

Authoritarianism and National Identity: Examining the Longitudinal Effects of SDO and RWA on Nationalism and Patriotism

Personality and Social
Psychology Bulletin
2017, Vol. 43(8) 1086–1099
© 2017 by the Society for Personality
and Social Psychology, Inc
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0146167217704196
journals.sagepub.com/home/pspb


Danny Osborne¹, Petar Milojev², and Chris G. Sibley¹

Abstract

The resurgence of right-wing political parties across the globe raises questions about the origins of national identity. Based on the Dual Process Model of Ideology and Prejudice, we argue that people's tendency to submit to ingroup authorities (Right-Wing Authoritarianism [RWA]) and preference for group-based hierarchy (Social Dominance Orientation [SDO]) underlie people's belief in the superiority of their nation (nationalism) and attachment to their homeland (patriotism). We examine these hypotheses using three waves of data from an annually conducted national longitudinal panel study of New Zealanders ($N = 3,838$). As predicted, RWA had positive cross-lagged effects on nationalism and patriotism. Conversely, SDO had a positive cross-lagged effect on nationalism, but a *negative* cross-lagged effect on patriotism. Little evidence of reciprocal cross-lagged effects (i.e., national identity on authoritarianism) was found. These results demonstrate that nationalism and patriotism are related, albeit distinct, ways of identifying with one's nation that are ultimately rooted in authoritarianism.

Keywords

SDO, RWA, authoritarianism, nationalism, patriotism, longitudinal design, dual process model

Received October 12, 2016; revision accepted March 21, 2017

National Front's 2014 electoral success at the helm of Marine Le Pen, a politician who just 4 years earlier compared the presence of Muslims in modern-day France with the Nazi Occupation during World War II (Bremer, 2010), sent shockwaves across the globe. Indeed, the victory of Le Pen's party signaled the renewed viability of extreme right-wing parties in Western democracies, as National Front's xenophobic rhetoric resonated with nearly one quarter of France's voters. Coupled with the Conservative Party's surprise win in the U.K.'s 2015 general election and the 2016 U.S. presidential election that saw Donald Trump claim an upset victory over Hillary Clinton, Le Pen's success demonstrates that candidates—and political parties—who espouse nationalistic views are becoming increasingly viable in the 21st century. These trends highlight the need to assess the origins of national identity and, in particular, its separate subcomponents (namely, nationalism and patriotism).

To be clear, identification with one's nation is vital for a healthy democracy. National identification positively correlates with support for civil liberties (Williams, Foster, & Krohn, 2008), interest in politics (Schatz, Staub, & Lavine, 1999), voter turnout (Huddy & Khatib, 2007), and other forms of civic engagement (Rothi, Lyons, & Chrysoschoou,

2005; Skitka, 2005). But nationalism—a distinct form of national identification that entails a belief in the superiority of one's nation of residence over other nations—positively correlates with *anti*-democratic values including anti-egalitarianism (Peña & Sidanius, 2002), ethnocentrism (Wagner, Becker, Christ, Pettigrew, & Schmidt, 2012), and outgroup rejection (Mummendey, Klink, & Brown, 2001). As such, it is important to understand the correlates of these distinct forms of national identification to identify ways of counteracting their negative effects on society.

Nationalism and Patriotism

Although national identification confers benefits, *how* people identify with their nation has important consequences for intergroup relations. Indeed, Kosterman and Feshbach

¹University of Auckland, New Zealand

²Marbella International University Centre, Spain

Corresponding Author:

Danny Osborne, School of Psychology, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand.
Email: d.osborne@auckland.ac.nz

(1989) made a critical distinction between nationalism and patriotism. Whereas nationalism reflects a belief in the superiority of one's nation and a desire for its dominance in the international community, patriotism captures people's attachment to their nation and the values for which it stands, *irrespective* of its status. Although there is wide variability in how these constructs are assessed (Kosterman & Feshbach, 1989; Skitka, 2005; Staub, 1997; Wagner et al., 2012), most researchers agree that nationalism and patriotism reflect two distinct ways of identifying with one's nation.

Research consistently supports the distinction between these two constructs. Indeed, nationalism, but *not* patriotism, positively correlates with intergroup biases including anti-immigration attitudes (Ariely, 2012; Pehrson, Brown, & Zagefka, 2009; Wagner, Christ, & Heitmeyer, 2010), ethnocentrism/xenophobia (De Figueiredo & Elkins, 2003; Li & Brewer, 2004), and other forms of prejudice (Blank & Schmidt, 2003; Mummendey et al., 2001; Wagner et al., 2012). Moreover, nationalism positively correlates with support for nuclear armament (Feshbach, 1987; Kosterman & Feshbach, 1989) and other pro-war beliefs (Pratto, Stallworth, & Conway-Lanz, 1998). Importantly, these associations emerge *after* accounting for people's general attachment to their nation. Thus, nationalism is uniquely associated with support for the dominance of one's nation of residence over other countries within the global community.

Although research on nationalism indicates that identification with one's nation can have negative implications for intergroup relations, positive feelings toward the ingroup do not imply outgroup derogation (see Brewer, 1979, 1999). Indeed, patriotism (i.e., the positive feelings and attachment one feels toward his or her nation) positively correlates with various prosocial outcomes including ingroup pride (Skitka, 2005), support for multiculturalism (Ariely, 2012; Spry & Hornsey, 2007), and endorsement of democratic values (Williams et al., 2008). Patriotism is also *negatively* associated with outgroup bias (see Blank & Schmidt, 2003; Parker, 2010; Wagner et al., 2012). These findings demonstrate that the way in which people identify with their homeland has distinct implications for intergroup relations—one form of national identity (i.e., nationalism) breeds hostility toward outgroups, whereas the other (i.e., patriotism) can facilitate intergroup harmony.

Dual Process Model (DPM)

Although past research has examined the *consequences* of these distinct forms of national identification, relatively few studies have focused on the psychological *antecedents* of nationalism and patriotism. Duckitt's (2001) DPM of Ideology and Prejudice offers one likely, albeit never examined, account of the origins of national identity. According to Duckitt, two independent processes underlie intergroup attitudes: one process originates from punitive socialization experiences that foster dangerous worldviews and a tendency to conform to ingroup norms, whereas the other process is rooted in unaffectionate child-rearing practices that elicit

dominance-related goals and a tough-minded approach to the world. In turn, these distinct worldviews give rise to Right-Wing Authoritarianism (RWA; Altemeyer, 1996) and Social Dominance Orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994), respectively.

Consistent with the argument that dangerous worldviews underlie RWA, historical trends show that support for authoritarian leaders and policies increase during times of threat (Bonanno & Jost, 2006; McCann, 1997; Sales, 1972). Experimental studies also demonstrate that threat increases levels of authoritarianism (Duckitt & Fisher, 2003; Stellmacher & Petzel, 2005). Competition-based motives, however, facilitate preferences for group-based hierarchy (i.e., SDO). Indeed, Duckitt, Wagner, du Plessis, and Birum (2002) showed that competitive worldviews mediate the relationship between tough-mindedness and SDO. Finally, a meta-analysis of over 40 studies shows that RWA and SDO arise from dangerous and competitive worldviews, respectively (Perry, Sibley, & Duckitt, 2013).

Because distinct worldviews underlie RWA and SDO, they should also predict unique outcomes. Accordingly, whereas RWA positively correlates with hostility toward groups that threaten the social order (e.g., anti-conformists), SDO positively correlates with biases toward derogated groups and those low on the social hierarchy (Asbrock, Sibley, & Duckitt, 2010; Duckitt & Sibley, 2007). Dru (2007) also showed that RWA, but not SDO, positively correlates with outgroup bias when group-based values (i.e., a motivator for conformity) are salient. Conversely, SDO, but not RWA, positively correlates with outgroup bias when competition is salient. Thus, RWA and SDO have distinct motivational roots and, as a result, independently predict (distinct) intergroup attitudes.

Perhaps most relevant to the current discussion is the relationship between both forms of authoritarianism and group identification. Duckitt (1989) noted that RWA is best viewed as an index of people's beliefs about the need to adhere to, and identify with, ingroup norms. As such, RWA should positively correlate with ingroup identification, *regardless* of the group's status and the values for which it stands. Conversely, SDO reflects one's preference for social hierarchy (Sidanius & Pratto, 1999). Thus, the relationship between SDO and unconditional identification with the nation (i.e., patriotism) should vary by the content of national identity and its relative ranking in the global community. Specifically, the relationship between SDO and patriotism should be positive in nations that endorse group-based hierarchy and dominate global politics, but *negative* in nations that officially discourage social hierarchies and have (relatively) little global influence. Research has yet to test this thesis.

Current Study

The current study provides a novel addition to the literature by examining the cross-lagged effects of RWA and SDO on

nationalism and patriotism over a 3-year period in a nation that openly supports biculturalism and has a (relatively) small impact on international politics (i.e., New Zealand). Because having one's nation on top of the international hierarchy should satisfy the security-based needs of those high on RWA, we predicted that RWA would have a positive cross-lagged effect on nationalism. Likewise, the positive ingroup sentiments that form the basis of patriotism should appeal to those who are motivated to obtain ingroup cohesion (i.e., those who are high in RWA). As such, RWA should also have a positive cross-lagged effect on patriotism.

The relationship between SDO and national identity should be more nuanced than the predicted cross-lagged effects of RWA on nationalism and patriotism. However, nationalism reflects people's belief about the superiority of their nation over other countries in the international community (Kosterman & Feshbach, 1989). As such, SDO—a measure of one's preference for group-based hierarchy (Pratto et al., 1994; Sidanius & Pratto, 1999)—should have a positive cross-lagged effect on this aspect of national identity. Indeed, cross-sectional research shows that SDO is positively associated with nationalism (Duckitt et al., 2002; Pratto et al., 1998; Sidanius & Pratto, 1999).

The relationship between SDO and patriotism, however, should depend on the content of national identity (i.e., what it means to be a resident of the given nation) and the status of people's nation of residence. Specifically, SDO should positively correlate with patriotism in high status countries that support group-based hierarchies (e.g., the United Kingdom, the United States, Russia, etc.), as the country's values and position in the international community align with the desire to dominate (as indexed by SDO). Accordingly, U.S.-based studies find that SDO is positively associated with patriotism (Peña & Sidanius, 2002; Pratto et al., 1994; Sidanius & Pratto, 1999). However, research has yet to examine the association between SDO and patriotism in samples drawn from countries that officially endorse forms of egalitarianism and have a relatively small impact on global politics. Because the norms and relative position of these nations conflict with the need to be on top of the status hierarchy, SDO should have a *negative* cross-lagged effect on patriotism in samples drawn from countries that officially reject group-based hierarchies and have limited status (as is the case in the current study).

Our New Zealand-based sample provides the perfect opportunity to test our thesis that SDO will have a negative cross-lagged effect on patriotism in countries that oppose the status hierarchy. Although ethnic relations in New Zealand are far from perfect and many inequities exist between Māori (i.e., New Zealand's indigenous peoples) and New Zealand Europeans (Sibley & Osborne, 2016), the nation's founding document, the Treaty of Waitangi, explicitly defines New Zealand as a bicultural nation. Accordingly, in contrast to countries like the United States and Australia where Whiteness is implicitly associated with national identity (see Devos & Banaji, 2005; Sibley & Barlow, 2009), New Zealanders

equate *both* New Zealand Europeans and Māori with national symbols (Sibley & Barlow, 2009; Sibley & Liu, 2007). Notably, this effect is particularly strong among New Zealand Europeans (Harding, Sibley, & Robertson, 2011; Sibley, Liu, & Khan, 2008). Moreover, egalitarianism is a central theme of national identity in New Zealand (Osborne, Lees-Marshment, & van der Linden, 2016). Indeed, the connection between egalitarianism and national identity is so strong that exposure to the New Zealand flag facilitates response times to egalitarian concepts on lexical decision tasks (see Sibley, Hoverd, & Duckitt, 2011). Finally, New Zealand is a small nation with limited ability to influence global politics. Thus, New Zealand's official egalitarian doctrine and limited status relative to other Western nations—factors that should be unappealing to those high on SDO—provide an ideal setting to test our hypothesis that SDO will have a *negative* cross-lagged effect on patriotism.

In testing our hypotheses, we make multiple contributions to the extant literature. For one, we are the first to assess the origins of nationalism and patriotism from the perspective of the DPM, thereby resolving an existing debate in the literature. Specifically, Parker (2010) noted that, despite differing at the conceptual level, nationalism and patriotism often produce similar results (e.g., support for xenophobic policies). As such, the utility of the distinction between these two constructs has been called into question. By showing that nationalism and patriotism are rooted in distinct motivational processes, the current study has the potential to demonstrate the importance of distinguishing between these two critical aspects of national identity.

The longitudinal nature of our study also provides unique insights into the likely direction of the relationship between authoritarianism and national identity. Specifically, by simultaneously estimating (a) the cross-lagged effects of RWA and SDO on nationalism and patriotism and (b) the cross-lagged effects of nationalism and patriotism on RWA and SDO, we are able to rule out the possibility that these two aspects of national identity affect people's levels of authoritarianism. Moreover, our model explicitly tests the antecedents, rather than the consequences, of nationalism and patriotism. Because studies have traditionally focused on the consequences of both aspects of national identity, we offer key insights into the origins of nationalism and patriotism.

Finally, our use of a national probability sample of New Zealand-born adults increases our ability to generalize our results to the general population. Combined with the size of our study (both in terms of sample size and 3-year assessment time frame), we provide one of the most comprehensive assessments of our research question to date. Our sample also provides a rare opportunity to test the proposed nuanced relationship between SDO and patriotism in a nationally representative sample *outside* of the United States. Thus, the results of the current study provide a number of unique contributions that increase our understanding of the origins of two distinct aspects of national identification.

Method

Sampling Procedure

Data for the current study come from Times 1, 2, and 3 of the New Zealand Attitudes and Values Study (NZAVS). The NZAVS is an annual national longitudinal study that began in 2009 (i.e., Time 1) and is based on a random sample of adults from the electoral roll (i.e., a national list of registered voters).¹ Invitations to participate in Time 1 of the NZAVS were sent to 40,500 people randomly selected from the electoral roll. After adjusting for estimated inaccuracies on this official registry, invitations reached approximately 39,123 people—6,518 of whom returned partially or fully completed surveys (response rate = 16.6%). Of these participants, 5,119 (3,078 women and 2,034 men; seven missing) were born in New Zealand and are the focus of the current study.

In late 2010, Time 2 surveys were sent to participants who responded to the Time 1 survey. This follow-up survey was completed by 3,522 New Zealand-born participants (2,200 women and 1,319 men; three missing; retention rate = 68.9%). A year later, Time 3 surveys were sent to participants who responded to the Time 1 and/or Time 2 survey. This resulted in a sample of 3,147 New Zealand-born participants (1,971 women, 1,173 men; three missing) who had returned a survey from at least one prior time point. Of these participants, 2,831 (1,797 women, 1,032 men; two missing) completed both Times 1 and 2 (retention from Time 2 = 80.3%) and 316 completed Times 1 and 3 (174 women, 141 men; one missing). In total, 3,838 of the original 5,119 New Zealand-born participants (i.e., 74.9% of the initial New Zealand-born sample) responded to our survey 2 or more times over a 3-year period (for more information about our sampling procedure, see Sibley, 2014).

Participants

This study examines data from all the 3,838 New Zealand-born participants ($M_{age} = 49.57$, $SD = 15.44$; 61.9% women) who provided partial or complete responses to our variables of interest and who responded to at least two of the three annual surveys used in the current study.² In terms of ethnicity, participants identified as New Zealand European (74.0%), Māori (22.7%), Pacific Nations (1.9%), or Asian (1.1%; 0.3% did not report their ethnicity).

Power

Given that our participants were part of an existing dataset, we conducted a post hoc power analysis using a Monte Carlo simulation to determine the power of our study to detect our predicted effects given our sample size and actual parameter estimates. These analyses demonstrated that we had sufficient power to detect the predicted effects identified in our

study (power $\geq .80$), but were unlikely to find an effect that did not exist (Type I error $\leq .088$).

Measures

Due to space constraints, SDO, RWA, patriotism, and nationalism were assessed annually using short-form scales. All items were rated on a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*). Descriptive statistics and bivariate correlations for the variables used in this study are displayed in Table 1. Means for SDO and RWA represent mean-scaled scores, but were estimated as latent variables in our focal analyses.

SDO was assessed using these six items from Sidanius and Pratto's (1999) 16-item SDO₆ scale: (a) "It is OK if some groups have more of a chance in life than others"; (b) "Inferior groups should stay in their place"; (c) "To get ahead in life, it is sometimes okay to step on other groups"; (d) "We should have increased social equality" (reverse-scored); (e) "It would be good if groups could be equal" (reverse-scored); and (f) "We should do what we can to equalize conditions for different groups" (reverse-scored). The six-item scale was reliable at Time 1 ($\alpha = .705$), Time 2 ($\alpha = .700$), and Time 3 ($\alpha = .705$).

RWA was assessed using these five items from Altemeyer's (1996) 27-item scale: (a) "It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds"; (b) "It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material"; (c) "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs"; (d) "People should pay less attention to The Bible and other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral" (reverse-scored); and (e) "Atheists and others who have rebelled against established religions are no doubt every bit as good and virtuous as those who attend church regularly" (reverse-scored). The five-item scale was moderately reliable at Time 1 ($\alpha = .659$), Time 2 ($\alpha = .637$), and Time 3 ($\alpha = .645$).

Patriotism was assessed using these two items from Kosterman and Feshbach's (1989) 12-item scale: "I feel a great pride in the land that is our New Zealand" and "Although at times I may not agree with the government, my commitment to New Zealand always remains strong." These items formed a reliable measure at Time 1 ($\alpha = .703$), Time 2 ($\alpha = .692$), and Time 3 ($\alpha = .697$).

Nationalism was assessed using these two items from Kosterman and Feshbach's (1989) eight-item scale: "Generally, the more influence New Zealand has on other nations, the better off they are" and "Foreign nations have done some very fine things but they are still not as good as New Zealand."

Table I. Descriptive Statistics and Bivariate Correlations Between the Variables Included in Our Study.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender ^a	—															
2. Minority ^b	-.01	—														
3. Education	-.10***	-.12***	—													
4. Age	.11***	-.15***	-.15***	—												
5. SDO _{T1}	.19***	-.02	-.13***	.08***	—											
6. RWA _{T1}	-.08***	.05**	-.22***	.23***	.15***	—										
7. Nationalism _{T1}	.01	.13***	-.15***	.06***	.07***	.26***	—									
8. Patriotism _{T1}	-.03*	.02	-.07***	.23***	-.11***	.12***	.29***	—								
9. SDO _{Time 2}	.17***	-.05**	-.13***	.10***	.65***	.12***	.07***	-.10***	—							
10. RWA _{Time 2}	-.07***	.05**	-.22***	.24***	.13***	.77***	.24***	.11***	.15***	—						
11. Nationalism _{T2}	.03†	.06***	-.15***	.06***	.09***	.24***	.56***	.24***	.07***	.23***	—					
12. Patriotism _{T2}	-.05**	.03†	-.04**	.21***	-.06***	.11***	.24***	.67***	-.11***	.12***	.28***	—				
13. SDO _{T3}	.20***	-.01	-.17***	.10***	.63***	.15***	.09***	-.09***	.68***	.15***	.11***	-.10***	—			
14. RWA _{T3}	-.07***	.04*	-.22***	.22***	.14***	.76***	.23***	.10***	.16***	.78***	.24***	.12***	.19***	—		
15. Nationalism _{T3}	.02	.09***	-.11***	.03*	.10***	.20***	.55***	.21***	.09***	.21***	.56***	.24***	.11***	.22***	—	
16. Patriotism _{T3}	-.05**	-.00	-.02	.21***	-.08***	.11***	.22***	.63***	-.11***	.10***	.20***	.67***	-.14***	.09***	.25***	—
M	0.38	0.26	-0.35	49.57	2.60	3.48	3.93	6.00	2.55	3.46	4.04	5.98	2.53	3.45	3.92	5.94
SD	0.49	0.44	1.28	15.44	0.97	1.26	1.30	0.98	0.92	1.22	1.27	0.96	0.91	1.20	1.22	0.96
α	—	—	—	—	.71	.66	.48	.70	.70	.64	.47	.69	.71	.65	.46	.70
n	3,834	3,828	3,838	3,838	3,810	3,810	3,813	3,827	3,504	3,504	3,503	3,513	3,096	3,095	3,130	3,144

Note. SDO = Social Dominance Orientation; RWA = Right-Wing Authoritarianism.

^aGender was dummy coded (0 = female, 1 = male).

^bMinority was dummy coded (0 = New Zealand European, 1 = minority).

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Table 2. Fit Statistics for the Measurement and Structural Models Estimated Using Maximum Likelihood.

	χ^2	df	CFI	RMSEA (90% CI)	sRMR
Measurement model					
Null model (independent indicator variables)	31,081.391***	177	.000	.213 [.211, .215]	.321
Configural factorial invariance (similar pattern of factor loadings)	698.684***	102	.978	.039 [.036, .042]	.050
Weak factorial invariance (equal congeneric factor loadings)	701.796***	110	.978	.037 [.035, .040]	.050
Strong factorial invariance (equal congeneric intercepts)	714.336***	118	.978	.036 [.034, .039]	.050
Structural model					
Nonstationary (estimation of different paths)	1,588.755***	206	.961	.042 [.040, .044]	.044
Stationary (equal congeneric paths)	1,611.019***	222	.961	.040 [.039, .042]	.045

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; CI = confidence interval; sRMR = standardized root mean square residual.

† $p \leq .10$. * $p < .05$. ** $p \leq .01$. *** $p \leq .001$.

These items formed a measure at Time 1 ($\alpha = .484$), Time 2 ($\alpha = .474$), and Time 3 ($\alpha = .459$).

Results

Missing Data

Like most large surveys, some participants provided partial responses to our variables of interest. Specifically, the covariance coverage for our data ranged from .716 to .997 ($M = 0.843$, $SD = 0.086$), with 71.7% of the coverage falling at or above .800. To address these cases of missing data, we estimated our measurement and structural models using full information maximum likelihood (FIML)—an estimation procedure that uses data from participants who provide either partial or complete responses.³ Notably, Enders and Bandalos (2001) showed that FIML produces more reliable estimates than listwise deletion. FIML also does not assume that data are missing completely at random, nor does it increase Type 1 error rates. Therefore, FIML is the preferred estimation procedure for dealing with missing data—an inevitable feature of survey research. To these ends, we now turn to a description of our measurement and structural models, respectively.

Measurement Model

Before conducting our focal analyses, we specified a measurement model in *Mplus Version 7.4* (Muthén & Muthén, 1998-2015) employing Little's (2013) balanced parceling approach to estimate latent variables for SDO and RWA.⁴ To begin, an initial factor analysis was performed on our six-item SDO scale. Items with the highest and lowest factor loadings were then combined into a two-item parcel, followed by a second two-item parcel consisting of the next

highest and lowest factor loadings and so on. The same method was used for our measure of RWA, with the exception that, because we had an odd number of indicators, the highest loading RWA item was treated as a single-item indicator. The remaining four items were parceled such that the remaining highest and lowest loading items were combined, followed by the next highest and lowest loading RWA items.

To test for strong factorial invariance, we first specified a baseline measurement model assessing the configural invariance (i.e., similar factor loading patterns) of SDO and RWA at Times 1, 2, and 3 (Meredith, 1993).⁵ Specifically, indicator variables were allowed to load onto one (and only one) latent variable at each time point and residual covariances for congeneric indicators were allowed to covary across measurement occasions. For scale identification purposes, the means and variances of the latent variables at each time point were fixed at 0 and 1, respectively. To demonstrate weak factorial invariance, we then constrained the congeneric factor loadings to equality at each time point and freely estimated the variances of latent variables at Times 2 and 3 (Meredith, 1993). Finally, we further constrained congeneric item intercepts to equality across time and freely estimated latent variable means at Times 2 and 3 to examine strong factorial invariance (Meredith, 1993). Table 2 shows that our measures of SDO and RWA had strong factorial invariance across measurement occasions (i.e., change in comparative fit index [ΔCFI] $< .01$; Cheung & Rensvold, 2002). Thus, the structural equation model (SEM) discussed below imposed strong factorial invariance on our latent variables of SDO and RWA.

Structural Model

We next specified an SEM to test our hypotheses that SDO and RWA would have independent cross-lagged effects on

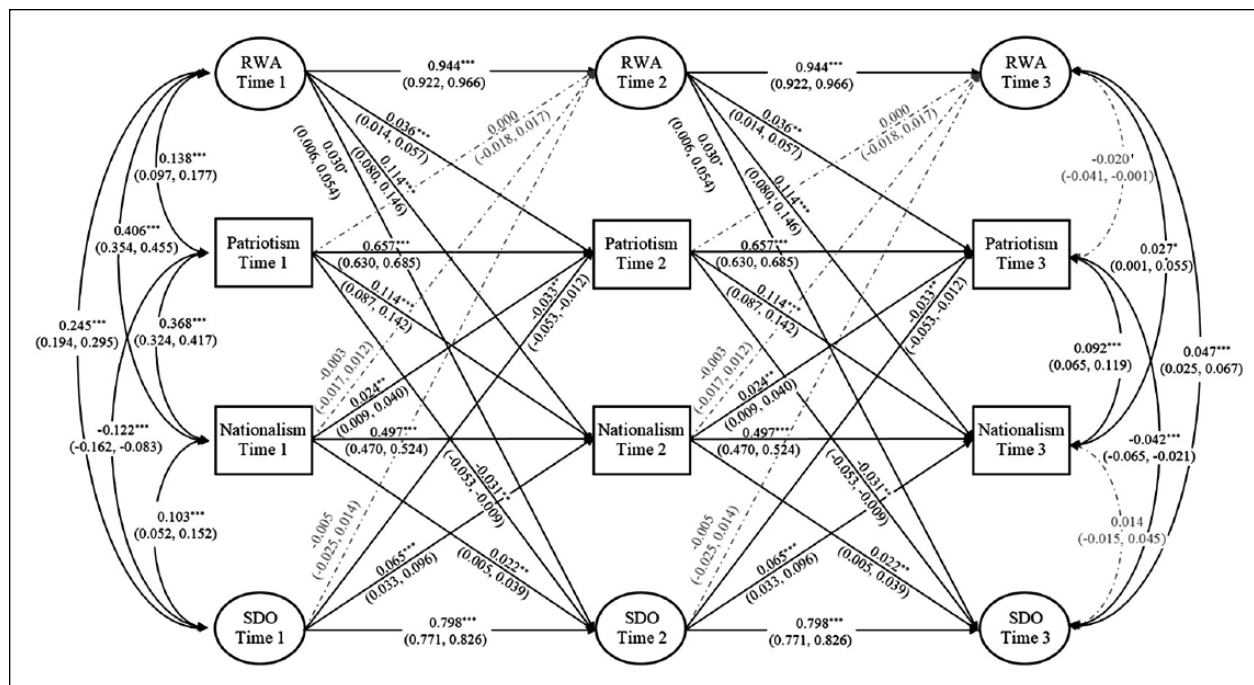


Figure 1. Longitudinal model assessing the cross-lagged effects of authoritarianism on national identity from (a) Time 1 to Time 2 and (b) Time 2 to Time 3.

Note. $\chi^2(222) = 1,611.019$, $p < .001$; CFI = .961; RMSEA = .040 [.039, .042; $p > .999$]; sRMR = .045. Estimates reflect unstandardized regression coefficients (with bias corrected 95% confidence intervals). Nonsignificant pathways are shown in gray. Covariances between Time 2 measures, as well as the factor loadings for our latent variables at each measurement occasion, were estimated but excluded from the figure because of space constraints. The model assumes a stationary process in which the cross-lagged effects of Time 1 variables on Time 2 variables were constrained to be equal to the congeneric cross-lagged effects of Time 2 variables on Time 3 variables. RWA = Right-Wing Authoritarianism; SDO = Social Dominance Orientation; CFI = comparative fit index; RMSEA = root mean square error of approximation; sRMR = standardized root mean square residual.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

nationalism and patriotism. To these ends, we began by regressing the Time 3 nationalism measure onto Time 2 measures of nationalism, patriotism, SDO, and RWA. Likewise, our Time 3 measure of patriotism was regressed onto our Time 2 measures of patriotism, nationalism, SDO, and RWA. To examine possible reciprocal effects, we regressed our Time 3 measure of SDO onto Time 2 measures of SDO, RWA, nationalism, and patriotism, as well as our Time 3 measure of RWA onto Time 2 measures of RWA, SDO, nationalism, and patriotism. Identical paths were specified when regressing Time 2 measures onto Time 1 measures. Finally, all the variables in our model were allowed to covary at the same measurement occasion.⁶

The bottom half of Table 2 demonstrates that our full cross-lagged model provided an excellent fit to these data, $\chi^2(206) = 1,588.755$, $p < .001$; CFI = .961; root mean square error of approximation (RMSEA) = .042 [.040, .044; $p > .999$]; standardized root mean square residual (sRMR) = .044. Because the cross-lagged effects of SDO and RWA on patriotism and nationalism likely reflect a stationary process (i.e., a continuous process with an unknown starting point; see McArdle, 2009), we re-estimated our model after constraining all congeneric cross-lagged effects of Time 1 to Time 2 variables and Time 2 to Time 3 variables to equality,

$\chi^2(222) = 1,611.019$, $p < .001$; CFI = .961; RMSEA = .040 [.039, .042; $p > .999$]; sRMR = .045. Consistent with our assumption that our model reflects a stationary process, imposing these constraints did not produce an appreciable drop in model fit ($\Delta\chi^2[16] = 22.264$, $p = .135$). Thus, we report the results of our longitudinal SEM assuming a stationary process below.

Figure 1 shows that RWA, $B = 0.944$, 95% confidence interval (CI) = [0.922, 0.966]; $p < .001$; SDO, $B = 0.798$, 95% CI = [0.771, 0.826]; $p < .001$; and patriotism, $B = 0.657$, 95% CI = [0.630, 0.685]; $p < .001$, were stable across measurement occasions. Nationalism, in contrast, was notably less stable over time ($B = 0.497$, 95% CI = [0.470, 0.524]; $p < .001$). Still, our model provided support for the hypothesized cross-lagged effects of authoritarianism on national identity. Specifically, RWA had positive cross-lagged effects on patriotism ($B = 0.036$, 95% CI = [0.014, 0.057]; $p = .001$) and nationalism ($B = 0.114$, 95% CI = [0.080, 0.146]; $p < .001$) after accounting for the cross-lagged effects of nationalism on patriotism ($B = 0.024$, 95% CI = [0.009, 0.040]; $p = .002$) and patriotism on nationalism ($B = 0.114$, 95% CI = [0.087, 0.142]; $p < .001$). Finally, whereas SDO had a positive cross-lagged effect on nationalism ($B = 0.065$, 95% CI = [0.033, 0.096]; $p < .001$), it had a negative

cross-lagged effect on patriotism ($B = -0.033$, 95% CI = $[-0.053, -0.012]$; $p = .002$).

Although not the focus of our study, Figure 1 also assesses the possibility that national identity influences authoritarianism. Contrary to this alternative hypothesis, neither the cross-lagged effect of patriotism on RWA ($B = 0.000$, 95% CI = $[-0.018, 0.017]$; $p = .971$) nor the cross-lagged effect of nationalism on RWA ($B = -0.003$, 95% CI = $[-0.017, 0.012]$; $p = .655$) reliably differed from zero. Also, the cross-lagged effect of nationalism on SDO ($B = 0.022$, 95% CI = $[0.005, 0.039]$; $p = .009$) was nearly one third the size of the cross-lagged effect of SDO on nationalism. The negative cross-lagged effect of patriotism on SDO ($B = -0.031$, 95% CI = $[-0.053, -0.009]$; $p = .006$), however, was similar in magnitude to the cross-lagged effect of SDO on patriotism. Aside from this exception, authoritarianism seems to mainly affect national identity (rather than vice versa).

Finally, Figure 1 examines the cross-lagged effects of RWA and SDO on each other. These analyses demonstrate that, although RWA has a cross-lagged effect on SDO ($B = 0.030$, 95% CI = $[0.006, 0.054]$; $p = .014$), earlier assessments of SDO are unassociated with later assessments of RWA ($B = -0.005$, 95% CI = $[-0.025, 0.014]$; $p = .607$). Thus, RWA increases people's preference for group-based hierarchy, but SDO does not affect people's deference to authority.

Discussion

We examined the antecedents of national identification from the perspective of Duckitt's (2001) DPM. According to the DPM, intergroup attitudes are rooted in two related, albeit distinct, motivational goals: the need for (a) social conformity/ingroup cohesion (i.e., RWA) and (b) dominance/tough-mindedness (i.e., SDO). Because patriotism and nationalism reflect love for one's country and preference for its international dominance, respectively (see Kosterman & Feshbach, 1989), we hypothesized that RWA and SDO would be *independently* associated with both forms of national identification. Whereas the pro-ingroup sentiment and provision of security found in patriotism and nationalism, respectively, should appeal to those high in RWA, the need to dominate echoed in nationalism should resonate with those high in SDO. Attachment to a nation that officially endorses biculturalism in its founding document (i.e., New Zealand), however, is incompatible with a preference for a clearly defined social hierarchy. Likewise, New Zealand's relatively low status among Western nations should be unappealing to those who would prefer to be at the top of the international pecking order. As such, SDO should be negatively associated with patriotism in our New Zealand-based sample.

As predicted, RWA had positive cross-lagged effects on patriotism and nationalism. Given that there was only a modest correlation between these two ways of identifying with one's nation, our results demonstrate that patriotism and nationalism capture distinct ways of satisfying the need for

ingroup cohesion and security, respectively. That said, the cross-lagged effect of RWA on nationalism was over 3 times the size of the cross-lagged effect of RWA on patriotism (i.e., B s = 0.114 vs. 0.036, respectively). Thus, the security needs met by having one's nation influence global politics (i.e., nationalism) appear to be a particularly strong motivator of identifying with one's nation for those high on RWA. These findings also indicate that the relatively small benefits of RWA to national identification (i.e., increases in patriotism) may be greatly outweighed by its costs to intergroup harmony (i.e., increases in nationalism).

That RWA was positively associated with both forms of national identity corroborates recent work demonstrating that RWA captures people's motivation for ingroup cohesion and support for prevailing social norms, *irrespective* of their content. Although RWA is typically associated with anti-minority sentiment in many Western nations (e.g., Duckitt, 2001; Duckitt et al., 2002), Roets, Au, and Van Hiel (2015) found that RWA was *positively* correlated with support for multiculturalism in Singapore, a nation whose government has passed legislation to officially promote multiculturalism. Notably, perceptions of the government's support for multiculturalism (i.e., the norms in Singapore) mediated this relationship. Bilewicz, Soral, Marchlewska, and Winiewski (2017) also showed that, although RWA positively correlates with outgroup bias, it also predicts support for restricting the rights of those who promote hate speech (i.e., norm violators). Our results are consistent with these findings by showing that RWA is positively associated with being proud of one's nation, even when the country's founding document explicitly supports biculturalism.

Also consistent with our hypotheses, SDO was positively associated with nationalism, but *negatively* associated with patriotism. These results indicate that, although the desire for one's nation to influence the global community (i.e., nationalism) resonates with those who are high on SDO, positive regard for one's country (i.e., patriotism) depends on the norms upon which the nation is based. When the nation's norms and official doctrine conflict with a strictly hierarchical ordering of society, SDO should correlate with distancing one's self from the nation. Accordingly, because what it means to be a New Zealander is intimately linked to biculturalism and egalitarianism (Osborne et al., 2016; Sibley & Barlow, 2009; Sibley et al., 2011; Sibley & Liu, 2007), identifying with New Zealand is unappealing to those who prefer social hierarchies. These results demonstrate the need to account for the content of national identity when assessing the association between SDO and patriotism.

On a related note, our results also support the view that SDO reflects a preference for group-based hierarchy *irrespective* of the status of one's own group (see Sidanius & Pratto, 1999). Jost and Thompson (2000) showed that the subcomponent of SDO assessing one's preference for group-based dominance was *negatively* associated with ingroup favoritism among African Americans—a group consensually

seen as being low on the status hierarchy in the United States (Sidanius & Pratto, 1999). More recently, Ho and colleagues (2015) demonstrated that SDO was negatively associated with ingroup identification among African Americans (also see Sidanius & Petrocik, 2001). Given its relatively low status among Western nations, it is unsurprising that SDO is negatively associated with unadulterated pride in New Zealand (i.e., patriotism).

Although SDO had a negative cross-lagged effect on patriotism in our sample, this relationship should be *positive* in countries that are higher on the status hierarchy than New Zealand. Indeed, because New Zealand is a small country, its global influence is limited (at best). Other nations that can exert hegemonic control over the international community likely have their global dominance incorporated into their national identity. In other words, the love for one's nation captured by patriotism may include the country's position in the international hierarchy. Accordingly, U.S.-based studies often find a positive correlation between SDO and patriotism (e.g., see Peña & Sidanius, 2002; Pratto et al., 1994; Rabinowitz, 1999; Sidanius & Pratto, 1999).

Between-nation discrepancies in the direction of the relationship between SDO and patriotism further highlight the need to consider the *content* of national identity. Davies and colleagues (2017) showed that Americans and Canadians react differently to national identity threats; whereas Americans respond to threats to the global standing of the U.S. by decreasing their support for pro-diversity policies, Canadians *increase* their support for the same policies after an identical threat. The authors interpreted these opposing effects in terms of the *meaning* of national identity in the given nations. Discourse on immigration in the United States focuses on assimilation at the exclusion of identification with one's national origin (Davies, Steele, & Markus, 2008). Canada, in contrast, has a strong focus on multiculturalism that is widely accepted by the public (J. W. Berry, 2013). Because the content of these discourses differ, how residents of the respective nations "rally around the flag" vary considerably (also see Citrin, Johnston, & Wright, 2012).

We also examined the possibility that the relationships between authoritarianism and national identification were bidirectional. With the exception of a negative cross-lagged effect of patriotism on SDO, evidence of reciprocal relationships was minimal. That is, both patriotism and nationalism were unassociated with residual change in RWA. Likewise, the cross-lagged effect of nationalism on SDO was notably smaller than the corresponding cross-lagged effect of SDO on nationalism. These results demonstrate that most of the relationships identified in the current study are unidirectional and primarily flow from authoritarianism to national identification.

Although we found limited evidence of bidirectional relationships in our study, the unexpected negative cross-lagged effect of patriotism on SDO is noteworthy. Specifically, this finding suggests that national pride—particularly in countries that officially endorse biculturalism—may *decrease* support

for group-based hierarchy. In other words, not all forms of national identification foster hostile intergroup relations. Indeed, Wagner and colleagues (2012) showed that patriotism had a negative cross-lagged effect on outgroup derogation among a sample of native-born German adults. Thus, depending on the content of national identity (i.e., what it "means" to be a New Zealander or German), the promotion of patriotism in the public may help to *reduce* intergroup conflict.⁷ Still, because the negative cross-lagged effect of patriotism on SDO was unexpected, future research should replicate this finding before reaching definitive conclusions.

The current study also has implications for recent debates over the distinction between different forms of national identity (e.g., see Parker, 2010). Specifically, our results further validate Kosterman and Feshbach's (1989) distinction between nationalism and patriotism by highlighting their differential relationships with SDO. Indeed, the fact that SDO had positive *and* negative cross-lagged effects on nationalism and patriotism, respectively, demonstrates that these are two separate ways of identifying with one's nation. The *negative* association between SDO and patriotism is also consistent with the view that patriotism is a benign—and, in this case, prosocial—form of national identification (e.g., see Skitka, 2005). In short, our results corroborate the view that there are multiple ways of identifying with one's nation and that ingroup favoritism need not always translate into outgroup derogation (see Brewer, 1979, 1999).

It is also noteworthy that RWA had a cross-lagged effect on SDO, but that SDO did *not* have a similar cross-lagged effect on RWA. This has important previously unexamined implications for our understanding of these two constructs. As Duckitt (2001) noted, RWA and SDO are rooted in two distinct worldviews: (a) dangerous world beliefs and (b) the view of the world as a competitive place. Therefore, the finding that RWA contributes to residual change in SDO (but not vice versa) suggests that preference for group-based hierarchy may absolve fears about the world being a dangerous place. Indeed, McCann (1997) showed that U.S. presidents' power/dominance (as rated by experts) was positively associated with their margin of victory in presidential elections over a nearly 150-year period, but *only* during times of threat. In other words, people may seek to satisfy their safety-based concerns by supporting leaders who project dominance during dangerous times.

Strengths, Limitations, and Future Directions

Although our results provide longitudinal evidence that authoritarianism affects two distinct aspects of national identity, inferences about *causal* relationships must still be made with caution. Indeed, factors that occurred *prior* to our initial measurement occasion could be driving the relationships identified in the current study (see Highton, 2009). Alternatively, a third unmeasured variable may be correlated with both

authoritarianism and national identity, thus explaining their covariation over time. Our results, however, converge with experimental research showing that SDO has a causal effect on prejudice (Guimond, Dambrun, Michinov, & Duarte, 2003). Likewise, Dru (2007) showed that RWA predicted biases toward multiple outgroups *only* after value-based social identities were made salient. These experimental findings are consistent with the causal direction implied by our model.

A related concern focuses on our use of cross-lagged models to examine change over time. Specifically, cross-lagged models have been critiqued for confounding individual-level change with between-person change (see D. Berry & Willoughby, 2016; Hamaker, Kuiper, & Grasman, 2015). As such, alternative methods have been proposed including latent difference score models (McArdle, 2009), multivariate latent change score models (Grimm, Ram, & Estabrook, 2017), and random-intercepts cross-lagged panel models (Hamaker et al., 2015). The complexity of these models, however, may lead to problems with model identification and convergence issues. Indeed, we re-estimated our model using a random-intercepts cross-lagged panel model and a multivariate latent difference score model, but both models failed to converge. We suspect that this is due to the complexity of our model (i.e., whereas most studies assess the cross-lagged effects of two variables, our model includes four variables) and because we only had a limited number of waves of data available for analysis. Indeed, some models need upward of 10 waves of data before being able to estimate change with precision (Kenny & Zautra, 2001). We look forward to revisiting this important issue when we have the additional data needed to disaggregate individual-level change from between-person change.

Another limitation to our study is that our measure of nationalism was less reliable than our measure of patriotism. Unfortunately, due to space constraints on our survey, we could only include two indicators for each measure of national identity. Accordingly, we selected items from Kosterman and Feshbach's (1989) scale that (a) fit the New Zealand context; (b) had high factor loadings on nationalism, but low factor loadings on patriotism (and vice versa); and (c) were concisely worded. Although this approach allowed us to include multiple measures in our survey, it also limited our ability to correct for measurement error by modeling nationalism and patriotism as latent variables. Our results are, however, consistent with past research. Indeed, Kosterman and Feshbach found that nationalism was less reliable than patriotism. Likewise, Mummendey and colleagues (2001) showed that ingroup identification and evaluation—two aspects of patriotism—were more reliable than outgroup-derogation—a concept closely associated with nationalism. Others also find that nationalism is less reliable than patriotism (e.g., Balabanis, Diamantopoulos, Mueller, & Melewar, 2001; Li & Brewer, 2004).

One reason why nationalism is consistently less reliable than patriotism may be due to differences in the content of these two

constructs. Whereas nationalism focuses on how one's nation of residence compares with other countries, patriotism reflects people's attachment to their nation and the values for which it stands *irrespective of its status* within the international community. Because the performance of one's nation relative to others arguably varies more than its cultural values, nationalism should be less reliable than patriotism over time. Although this offers plausible explanation for the differential levels of reliability noted in the literature, future research should examine why nationalism is less reliable than patriotism.

Space constraints on our survey also prevented a direct test of our hypothesis that RWA would have cross-lagged effects on nationalism and patriotism due to people's needs for security and ingroup cohesion, respectively. As such, the associations between these variables may be due to their shared variance with national identification (see Wagner et al., 2012). Indeed, nationalism and patriotism reflect unique ways of identifying with one's nation (Kosterman & Feshbach, 1989), and RWA (partly) captures people's tendency to identify with their ingroup (Duckitt, 1989). Therefore, these variables may correlate with each other because they constitute separate components of a higher order construct (i.e., national identification).

Although the associations between RWA, nationalism, and patriotism may be due to their shared variance with national identification, we believe that this possibility is unlikely. For one, Kosterman and Feshbach's (1989) scale development study showed that nationalism and patriotism were independent constructs. Since then, numerous studies have shown that nationalism and patriotism are related, albeit distinct, factors (e.g., Rothi et al., 2005; Schatz et al., 1999; Wagner et al., 2012). Perhaps most importantly, our results show that RWA had cross-lagged effects on both nationalism and patriotism, whereas neither nationalism nor patriotism had cross-lagged effects on RWA. Together, these results suggest that it is unlikely that the associations between RWA, nationalism, and patriotism are due to their shared variance with national identification.

It is also important to note that we have focused on the authoritarian roots of national identification. Because identification with one's nation is a complex process, other factors likely contribute to people's levels of nationalism and patriotism. For example, Druckman (1994) argued that national identification is a special case of group loyalty/attachment. Thus, the same processes that facilitate group identification (e.g., socialization, affiliation-based needs, needs for achievement, etc.) should influence one's strength of identification with her or his nation. Moreover, Staerklé, Sidanius, Green, and Molina (2010) showed that between-nation differences in ethnic diversity and inequality affect the asymmetry in levels of national identification between ethnic majority and minority group members; asymmetry in national identification increases as (a) within-nation diversity increases and (b) inequality decreases. Thus, many factors influence national identification. We add to this literature by identifying the authoritarian roots of nationalism and patriotism.

Finally, future research should examine the processes that mediate the relationship between authoritarianism and both forms of national identity. Fortunately, the DPM offers insight into plausible mechanisms. Specifically, Duckitt (1989, 2001) argued that RWA and SDO originate from distinct motivational goals. Therefore, it is likely that nationalism and patriotism meet the independent goals of RWA and SDO by satisfying people's needs for social cohesion and dominance, respectively (also see Duckitt, 2006). Nevertheless, research should identify the proximal correlates of national identity to explicate the processes through which RWA and SDO influence nationalism and patriotism.

Conclusion

The rising popularity of extreme-right parties in Western democracies highlights the need to understand the roots of national identity. To these ends, the current study uses a large nationally representative longitudinal sample to demonstrate that the seeds of nationalism and patriotism are sewn in authoritarianism; whereas RWA has positive cross-lagged effects on both forms of national identity, SDO has positive and negative cross-lagged effects on nationalism and patriotism, respectively. In addition to supporting the conceptual distinction between nationalism and patriotism, these findings offer the first longitudinal demonstration that identifying with one's nation satisfies distinct motivational needs identified by the DPM (i.e., the need for dominance and security, respectively). By elucidating the distinct origins of national identity, the current research helps to identify the factors that facilitate—and perhaps most importantly, extinguish—attraction to right-wing propaganda.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Preparation of this article was supported by a University of Auckland ECREA grant (3709010) and an FRDF grant (3709123) awarded to the first author and a PBRF grant jointly awarded to the first and third authors. Additional funding was provided by a Templeton World Charity Foundation Grant (ID: 0077) awarded to the third author.

Notes

1. Because registration on the electoral roll is mandatory (save for the rare case-by-case exception due to privacy and/or idiosyncratic concerns), our sampling frame is as close to a representative sample of New Zealand as possible.
2. We obtained similar results when analyzing data from the full sample of 5,119 New Zealand-born participants who provided partial or complete responses to one or more of our annual

surveys. Nevertheless, because at least two time points are (theoretically) required to qualify as a cross-lagged model, we present analyses restricted to those who provided partial or complete responses to two or more time points.

3. Similar results were obtained using listwise deletion.
4. *Mplus* syntax for the models estimated in the current article is available on the online appendix, the New Zealand Attitudes and Values Study (NZAVS) website (<http://www.psych.auckland.ac.nz/en/about/our-research/research-groups/new-zealand-attitudes-and-values-study/nzavs-information-for-researchers.html>), or by contacting the first author.
5. We were unable to examine the factorial invariance of nationalism and patriotism because these separate measures of national identification were assessed by two items a piece and, as such, could not be estimated as latent variables (i.e., both variables would be just-identified).
6. We also estimated a model controlling for participants' gender, ethnicity, education, and age on our measures of national identity at Time 2. Because inclusion of these variables does not affect the interpretation of our results, we present the results from our initial model below.
7. The content of national identity may also partly explain inconsistencies in the measurement of patriotism and nationalism across studies. Indeed, whereas Kosterman and Feshbach (1989) viewed pride in one's country as a measure of patriotism in the United States, both Blank and Schmidt (2003) and Wagner, Becker, Christ, Pettigrew, and Schmidt (2012) noted that being proud of Germany may capture reverence for the Holocaust. Thus, they view national pride as an indicator of nationalism in Germany.

Supplemental Material

The online supplemental material is available at <http://pspb.sagepub.com/supplemental>.

References

- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Cambridge University Press.
- Ariely, G. (2012). Globalization, immigration and national identity: How the level of globalization affects the relations between nationalism, constructive patriotism and attitudes toward immigrants? *Group Processes & Intergroup Relations*, 15, 539-557. doi:10.1177/1368430211430518
- Asbrock, F., Sibley, C. G., & Duckitt, J. (2010). Right-wing authoritarianism and social dominance orientation and the dimensions of generalized prejudice: A longitudinal test. *European Journal of Personality*, 24, 324-340. doi:10.1002/per.746
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. C. (2001). The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies. *Journal of International Business Studies*, 32, 157-175. doi:10.1057/palgrave.jibs.8490943
- Berry, D., & Willoughby, M. T. (2016). On the practical interpretability of cross-lagged panel models: Rethinking a developmental workhorse. *Child Development*. Advance online publication. doi:10.1111/cdev.12660
- Berry, J. W. (2013). Research on multiculturalism in Canada. *International Journal of Intercultural Relations*, 37, 663-675. doi:10.1016/j.ijintrel.2013.09.005

- Bilewicz, M., Soral, W., Marchlewska, M., & Winiewski, M. (2017). When authoritarians confront prejudice: Differential effects of SDO and RWA on support for hate-speech prohibition. *Political Psychology*, 38, 87-99. doi:10.1111/pops.12313
- Blank, T., & Schmidt, P. (2003). National identity in a united Germany: Nationalism or patriotism? An empirical test with representative data. *Political Psychology*, 24, 289-312. doi:10.1111/0162-895X.00329
- Bonanno, G. A., & Jost, J. T. (2006). Conservative shift among high-exposure survivors of the September 11th terrorist attacks. *Basic and Applied Social Psychology*, 28, 311-323. doi:10.1207/s15324834basps2804_4
- Bremer, C. (2010, December 14). French far-right star compares praying Muslims to Nazi occupiers. *Reuters*. Available from <http://blogs.reuters.com>
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86, 307-324. doi:10.1037/0033-2909.86.2.307
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love and outgroup hate? *Journal of Social Issues*, 55, 429-444. doi:10.1111/0022-4537.00126
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9, 233-255. doi:10.1207/S15328007SEM0902_5
- Citrin, J., Johnston, R., & Wright, M. (2012). Do patriotism and multiculturalism collide? Competing perspectives from Canada and the United States. *Canadian Journal of Political Science*, 45, 531-552. doi:10.1017/S0008423912000704
- Davies, P. G., Hutchinson, S., Osborne, D., ten Brinke, L., Steele, C. M., & Markus, H. R. (2017). International differences in the relationship between foreign threats, national identity, and citizenry's tolerance for diversity. Unpublished manuscript.
- Davies, P. G., Steele, C. M., & Markus, H. R. (2008). A nation challenged: The impact of foreign threat on America's tolerance for diversity. *Journal of Personality and Social Psychology*, 95, 308-318. doi:10.1037/0022-3514.95.2.308
- De Figueiredo, R. J. P., & Elkins, Z. (2003). Are patriots bigots? An inquiry into the vices of in-group pride. *American Journal of Political Science*, 47, 171-188. doi:10.1111/1540-5907.00012
- Devos, T., & Banaji, M. R. (2005). American = White? *Journal of Personality and Social Psychology*, 88, 447-466. doi:10.1037/0022-3514.88.3.447
- Dru, V. (2007). Authoritarianism, social dominance orientation and prejudice: Effects of various self-categorization conditions. *Journal of Experimental Social Psychology*, 43, 877-883. doi:10.1016/j.jesp.2006.10.008
- Druckman, D. (1994). Nationalism, patriotism, and group loyalty: A social psychological perspective. *Mershon International Studies Review*, 38, 43-68. doi:10.2307/222610
- Duckitt, J. (1989). Authoritarianism and group identification: A new view of an old construct. *Political Psychology*, 10, 63-84. doi:10.2307/3791588
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41-113). San Diego, CA: Academic Press. doi:10.1016/S0065-2601(01)80004-6
- Duckitt, J. (2006). Differential effects of right wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin*, 32, 684-696. doi:10.1177/0146167205284282
- Duckitt, J., & Fisher, K. (2003). The impact of social threat on worldview and ideological attitudes. *Political Psychology*, 24, 199-222. doi:10.1111/0162-895X.00322
- Duckitt, J., & Sibley, C. G. (2007). Right wing authoritarianism, social dominance orientation and the dimensions of generalized prejudice. *European Journal of Personality*, 21, 113-130. doi:10.1002/per.614
- Duckitt, J., Wagner, C., du Plessis, I., & Birum, I. (2002). The psychological bases of ideology and prejudice: Testing a dual process model. *Journal of Personality and Social Psychology*, 83, 75-93. doi:10.1037/0022-3514.83.1.75
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 8, 430-457. doi:10.1207/S15328007SEM0803_5
- Feshbach, S. (1987). Individual aggression, national attachment, and the search for peace: Psychological perspectives. *Aggressive Behavior*, 13, 315-325. doi:10.1002/1098-2337(1987)13:5<315::AID-AB2480130508>3.0.CO;2-4
- Grimm, K. J., Ram, N., & Estabrook, R. (2017). *Growth modeling: Structural equation and multilevel modeling approaches*. New York, NY: The Guilford Press.
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology*, 84, 697-721. doi:10.1037/0022-3514.84.4.697
- Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods*, 20, 102-116. doi:10.1037/a0038889
- Harding, J. F., Sibley, C. G., & Robertson, A. (2011). New Zealand = Māori, New Zealand = bicultural: Ethnic group differences in a national sample of Māori and Europeans. *Social Indicators Research*, 100, 137-148. doi:10.1007/s11205-010-9608-5
- Highton, B. (2009). Revisiting the relationship between educational attainment and political sophistication. *Journal of Politics*, 71, 1564-1576. doi:10.1017/S0022381609990077
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., . . . Stewart, A. L. (2015). The nature of Social Dominance Orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO7 scale. *Journal of Personality and Social Psychology*, 109, 1003-1028. doi:10.1037/pspi0000033
- Huddy, L., & Khatib, N. (2007). American patriotism, national identity, and political involvement. *American Journal of Political Science*, 51, 63-77. doi:10.1111/j.1540-5907.2007.00237.x
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, 36, 209-232. doi:10.1006/jesp.1999.1403
- Kenny, D. A., & Zautra, A. (2001). Trait-state models for longitudinal data. In L. M. Collins & A. G. Sayer (Eds.), *New methods for the analysis of change* (pp. 243-263). Washington, DC: American Psychological Association. doi:10.1037/10409-008

- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology, 10*, 257-274. doi:10.2307/3791647
- Li, Q., & Brewer, M. B. (2004). What does it mean to be an American? Patriotism, nationalism, and American identity after 9/11. *Political Psychology, 25*, 727-739. doi:10.1111/j.1467-9221.2004.00395.x
- Little, T. D. (2013). *Longitudinal structural equation modeling*. New York, NY: The Guilford Press.
- McArdle, J. J. (2009). Latent variable modeling of differences and changes with longitudinal data. *Annual Review of Psychology, 60*, 577-605. doi:10.1146/annurev.psych.60.110707.163612
- McCann, S. J. H. (1997). Threatening times, "strong" presidential popular vote winners, and the victory margin, 1824-1964. *Journal of Personality and Social Psychology, 73*, 160-170. doi:10.1037/0022-3514.73.1.160
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika, 58*, 525-543. doi:10.1007/BF02294825
- Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology, 40*, 159-172. doi:10.1348/014466601164740
- Muthén, L. K., & Muthén, B. O. (1998-2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Author.
- Osborne, D., Lees-Marshment, J., & van der Linden, C. (2016). National identity and the flag change referendum: Examining the latent profiles underlying New Zealanders' flag change support. *New Zealand Sociology, 31*(7), 19-47.
- Parker, C. S. (2010). Symbolic versus blind patriotism: Distinction without difference? *Political Research Quarterly, 63*, 97-114. doi:10.1177/1065912908327228
- Pehrson, S., Brown, R., & Zagefka, H. (2009). When does national identification lead to the rejection of immigrants? Cross-sectional and longitudinal evidence for the role of essentialist in-group definitions. *British Journal of Social Psychology, 48*, 61-76. doi:10.1348/014466608X288827
- Peña, Y., & Sidanius, J. (2002). U.S. patriotism and ideologies of group dominance: A tale of asymmetry. *The Journal of Social Psychology, 142*, 782-790. doi:10.1080/00224540209603936
- Perry, R., Sibley, C. G., & Duckitt, J. (2013). Dangerous and competitive worldviews: A meta-analysis of their associations with Social Dominance Orientation and Right-Wing Authoritarianism. *Journal of Research in Personality, 47*, 116-127. doi:10.1016/j.jrp.2012.10.004
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763. doi:10.1037/0022-3514.67.4.741
- Pratto, F., Stallworth, L. M., & Conway-Lanz, S. (1998). Social dominance orientation and the ideological legitimization of social policy. *Journal of Applied Social Psychology, 28*, 1853-1875. doi:10.1111/j.1559-1816.1998.tb01349.x
- Rabinowitz, J. L. (1999). Go with the flow or fight the power? The interactive effects of social dominance orientation and perceived injustice on support for the status quo. *Political Psychology, 20*, 1-24. doi:10.1111/0162-895X.00135
- Roets, A., Au, E. W. M., & Van Hiel, A. (2015). Can authoritarianism lead to greater liking of out-groups? The intriguing case of Singapore. *Psychological Science, 26*, 1972-1974. doi:10.1177/0956797615605271
- Rothi, D. M., Lyons, E., & Chrysoschoou, X. (2005). National attachment and patriotism in a European nation: A British study. *Political Psychology, 26*, 135-155. doi:10.1111/j.1467-9221.2005.00412.x
- Sales, S. M. (1972). Economic threat as a determinant of conversion rates in authoritarian and nonauthoritarian churches. *Journal of Personality and Social Psychology, 23*, 420-428. doi:10.1037/h0033157
- Schatz, R. T., Staub, E., & Lavine, H. (1999). On the varieties of national attachment: Blind versus constructive patriotism. *Political Psychology, 20*, 151-174. doi:10.1111/0162-895X.00140
- Sibley, C. G. (2014). Sampling procedure and sample details for the New Zealand Attitudes and Values Study. *NZAVS Technical Documents*. Retrieved from <https://cdn.auckland.ac.nz/assets/psych/about/our-research/nzavs/NZAVSTechnicalDocuments/NZAVS-Technical-Documents-e01-Sampling-Procedure-and-Sample-Details.pdf>
- Sibley, C. G., & Barlow, F. K. (2009). Ubiquity of whiteness in majority group national imagination: Australian = White, but New Zealander does not. *Australian Journal of Psychology, 61*, 119-127. doi:10.1080/00049530802239300
- Sibley, C. G., Hoeverd, W. J., & Duckitt, J. (2011). What's in a flag? Subliminal exposure to New Zealand national symbols and the automatic activation of egalitarian versus dominance values. *The Journal of Social Psychology, 151*, 494-516. doi:10.1080/00224545.2010.503717
- Sibley, C. G., & Liu, J. H. (2007). New Zealand = bicultural? Implicit and explicit associations between ethnicity and nationhood in the New Zealand context. *European Journal of Social Psychology, 37*, 1222-1243. doi:10.1002/ejsp.459
- Sibley, C. G., Liu, J. H., & Khan, S. S. (2008). Who are "we"? Implicit associations between ethnic and national symbols for Maori and Pakeha in New Zealand. *New Zealand Journal of Psychology, 37*(2), 38-49.
- Sibley, C. G., & Osborne, D. (2016). Ideology and post-colonial society. *Advances in Political Psychology, 37*, 115-161. doi:10.1111/pops.12323
- Sidanius, J., & Petrocik, J. R. (2001). Communal and national identity in a multiethnic state. In R. D. Ashmore, L. Jussim, & D. Wloder (Eds.), *Social identity, intergroup conflict and conflict resolution* (pp. 101-127). New York, NY: Oxford University Press.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.
- Skitka, L. J. (2005). Patriotism or Nationalism? Understanding post-September 11, 2001, flag-display behavior. *Journal of Applied Social Psychology, 35*, 1995-2011. doi:10.1111/j.1559-1816.2005.tb02206.x
- Spry, C., & Hornsey, M. (2007). The influence of blind and constructive patriotism on attitudes toward multiculturalism and immigration. *Australian Journal of Psychology, 59*, 151-158. doi:10.1080/00049530701449489
- Staerklé, C., Sidanius, J., Green, E. G. T., & Molina, L. E. (2010). Ethnic minority-majority asymmetry in national attitudes around the world: A multilevel analysis. *Political Psychology, 31*, 491-519. doi:10.1111/j.1467-9221.2010.00766.x

- Staub, E. (1997). Blind versus constructive patriotism: Moving from embeddedness in the group to critical loyalty and action. In D. Bar-Tal & E. Staub (Eds.), *Patriotism: In the lives of individuals and nations* (pp. 213-228). Chicago, IL: Nelson-Hall.
- Stellmacher, J., & Petzel, T. (2005). Authoritarianism as a group phenomenon. *Political Psychology*, 26, 245-274. doi:10.1111/j.1467-9221.2005.00417.x
- Wagner, U., Becker, J. C., Christ, O., Pettigrew, T. F., & Schmidt, P. (2012). A longitudinal test of the relation between German nationalism, patriotism, and outgroup derogation. *European Sociological Review*, 28, 319-332. doi:10.1093/esr/jcq066
- Wagner, U., Christ, O., & Heitmeyer, W. (2010). Anti-immigration bias. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), *The SAGE handbook of prejudice, stereotyping and discrimination* (pp. 361-377). Thousand Oaks, CA: SAGE.
- Williams, R. L., Foster, L. N., & Krohn, K. R. (2008). Relationship of patriotism measures to critical thinking and emphasis on civil liberties versus national security. *Analyses of Social Issues and Public Policy*, 8, 139-156. doi:10.1111/j.1530-2415.2008.00165.x