

Group-Based Dominance and Authoritarian Aggression Predict Support for Donald Trump in the 2016 U.S. Presidential Election

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Abstract

In three convenience samples (combined $N = 3,755$) and one nationally representative survey ($N = 1,500$), we investigated whether and how right-wing authoritarianism (RWA) and social dominance orientation (SDO) were associated with support for Donald Trump during the 2016 U.S. presidential election. In all samples, facets of RWA and SDO predicted support for Trump (compared to other Republican, Democratic, and Libertarian candidates), even after adjusting for demographic factors and religious affiliation. In comparison with supporters of other Republican candidates, Trump supporters were consistently higher in group-based dominance and authoritarian aggression (but not submission or conventionalism). These results highlight the real-world significance of psychological theories and constructs and establish that Trump voters were uniquely driven by the desire to dominate out-group members in an aggressive manner.

Keywords

authoritarianism, social dominance orientation, political ideology, voting behavior

Throughout the 2016 U.S. presidential campaign, political commentators struggled to characterize “the Trump voter.” Surveys suggested that, in comparison with the average voter, Trump supporters were disproportionately White, male, high in income, low in education, and living in communities adversely affected by globalization (Iaconangelo, 2016; Thompson, 2016). Other analysts speculated that Trump appealed to citizens who are drawn to authoritarian leaders. Indeed, pundits, pollsters, and social scientists agreed that Trump’s 2016 campaign struck a number of familiar authoritarian chords, including the use of overtly hostile rhetoric and an apparent willingness to embrace violence against out-group members (Kagan, 2016; Kteily & Bruneau, 2017; Ludeke, Klitgaard, & Vitriol, 2018; MacWilliams, 2016; Pettigrew, 2017; Ross, 2016; Smith & Hanley, 2018; Taub, 2016).

Such characterizations fit comfortably within a voluminous literature in psychology—and social science more broadly—on authoritarianism and social dominance (Altemeyer, 1998, 2006; Duckitt, 2001; Heatherington & Weiler, 2009; Jost, Glaser, Kruglanski, & Sulloway, 2003; Pettigrew, 2017; Sibley & Duckitt, 2009; Sidanius & Pratto, 1999). Indeed, studies of nearly every presidential election since 1964 find that authoritarianism was in every case associated with a preference for the Republican over the Democratic candidate (Jost, West, & Gosling, 2009, pp. 105–106). It would appear that the 2016 election was no different, insofar as authoritarianism was

associated with support for Donald Trump over Hillary Clinton (Choma & Hanoch, 2017; see also Azevedo, Jost, & Rothmund, 2017; Ludeke et al., 2018; Pettigrew, 2017; Smith & Hanley, 2018). However, comparisons between supporters of Republican and Democratic candidates do not illuminate the possible differences between candidates of the same party. The present research sought to characterize Trump supporters, not only compared to supporters of Democratic candidates but also to other Republican candidates.

There are reasons to expect supporters of Donald Trump to differ from supporters of other Republicans. Trump was unusual in the Republican field in that he previously espoused more liberal attitudes on numerous issues. His status as a political outsider, his multiple marriages, and his colorful language

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also set him apart. Whereas other candidates have been accused of “Dog Whistle Politics” to cue fairly subtle racial biases, Trump made comments that were considered by many to be explicitly racist and sexist (Shelton & Stasio, 2017). To some, these comments were taken as evidence of Trump’s authenticity—a breath of “fresh air”—and principled opposition to “political correctness” (Stanley, 2015). To others, it was shocking to see a serious candidate for president using crass language and defending violence. According to *Time* magazine, Trump said, “he’d like to punch protesters in the face and offered to pay the legal fees of supporters who did.” His rallies were “punctuated by his roar—‘Get ‘em out!’—when a dissenter starts chanting or raising a sign” (Berenson, 2016, p. 1). These characteristics of the Trump campaign motivated us to consider the possibility that, compared to other Republican candidates, authoritarian voters might have been drawn to Trump, not out of value for convention and tradition, but rather endorsement of aggression toward out-group members.

Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO)

Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) introduced the concept of authoritarianism to capture “ideological receptivity” to ethnocentric, antidemocratic, proto-fascistic messages in societies that emphasized threatening circumstances and nationalist propaganda. Whereas Adorno and colleagues identified nine characteristics of “the authoritarian syndrome,” Altemeyer (1981) boiled it down to three: (1) submission to “strong” or charismatic leaders, (2) aggression against deviants and “weak” scapegoats, and (3) the holding of traditional, conventional views about politics and morality.

These three facets of RWA are highly correlated, but they are associated with distinct outcomes. More than the other facets, authoritarian submission predicts deferential behavior toward high-status authorities (Duckitt, Bizumic, Krauss, & Heled, 2010). Authoritarian aggression predicts punitiveness toward norm violators (Funke, 2005) and approval of torture (Benamin, 2016). Authoritarian conventionalism is more strongly associated with religiosity, ethnic identification, and disapproval of gay rights (Duckitt et al., 2010).

SDO, another personality disposition related to authoritarianism, captures an ideological preference for the establishment and maintenance of group-based hierarchies (Sidanius & Pratto, 1999). Social dominance is more closely associated with authoritarian aggression than submission or conventionalism (Passini, 2008). People who score high on SDO lack empathic concern for others and are unsupportive of social programs designed to help the disadvantaged (Pratto, Sidanius, Stallworth, & Malle, 1994).

Importantly, SDO is comprised of two distinct but correlated factors, namely, group-based dominance and opposition to equality (Jost & Thompson, 2000; see also Ho et al., 2012). A review of the empirical literature indicates that of the two facets, group-based dominance is more strongly associated

with racism and intergroup hostility and opposition to equality is more strongly associated with political conservatism and a rejection of redistributive social and economic policies (Kugler, Cooper, & Nosek, 2010).

According to Duckitt (2001), RWA and SDO are the products of distinctive patterns of childhood socialization, personality dispositions, and cultural worldviews. On this view, RWA arises through punitive parenting with an emphasis on social conformity and perceptions of a “dangerous world,” whereas SDO arises from cold parenting, tough-mindedness, and a perception that the world is a “competitive jungle.” In terms of motivational structures, RWA is linked to goals such as conformity, security, self-protection, and social control, while SDO is linked to the attainment of power, dominance, self-reliance, and superiority (see also Weber & Federico, 2007). Thus, RWA and SDO represent distinct but related psychological orientations that contribute in complementary ways to a preference for antidemocratic leadership (Altemeyer, 1998; Napier & Jost, 2008).

Given the overlap between authoritarian aggression and SDO group-based dominance and the Trump campaigns emphasis on hostility, aggression, and “winning,” we hypothesized that voters drawn to Trump would differ from supporters of other Republicans on these dimensions. Although compared to Democratic voters, Republican voters would be expected to be higher in authoritarianism, we expected that within the Republican field, Trump support would be distinctly linked to these features of authoritarian ideology.

Overview of Research

This research went beyond previous studies in three ways. First, we explored the specific facets of RWA and SDO to gain a more precise psychological understanding of Trump supporters. Second, we focused especially on the psychological differences between Trump supporters and supporters of other Republican (not simply Democratic) candidates. Third, we conducted a series of replications to insure that the psychological characteristics that were unique to Trump supporters were indeed robust and generalizable to the national population.

As noted above, both RWA and SDO are correlated with political conservatism and preferences for Republican over Democratic politicians in general (Altemeyer, 1998; Jost et al., 2003, 2009; Pratto et al., 1994; Sidanius & Pratto, 1999; Wilson & Sibley, 2013). Therefore, investigating hypotheses about Trump voters in particular required the use of high-powered data sets that permitted multiple comparisons within the group of Republican partisans (as well as between Republicans and Democrats).

Throughout the course of the 2016 U.S. Presidential campaign, we conducted four studies (including one involving a statistically representative sample of U.S. voters) in which we measured RWA, SDO, and candidate preferences, as well as demographic and other background variables. This enabled us to determine which facets of RWA and SDO were most predictive of support for Trump, both in general and within the

group of Republican respondents. Samples 1 and 2 completed our measures during the 2016 primaries, and Samples 3 and 4 completed them during the general election season. In all samples, we administered the general RWA Scale and both facets of the SDO Scale. For Samples 3 and 4, we administered an RWA Scale that allowed us to examine specific facets of authoritarianism as well.

Method

Participants

Sample 1. From September 23 to 30, 2015, we administered online questionnaires to 814 American Amazon Mechanical Turk (MTurk) workers (58.4% women; age range = 18–81, $M = 39$, $SD = 12.99$) who were each paid US \$0.50. The ethnic breakdown was as follows: White/European American (79.7%), Black/African American (6.8%), Asian (5.8%), Latino (4.4%), Native American (1.0%), and “Other” (2.4%). In terms of religion, 57.8% identified as Christian, 15.6% as religiously affiliated but non-Christian, and 28.7% as Atheist/Agnostic. The modal education level was a bachelor’s degree, and 75% had completed some college or more. The median income category was US \$25,000–39,000.

Sample 2. From March 30 to April 5, 2016 (later in the primary season), we launched a second data collection, administering questionnaires to 822 American MTurk workers (59% women; age range = 18–80, $M = 36$, $SD = 12.9$) who were paid US \$0.50. The ethnic breakdown was as follows: White/European American (78.8%), Black/African American (7.5%), Latino (5.6%), Asian (4.6%), Native American (0.7%), and “Other” (2.2%). Nearly half (46%) identified themselves as Christian, 12% as religiously affiliated but non-Christian, and 34.6% as Atheist/Agnostic. Modal education level was “some college,” and 89% had completed some college or more. The median income category was US \$40,000–80,000.

Sample 3. To conduct a large survey during the general election, we hired a professional survey firm (Survey Sampling International, a U.S.-based market research institute that recruits participants from a panel of 7,139,027 American citizens; more information can be found at <http://www.surveysampling.com>) to recruit a sample of 2,119 American adults (21.5% women) who completed study materials from August 20 to September 13, 2016. (Information about sampling and exclusion criteria is included in the Online Supplementary Material.) Age was distributed as follows: 18–24 (9.1%), 25–34 (13.8%), 35–44 (11.4%), 45–54 (2.7%), 55–65 (3.6%), 65 and older (59.3%). The ethnic breakdown was White/European American (85.9%), Black/African American (5.1%), Latino (4.1%), and “Other” (5.0%). In terms of religion, 70.7% identified as Christian, 15.7% as religiously affiliated but not Christian, and 13.7% as Atheist/Agnostic. With respect to educational status, 16.2% chose “high school or lower,” 40.4% reported

“some college,” and 43.4% had attained a “Bachelor” or “graduate” degree. The median income category was US \$50,000–74,999.

Sample 4. Through Survey Sampling International, we also recruited a nationally representative sample of 1,500 Americans (50.7% women) who completed study materials during the general election from August 16 to September 9, 2016. (Information about sampling and exclusion criteria is included in the Online Supplementary Material.) The age distribution was as follows: 18–24 (12.9%), 25–34 (17.6%), 35–44 (17.5%), 45–54 (19.5%), 55–65 (15.6%), and older than 65 (16.9%). The ethnic breakdown was White/European American (82.5%), Black/African American (7.7%), Latino (5.9%), and “Other” (4.0%). Concerning religion, 67.6% identified as Christian, 17.1% as religiously affiliated but not Christian, and 15.3% as Atheist/Agnostic. With respect to education, 35.1% indicated “high school only or lower,” 31.4% indicated “some college,” and 33.6% indicated having received a “Bachelor” or “Graduate” degree. The median income category was US \$50,000–74,999. The differences in number of women in Samples 3 and 4 were due to the use of demographic quotas in Sample 4 (absent in Sample 3). Since we controlled for gender in all studies and did not find significant gender differences in our analyses, we did not consider these differences in gender distribution concerning. More information on demographics can be found in the Online Supplementary Material.

Measures

In Samples 1 and 2, participants completed the 22-item RWA Scale (Altemeyer, 1981; sample item: “The established authorities generally turn out to be right about things, while the radicals and protestors are usually just ‘loud mouths’ showing off their ignorance”). Responses were provided on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In Samples 3 and 4, participants completed a 12-item RWA Scale (Funke, 2005) that facilitates the independent measurement of authoritarian submission (RWA-S; “Obedience and respect for authority are the most important values children should learn”), authoritarian aggression (RWA-A; “What our country really needs is a strong, determined President which will crush the evil and set us on our right way again”), and authoritarian conventionalism (RWA-C; “The withdrawal from tradition will turn out to be a fatal fault one day”). Responses were provided on a scale ranging from 1 (*very strongly disagree*) to 9 (*very strongly agree*).

All participants completed the Social Dominance Orientation Scale-7 (SDO7; Ho et al., 2015), which consists of two 8-item subscales, namely, group-based dominance (SDO-D; “In getting what your group wants, it is sometimes necessary to use force against other groups”) and opposition to equality (SDO-E; “We should strive to make incomes more equal,” reverse coded). For Samples 1 and 2, responses were given on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). For Samples 3 and 4, responses were given on a scale from 1 (*very*

Table 1. Logistic Regressions Predicting Support for Trump for the Full Sample and Those Who Preferred Republican Candidates, Sample 1.

Predictors	Full Sample		Republicans Only	
	B (SE)	OR [95% CI]	B (SE)	OR [95% CI]
Income	-.04 (.13)	0.96 [0.75, 1.24]	-.18 (.15)	0.84 [0.63, 1.12]
Age	.02 (.01)	1.02 [0.99, 1.04]	.00 (.01)	1.00 [0.98, 1.02]
Education	-.19 (.16)	0.82 [0.60, 1.12]	-.20 (.18)	0.81 [0.57, 1.17]
Sex	.07 (.31)	1.07 [0.59, 1.96]	.16 (.35)	1.19 [0.59, 2.37]
Race/ethnicity	.57 (.41)	1.73 [0.78, 3.82]	.28 (.46)	1.30 [0.53, 3.18]
Christian	.06 (.45)	1.10 [0.46, 2.63]	-.36 (.51)	0.74 [0.27, 2.01]
Religious, non-Christian	.22 (.52)	1.15 [0.42, 3.11]	.27 (.62)	1.06 [0.33, 3.42]
Group-based dominance	.20 (.11)	1.22 [0.97, 1.52]	.29 (.13)	1.34* [1.04, 1.73]
Opposition to equality	.31 (.11)	1.36** [1.10, 1.69]	.05 (.12)	1.05 [0.83, 1.32]
RWA	.49 (0.15)	1.62** [1.20, 2.18]	.02 (.17)	1.00 [0.74, 1.40]
Constant	-6.08 (1.08)		-0.92 (1.33)	

Note. Sex was dummy coded, so that *male* = 0 and *female* = 1. Race was dummy coded, so that 0 = *non-White* and 1 = *White*. For religiosity, we computed two dummy codes (with atheists and agnostics as the baseline group): “Christian” (1 = *Christian*, 0 = *not*) and “Religious, non-Christian” (1 = *religiously affiliated but not Christian*, 0 = *not*). RWA = right-wing authoritarianism. Confidence intervals (CIs) are 95% CIs.

* $p < .027$. ** $p < .005$.

strongly disagree) to 9 (*very strongly agree*). For Sample 2 only, we also administered measures of personality, and analyses involving these measures can be found in the Online Supplementary Materials.

At the end of the survey, participants from Sample 1 were asked to name their preferred candidate in the U.S. primaries using an open-ended format (638 named a candidate). Sample 2 participants selected their preferred candidate from a list: Trump, Cruz, Kasich, Clinton, Sanders, or “Other” (710 participants selected a candidate). Participants from Samples 3 and 4 were likewise asked to select their preferred candidate from a list. Specifically, they were asked the following: “In the 2016 presidential election, which candidate do you feel the closest to—or best represents your views on political issues?” The list of candidates we provided was as follows: Trump, Cruz, Paul, Bush, Sanders, Clinton, Johnson, and Petersen.

The research conducted for Samples 1 and 2 was approved by the institutional review board (IRB) at the lead author’s institution. Samples 3 and 4 were conducted in Germany, and this research was conducted in accord with German ethical guidelines, which do not require separate IRB approval for anonymous data.

Results

Reliabilities and correlations for all measures are included in the Online Supplementary Material. To investigate our hypotheses, we calculated separate logistic regression equations to estimate the odds of supporting Trump, within (a) the full samples (including supporters of Democratic and Libertarian candidates) and (b) the subsample of participants supporting only Republican candidates. We adjusted for a number of background variables, including sex, age, income, race/ethnicity, and religiosity. (We selected regression in order to be able to adjust for these third variables. For readers interested in parallel analyses based on mean differences between groups of candidate supporters, please see the Online Supplementary Material.)

Sample 1

With respect to the full sample, we observed that RWA and opposition to equality predicted increased support for Trump—as opposed to any of the other candidates from the Republican, Democratic, or Libertarian parties. These results are summarized in Table 1. For the group of Republican supporters, the only significant predictor of support for Trump was group-based dominance. For each unit increase in group-based dominance, the odds of supporting Trump—rather than one of the other Republican candidates—increased by a factor of 1.34, holding all other variables constant. Analyses excluding covariates show the same results and can be found in the Online Supplementary Material.

Sample 2

In the full sample, RWA and group-based dominance predicted support for Trump, as did education and race/ethnicity (see Table 2). Among Republicans, support for Trump was predicted by group-based dominance (odds ratio [*OR*] = 1.71) and race/ethnicity (for analyses excluding covariates, see the Online Supplementary Material). Thus, it appears that the tendency to regard force as an acceptable means of maintaining in-group superiority remained a consistent predictor of primary support for Donald Trump, even as the Republican field narrowed. However, the sizes of Samples 1 and 2 limited our power to detect small effect sizes, so we sought to further assess our hypotheses using larger samples.

Sample 3

In the full sample, we observed that authoritarian aggression, authoritarian conventionalism, group-based dominance, and opposition to equality were all significant predictors of support for Trump (see Table 3). In addition, supporters of Trump (as opposed to other candidates) were lower in terms of educational attainment and more likely to be White and Christian.

Table 2. Logistic Regressions Predicting Support for Trump for the Full Sample and Those Who Preferred Republican Candidates, Sample 2.

Predictors	Full Sample		Republicans Only	
	B (SE)	OR [95% CI]	B (SE)	OR [95% CI]
Income	−0.04 (.10)	0.97 [0.79, 1.18]	−0.27 (0.14)	0.77 [0.59, 1.02]
Age	0.01 (.01)	1.01 [0.99, 1.03]	0.01 (0.01)	1.01 [0.99, 1.04]
Education	−0.29 (.14)	0.75* [0.58, 0.98]	−0.44 (0.18)	0.65 [0.46, 0.91]
Sex	−0.02 (.24)	0.99 [0.63, 1.59]	0.35 (0.32)	1.47 [0.79, 2.74]
Race/ethnicity	1.62 (.41)	4.88* [2.21, 10.76]	1.58 (0.52)	4.34* [1.62, 11.63]
Christian	0.58 (.31)	1.54 [0.87, 2.75]	−0.38 (0.47)	0.52 [0.22, 1.22]
Religious, non-Christian	0.37 (.45)	0.87 [0.40, 1.91]	0.38 (0.75)	0.61 [0.21, 1.75]
Group-based dominance	0.39 (.10)	1.46** [1.21, 1.77]	0.53 (0.13)	1.69** [1.31, 2.18]
Opposition to equality	0.18 (.10)	1.20 [0.99, 1.45]	−0.06 (0.12)	0.94 [0.74, 1.18]
RWA	0.43 (.12)	1.57** [1.24, 1.99]	−0.15 (0.17)	0.90 [0.64, 1.26]
Constant	−5.84 (.82)		0.30 (1.12)	

Note. Sex was dummy coded, so that male = 0 and female = 1. Race was dummy coded, so that 0 = non-White and 1 = White. For religiosity, we computed two dummy codes (with atheists and agnostics as the baseline group): “Christian” (1 = Christian, 0 = not) and “Religious, non-Christian” (1 = religiously affiliated but not Christian, 0 = not). RWA = right-wing authoritarianism. Confidence intervals (CIs) 95% reflect 95% CIs.

* $p < .05$. ** $p < .001$.

Table 3. Logistic Regressions Predicting Support for Trump for the Full Sample and Those Who Preferred Republican Candidates, Sample 3.

Predictors	Full Sample		Republicans Only	
	B (SE)	OR	B (SE)	OR
Income	0.04 (.03)	1.04 [0.98, 1.10]	−.04 (.04)	0.96 [0.89, 1.04]
Age	0.04 (.04)	1.04 [0.97, 1.12]	.11 (.05)	1.12* [1.02, 1.23]
Education	−0.20 (.09)	0.82** [0.77, 0.99]	−.45 (.11)	0.64** [0.63, 0.86]
Sex	−0.30 (.16)	0.74 [0.55, 1.01]	.03 (.21)	1.03 [0.70, 1.59]
Race/Ethnicity	0.82 (.18)	2.27** [1.59, 3.26]	−.12 (.28)	0.88 [0.50, 1.50]
Christian	0.81 (.22)	2.26** [1.46, 3.49]	.22 (.30)	1.25 [0.65, 2.15]
Religious, non-Christian	0.42 (.25)	1.52 [0.93, 2.51]	.30 (.36)	1.35 [0.65, 2.68]
Group-based dominance	0.15 (.04)	1.16** [1.07, 1.27]	.20 (.05)	1.23** [1.10, 1.36]
Opposition to equality	0.18 (.04)	1.20** [1.10, 1.29]	−.05 (.05)	0.95 [0.86, 1.04]
Authoritarian submission	0.09 (.06)	1.09 [0.98, 1.21]	.01 (.07)	1.01 [0.88, 1.15]
Authoritarian aggression	0.43 (.05)	1.53** [1.40, 1.67]	.30 (.06)	1.34** [1.21, 1.50]
Authoritarian conventionalism	0.17 (.04)	1.19** [1.09, 1.29]	−.04 (.05)	0.96 [0.87, 1.07]
Constant	−6.90 (.48)		−.41 (.65)	

Note. Sex was dummy coded, so that male = 0 and female = 1. Race was dummy coded, so that 0 = non-White and 1 = White. For religiosity, we computed two dummy codes (with atheists and agnostics as the baseline group): “Christian” (1 = Christian, 0 = not) and “Religious, non-Christian” (1 = religiously affiliated but not Christian, 0 = not).

* $p < .05$. ** $p < .001$.

In the Republican sample, authoritarian aggression ($OR = 1.34$) and group-based dominance ($OR = 1.23$) were once again significant predictors of support for Trump. Those who supported Trump were also older and less educated than those who supported other Republican candidates. To insure the external validity of our findings, we analyzed data from a representative sample of the U.S. population.

Sample 4

In the full sample, we observed that authoritarian aggression, authoritarian conventionalism, group-based dominance, and opposition to equality were all significant predictors of support for Trump (see Table 4). Trump supporters were also older and less educated. When we analyzed the subsample of those who

supported other Republican candidates, authoritarian aggression ($OR = 1.28$), group-based dominance ($OR = 1.27$), and anti-egalitarianism ($OR = 0.84$) remained significant predictors.

Summary of Results

In Table 5, we have compiled the OR predicting support for Trump on the basis of RWA and SDO in all four samples. Inspection of this table reveals that group-based dominance—but not opposition to equality—was consistently associated with support for Trump as compared to other Republican candidates. For the largest and most statistically representative samples (Samples 3 and 4, respectively), authoritarian aggression consistently predicted support for Trump as compared to

Table 4. Logistic Regressions Predicting Support for Trump for the Full Sample and Those Who Preferred Republican Candidates, Sample 4.

Predictors	Full Sample		Republicans Only	
	B (SE)	OR	B (SE)	OR
Income	0.02 (.04)	1.02 [0.94, 1.09]	−0.02 (0.05)	0.98 [0.89, 1.06]
Age	0.20 (.04)	1.22** [1.12, 1.33]	0.18 (0.06)	1.19* [1.07, 1.33]
Education	−0.32 (.09)	0.73* [0.71, 0.95]	−0.39 (0.12)	0.67** [0.66, 0.95]
Sex	−0.31 (.14)	0.73* [0.56, 0.95]	−0.05 (0.18)	0.95 [0.67, 1.34]
Race/Ethnicity	1.18 (.25)	3.26** [2.05, 5.40]	0.15 (0.35)	1.16 [0.58, 2.34]
Christian	0.15 (.24)	1.17 [0.72, 1.85]	−0.38 (0.35)	0.69 [0.33, 1.30]
Religious, non-Christian	0.06 (.28)	1.07 [0.62, 1.83]	0.07 (0.42)	1.08 [0.47, 2.45]
Group-based dominance	0.22 (.06)	1.25** [1.12, 1.40]	0.24 (0.07)	1.27** [0.11, 1.46]
Opposition to equality	0.13 (.05)	1.14* [1.03, 1.25]	−0.18 (0.06)	0.84* [0.74, 0.94]
Authoritarian submission	0.10 (.07)	1.11 [0.93, 1.26]	0.04 (0.08)	1.04 [0.89, 1.22]
Authoritarian aggression	0.40 (.05)	1.49** [1.34, 1.66]	0.25 (0.07)	1.28** [1.12, 1.47]
Authoritarian conventionalism	0.14 (.05)	1.15* [1.04, 1.27]	−0.04 (0.07)	0.97 [0.85, 1.10]
Constant	−6.82 (.54)		−1.01 (1.91)	

Note. Sex was dummy coded, so that male = 0 and female = 1. Race was dummy coded, so that 0 = non-White and 1 = White. For religiosity, we computed two dummy codes (with atheists and agnostics as the baseline group): “Christian” (1 = Christian, 0 = not) and “Religious, non-Christian” (1 = religiously affiliated but not Christian, 0 = not). RWA = right-wing authoritarianism.

* $p < .05$. ** $p < .001$.

Table 5. Odds Ratios for Group-Based Dominance Predicting Support for Trump for the Full Sample and Those Who Preferred Republican Candidates, All Samples.

Predictors	Sample 1		Sample 2		Sample 3		Sample 4	
	Full Sample	Republican Subsample						
Group-based dominance	1.59**	1.37*	1.47**	1.71**	1.16**	1.23**	1.25**	1.27**
Opposition to equality	1.67**	1.17	1.20	0.95	1.20*	0.95	1.14*	0.84*
RWA	2.02**	1.13	1.54**	0.86	—	—	—	—
Authoritarian submission	—	—	—	—	1.09	1.01	1.11	1.04
Authoritarian aggression	—	—	—	—	1.53**	1.34**	1.49**	1.28**
Authoritarian conventionalism	—	—	—	—	1.19**	0.96	1.15**	0.97

Note. Sex was dummy coded, so that male = 0 and female = 1. Race was dummy coded, so that 0 = non-White and 1 = White. For religiosity, we computed two dummy codes (with atheists and agnostics as the baseline group): “Christian” (1 = Christian, 0 = not) and “Religious, non-Christian” (1 = religiously affiliated but not Christian, 0 = not). RWA = right-wing authoritarianism.

* $p < .01$. ** $p < .001$.

other Republicans. These results confirm that Trump supporters were indeed psychologically distinct—in terms of their willingness to endorse aggression and violence as means of promoting in-group superiority—not only from Democratic supporters but also from supporters of other Republican candidates as well.

Because group-based dominance was administered to all four samples, we also conducted a mini meta-analysis using a random effects model to calculate the log-odds for this variable, comparing Trump supporters to supporters of other Republican candidates. (To supplement these analyses, we also conducted an integrative data analysis; see Curran & Hussong, 2009. These analyses are reported in the Online Supplementary Material). The goals of this analysis were 2-fold: (a) to draw an inference about the average true effect size in a larger population of studies (i.e., to generalize beyond our samples) and (b) to facilitate cumulative scientific progress. Results are

displayed in Figure 1. The analysis yielded an overall group-based dominance estimate of log-odds of .25 ($OR = 1.28$) with a 95% confidence interval of [0.17, 0.32], $p < .001$.¹ Because authoritarian aggression was administered to only two of the four samples, we did not conduct a mini meta-analysis. Instead, we calculated the simple average of the two effect sizes, which yielded an average log-odds of .27 ($OR = 1.31$).

As an additional metric for quantifying psychological differences between Trump supporters and supporters of other Republican candidates, it is possible to calculate effect sizes based on the comparison of mean differences (see the Online Supplementary Material). We obtained an effect size estimate for group-based dominance of Hedges’ $g = .33$, $SE = .06$, $p < .001$, and an effect size estimate for authoritarian aggression of Hedges’ $g = .39$, $SE = .05$, $p < .001$. Thus, there was very clear evidence across four samples that Trump supporters were significantly higher in terms of group-based dominance

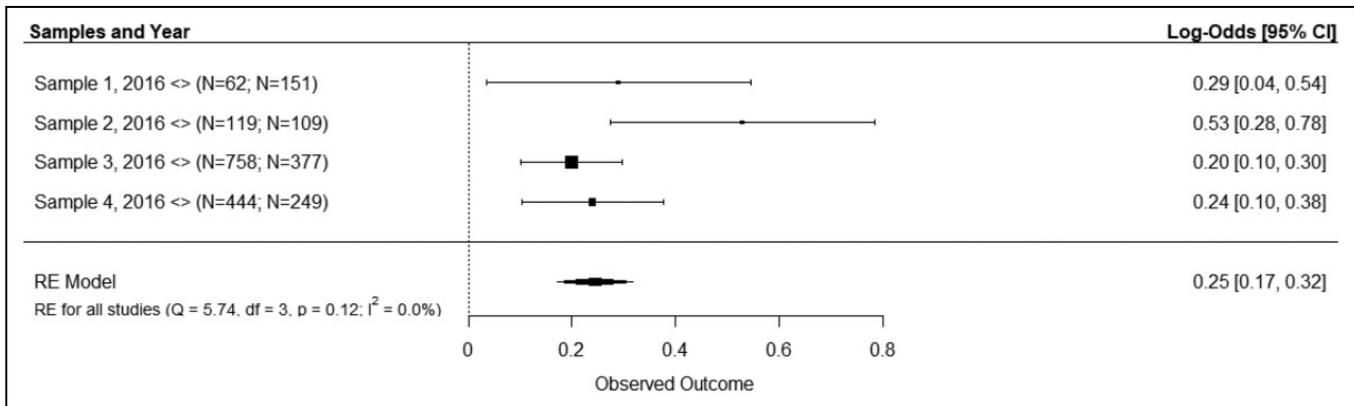


Figure 1. Mini meta-analysis of the effect sizes of mean differences between trump supporters and supporters of other Republican candidates in group-based dominance.

and authoritarian aggression than supporters of other candidates were.

General Discussion

Throughout the 2016 presidential campaign, the support garnered by Donald Trump, a real estate tycoon with no political experience, compelled the attention of pundits. We examined the contribution of RWA and SDO to candidate preference in four independent samples. Authoritarian submission, authoritarian conventionalism, and rejection of egalitarianism significantly predicted support for Trump when comparisons included Democrats, but they did not distinguish Trump support from that for other Republican candidates. Instead, individuals who backed Donald Trump during the Republican primaries and the general election in 2016 were significantly more likely to exhibit group-based dominance and authoritarian aggression than backers of other Republican candidates. That is, compared to other Republicans, they were especially likely to believe that: “Some groups of people are simply inferior to other groups”; “What our country needs instead of more ‘civil rights’ is a good stiff dose of law and order”; “Some groups of people must be kept in their place”; and “What our country really needs is a strong, determined President which will crush the evil and set us in our right way again.” These results are broadly consistent with media reports concerning the hostile behavior of Trump supporters at campaign events throughout the 2015–2016 primary season, including popular chants such as “Build a wall—kill them all!” and “Lock her up!” (Gold, 2016; Parker, Corasaniti, & Berenstein, 2016; Sullivan, 2016).

Our research may speak to the question of what to expect from Trump and his supporters now that he is in office. In an optimistic spirit, one might hope that, after having “won” such a major electoral victory, they might feel less motivated to seek domination through extreme means. Unfortunately, research paints a less sanguine picture. Experimental studies demonstrate that elevations in social status and power tend to increase (rather than decrease) levels of social dominance (Guimond, Dambrun, Michinov, & Duarte, 2003). Other work suggests that high levels of group-based dominance are associated with

virulent patterns of nationalism, ethnocentrism, and hostility toward minority groups (e.g., Jost & Thompson, 2000; Kugler et al., 2010; Pratto et al., 1994). Some of the policies that President Trump has advocated—such as a travel ban on people coming from a number of Muslim-majority countries, the cancellation of the Diversity Visa Lottery Program, the reinstatement of torture, tougher “law and order” practices, and calls for increased use of the death penalty—seem to bear the hallmarks of group-based dominance and authoritarian aggression (Barbaro, Haberman, & Alcindor, 2016; Benjamin, 2016; Funke, 2005; Goodman, 2016; Ho et al., 2015).

A strength of these studies is that they are tied to a consequential human behavior (voting). Yet these data are also tied to a particular candidate and a particular time. We might well ask how these findings generalize to other candidates and other elections. The relevance of authoritarian aggression and group-based dominance to the 2016 election may have emerged because of contextual factors that rendered Trump’s rhetoric and policy ideas particularly attractive to authoritarian voters. As noted earlier, authoritarianism is associated with support for Republican (vs. Democratic) candidates, generally. In this sense, results for the other facets of RWA and SDO fit with past research. The unique relevance of group-based dominance and authoritarian aggression to Trump support may indicate that contexts in which authoritarians feel highly energized and motivated by anger at the system are likely to spur strong support for polarizing figures.

The present results may have implications for understanding the tenor of contemporary American politics. Observers of American political life have grown increasingly alarmed about the phenomenon of “tribalism,” a situation in which “incomprehension and loathing can drown out . . . love of country” and extreme partisans care “not so much about their country’s interests but their own” (Sullivan, 2017). It seems likely that, on any reasonable definition of tribalism, people who are disposed toward authoritarian aggression and group-based dominance would behave more “tribally” in the political realm than those who are not. This is because the derogation of those who are different from and who disagree with the in-

group are essential aspects of authoritarian aggression and group-based dominance. Thus, it may be useful to revisit Greene's (2013, pp. 13–14) observation that many “people now believe that no human tribe ought to be privileged over any other, that all humans deserve to have certain basic goods and freedoms, and that violence should be used only as a last resort. (In other words, some tribes have become a lot less tribal.)”

In any case, it is important to note that in comparisons of only two nominees, one Trump and the other Hillary Clinton, the differences on supporters' levels of authoritarianism and social dominance might be assumed to represent a “Trump effect.” With regard to authoritarianism and rejection of egalitarian values, these differences are more accurately termed a Republican effect. In contrast, with regard to intergroup dominance and relatively positive attitudes about the use of aggression in the service of in-group goals, these results appear to pertain, in a unique way, to the Trump voter.

Authors' Note

The data for these studies are available online and can be found at https://osf.io/kd2ba/?view_only=fa01e3eb6fe644be8b57b4133c9e5c00

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Supplemental Material

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Note

1. We repeated this analysis after adjusting the test statistic and confidence intervals (CIs) using the Knapp and Hartung (2003) correction yielding equivalent results. The overall group-based dominance estimate of log odds = .25 (odds ratio = 1.28) was the same, with a 95% CI of [0.08, 0.41], $p = .0175$.

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