). In addition, we did not find a significant association between RWA and SDO in this study, which supports the proposition that these constructs are not strongly associated in contexts that are not explicitly organized along a left–right political dimension (see Mirisola et al., 2007). However, using only three items to measure RWA and six items to measure SDO, we may not have captured the full range of the constructs’ variability, potentially attenuating their intercorrelation.

Furthermore, as expected, RWA mediated a positive relationship between social conformity and prejudice, replicating this positive pathway of the dual process model found in Western cultural contexts (Sibley & Duckitt, 2008). According to the dual process model, social conforming per-sonalities should express higher RWA and more prejudice toward any group perceived as threatening, regardless of whether the group has more or less power, because protecting the ingroup from encroaching outgroups by denigrating them fulfills desires to maintain collective security and social cohesion in the dangerous world they perceive. Also as hypothesized, the path we found from tough-mindedness through SDO to prejudice was not positive, but negative. This is the opposite sign of the pathway typically found when examining prejudice toward subordinate groups in Western societies (Sibley & Duckitt, 2008). Based on social dominance theory, we expected tough-minded personalities in Lebanon to exhibit higher SDO and less prejudice toward Americans, because favoring dominant groups fulfills desires to maintain group-based domi-nance in the competitive world they perceive. Taken together, our results show the generaliza-bility of the positive pathway from a social con-forming personality through RWA to prejudice against both dominant and subordinate groups across Western and non-Western cultural contexts. Regarding the pathway to prejudice from a tough-minded personality through SDO, our findings indicate that the sign of this path will likely depend on whether prejudice is expressed toward dominant or subordinate groups. Thus, our results both support and extend previous findings on the personality component of the dual process model among Lebanese participants. An important agenda for future research is to examine whether other non-Western political and cultural contexts, especially those with less social heterogeneity, also show this pattern of individual variability in who is low or high in prejudice toward dominant groups.

The third goal of our study was to extend the dual process model to examine whether the dual pathways predict specific intergroup emotions indirectly through distinct intergroup threat per-ceptions in a Middle Eastern context. Unlike the positive pathway from RWA to disgust through value threat perceptions, which we expected would parallel previous findings regarding Americans’
emotions toward Muslims (Matthews & Levin, 2012), we expected the sign of the pathway from SDO to anger through economic threat perceptions to differ. Specifically, as a motivational goal expressing desires for group equality, we expected low SDO to sensitize Lebanese individuals to potential economic threats from Americans that could further entrench Arab subordination. We also expected economic threat perceptions to strongly predict feelings of anger toward Americans, as anger functions to stimulate actions to achieve desired resources (e.g., economic resources; Cottrell & Neuberg, 2005). Consistent with these predictions, we found that SDO had an indirect negative effect on anger through the economic threat perceptions: Low SDO Lebanese felt more anger toward Americans partly because of their heightened perceptions of economic threat.

Our extension of the dual process model to intergroup threat perceptions and emotions within the context of prejudice toward a dominant group offers three important theoretical contributions. First, whereas the dual process model has typically examined SDO and RWA as predictors of generalized prejudice, we found that the ideological attitudes also differentially predicted the specific intergroup emotions of anger and disgust, respectively. These results deepen our understanding of the relation between SDO and negative affect identified by other researchers (see Pratto et al., 2006, for a review). Furthermore, to the extent that these specific emotions predict functionally relevant behaviors (e.g., attack in response to anger and rejection in response to disgust; Cottrell & Neuberg, 2005), being able to differentiate the emotional responses to SDO and RWA allows us to potentially predict the distinct behavioral responses of high SDO and high RWA individuals as well. Second, our extension merges two theoretical perspectives within one integrated model: the sociofunctional view that distinct threat perceptions should predict functionally relevant emotions and the dual process notion that SDO should uniquely predict perceptions of competition over group power and RWA should uniquely predict perceptions of social cohesion threat (see also Matthews & Levin, 2012). A spotlight on the mediating role of threat perceptions that such an integrated model affords is the key to understanding the two pathways in the dual process model. High RWA Lebanese exhibit not just more generalized prejudice toward Americans, but specifically more disgust toward them, and especially to the degree that they perceive Americans as threatening their cherished values (rather than their economic resources). Along the second pathway in the model, low SDO predicts not just generalized prejudice, but specifically anger, and especially to the degree that perceptions of economic (rather than value) threat are heightened.

Third, evidence of a negative relationship between SDO and intergroup anger through economic threat perceptions in Lebanon serves as a theoretical development of the dual process model because of the focus on anger toward a dominant group (Americans). Previous research has mostly demonstrated a positive relationship between SDO and generalized prejudice toward subordinate groups (e.g., Sibley & Duckitt, 2008) and a positive relationship between SDO and anger toward a subordinate group through elevated economic threat perceptions (Matthews & Levin, 2012). However, our results suggest a reversal in the sign of the relationship between SDO and anger when emotions toward dominant groups are assessed. The narrative provided by social dominance theory explains such reversals. Viewed from the perspective of high SDO individuals, the narrative emphasizes how dominance is maintained: high SDO captures a prodominance orientation, which translates into more anger toward subordinate groups (i.e., a positive relationship between SDO and anger toward subordinate groups) and less anger toward dominant groups (i.e., a negative relationship between SDO and anger toward dominant groups). Alternatively, viewed from the perspective of low SDO individuals, the narrative highlights how dominance is challenged: low SDO captures a counter dominance orientation, which translates into more anger toward dominant groups and less anger toward subordinate groups.
The theoretical advantage of situating these relationships within a dual process model is that such an integration highlights the differential roles of SDO and RWA in predicting prejudice. SDO encompasses motivations regarding the power held by groups in an intergroup context, not the power held by individuals in an interpersonal context. Intragroup motivations that focus on maintaining ingroup norms and traditions, such as RWA, would not be expected to differentially affect group prejudice across intergroup contexts with different power dynamics. Group-based motivations such as SDO, by contrast, should express themselves differently when power relationships vary across intergroup contexts. Social dominance theory would expect the results of our study in Lebanon to generalize to other contexts in which subordinate groups exhibit prejudice toward dominant groups. Specifically, the counter dominance orientation of low SDO individuals in subordinate groups should be expressed in more anger toward dominant groups to the extent that the powerful groups are seen as threatening to further entrench the intergroup inequality that low SDO individuals oppose.

Although social dominance theory makes specific predictions regarding political power influences on the expression of SDO, more cross-cultural empirical work is needed to test theoretical predictions (Pratto et al., 2006). The current study in Lebanon provides one test of theoretical predictions regarding prejudice toward dominant groups. Specifically, the counter dominance orientation of low SDO individuals in subordinate groups should be expressed in more anger toward dominant groups to the extent that the powerful groups are seen as threatening to further entrench the intergroup inequality that low SDO individuals oppose.

We hope that our use of a stratified probability sample within a Middle Eastern country increases the generalizability of our results. All of the studies included in Sibley and Duckitt's (2008) meta-analysis examining the dual process model assessed prejudice toward subordinate groups within Western countries and the majority of studies used convenience samples of college students. Using probability samples allows the generalization of findings from samples to larger populations. We can now say with more certainty that the pathways of the dual process model are supported in the heterogeneous population of a Middle Eastern capital city (Beirut) and surrounding areas. All of the hypothesized paths in both of our models received unequivocal support. The fact that we were able to measure relationships among the major constructs in the dual process model in a public survey with few items per construct and in Arabic bodes well for studying the model among other publics in other languages.

However, we must acknowledge some limitations of our research. First, our study only included Lebanese participants and focused on their views of Americans. Historically, Lebanon has had a unique political and economic relationship with the United States (U.S. Department of State, 2010). We hope future research will examine the extent to which the present results generalize to attitudes toward other dominant groups among populations of other countries. Second, we focused only on economic and value threat perceptions toward Americans. The economic and value threat perceptions included in our model explained large proportions of variance in our Lebanese participants’ feelings of anger and disgust toward Americans (approximately 50% in each), but a number of other threat perceptions may influence intergroup emotions as well (e.g., physical threats; Cottrell & Neuberg, 2005) and should be included in future tests of the model in other intergroup contexts. Third, our models demonstrated adequate, but not ideal, model fit within our sample. Model fit may be improved in...
the future by including additional paths or using more reliable measures. For example, we found that aggregating the two intergroup emotions, disgust and anger, does not improve model fit, but adding the covariance between their error terms does. Measurement error (e.g., the tendency of a person to express negative emotions in general) could be responsible for this relation. As anger and disgust have been found to correlate strongly in other tests of the model as well (see Matthews & Levin, 2012), we feel that adding the covariance between them would not merely capitalize on chance variation within one particular sample. As such, these findings may warrant the inclusion of the covariance between anger and disgust in future research. The mediation analyses also suggested the addition of direct paths from RWA to disgust and from SDO to anger. That is, although the indirect paths from RWA to disgust through the value threat perceptions and from SDO to anger through the economic threat perceptions were significant, the mediation was only partial; there were still direct relationships between RWA and disgust and between SDO and anger. These findings suggest that although we were able to explain approximately 50% of the variance in anger and disgust with the threat perceptions alone, low SDO individuals were also angry for reasons other than perceiving greater economic threat and high RWA individuals felt more disgust for reasons other than perceiving greater value threat. Future research should examine whether other threat perceptions (e.g., physical threats; Cottrell & Neuberg, 2005) would add stronger mediation to the model. More reliable measurement of the latent constructs, including assessment of additional indicators for each factor, may also contribute to better fitting models in the future.

In conclusion, our findings confirm a counter dominance narrative of the negative relationship between SDO and prejudice toward a dominant group and situate this social dominance perspective within a dual process model that has typically examined prejudice toward subordinate groups. In the two pathways of the dual process model, it is evident that RWA and SDO have different directions of effects when prejudice toward a dominant group is the outcome variable. A dual process model also clarifies the underexplored mediated relationships between the ideological attitudes and intergroup emotions through the threat perceptions. Combined with the counter dominance narrative, this integrated model supports the novel prediction that low SDO individuals will exhibit more anger toward dominant groups in part because they perceive them as threatening the economic resources they need to promote the intergroup equality they so desire. Taken together, our results imply that to reduce feelings of anger and disgust toward Americans, we must consider the ways in which the USA poses and is perceived to pose economic and value threats to people in other nations, especially to individuals with strong desires for group equality (i.e., low SDO) and for social cohesion (i.e., high RWA).

Acknowledgments

This research received funding from Harvard University.

Notes

1. As in Sibley and Duckitt’s (2008) meta-analysis, we focus on the personality predictors of SDO/RWA and prejudice and do not extend our analysis to the role of competitive and dangerous worldviews in further mediating the relationships between the personality dimensions and SDO/RWA.

2. Values for the RMSEA statistic that are between .05 and .10 suggest an adequate model fit (lower values indicate better model fit). CFI and NFI values between .90 and .95 also indicate an adequate model fit (higher values indicate better model fit). Finally, a $\chi^2/df$ value that is under 3.00 is also indicative of an acceptable model fit.

References


