Dominance desires predicting conspiracy beliefs and Trump support in the 2016 US election.
Since 2016 terms such as “post-truth” or “alternative facts” have been symbolic for the spread of evidence-absent political discourse. As decision-making absent actual facts is dangerous, it is important to determine why people believe in conspiracies such as “large scale voter fraud” (Trump, 2016a). In this study we showed that desires to dominate/fears of being dominated (i.e., dominance motive) predicted conspiracy beliefs as voters faced challenges to election-relevant cognitions (e.g., “we will win”; “we are superior”). We explained this by dominance motives giving value to challenged election cognitions which would increase individuals’ desires to alleviate this challenge (i.e., by adopting conspiracy beliefs). In line with this we found Trump voters facing defeat pre-election believed more in election conspiracies as a function of their dominance motive. This effect disappeared post-election, as by Trump’s victory such challenges were arguably attenuated. Moreover, Clinton voters’ dominance motive positively, though weakly, predicted believing in election conspiracies after the election. Exploratory analyses showed mediating effects of conspiracy belief on the relationship between dominance motives and preferring Trump over Clinton. This research complements previous findings showing personality characteristics predicting conspiracy beliefs and, by using actual conspiracy beliefs in a real-life event, add to their ecological validity.

Keywords: dominance motive; conspiracy belief; US election; Trump; Clinton.
“Of course there is large scale voter fraud happening on and before election day. Why do Republican leaders deny what is going on? So naive!” (Trump, 2016a)

In 2016, US presidential candidate Trump tweeted several such statements suggesting large scale voter fraud, rigged pre-election polls, or complaining about unfair media coverage (e.g., Trump, 2016b, 2016c, 2016d). Contra overwhelming evidence (e.g., Bump, 2016; Patterson, 2016), a majority of Trump’s voters believed these conspiracies (Tamman, 2016).

As deliberately irrational/evidence-absent politics hinders informed decisions, understanding why people believe in such conspiracies is vital (cf. Lewandowsky & Oberauer, 2016). Previous studies have linked conspiracy beliefs to situational variables (e.g., manipulations of actors’ morality; van Prooijen & Jostmann, 2013) or personality characteristics (e.g., exaggerated pride in one’s in-group; e.g., Cichocka, Marchlewkska, Golec De Zavala, & Olechowski, 2016). Here, we wanted to add to the ecological validity of such findings by utilising authentic conspiracy beliefs in a real-life event (i.e., the 2016 US election). Moreover, as motives/desires strongly reflect how much people value certain beliefs/actions (e.g., Heckhausen & Heckhausen, 2008), we investigated the predictive power of the dominance motive (DM).

Multiple theories hold that challenges to expected outcomes (e.g., the expectation to win; Kruglanski et al., 2018), group-identity (e.g., being the superior group/not being the losers; Cichocka et al., 2016), or certainty of world view (e.g., most Americans are like me; van Prooijen & Jostmann, 2013) generate affectively negative motivation to reduce them (see also cognitive dissonance theory; Festinger, 1957). Despite their differences, each theory presumes the interplay of two components predicting reduction-motivation: the degree of perceived challenge and the value of the expected outcome/group identity/world view (i.e., cognitions; Festinger, 1957). Leading up to the election, Trump voters likely felt strongly challenged on all these fronts, given that most polls predicted a Clinton victory, the campaign was marked by a strong ‘us-against-them’ mentality on both sides, and fears of forced adherence to opponents’
agendas clashed with desires to gain control of one’s destiny/country (e.g. MacWilliams, 2016; Major, Blodorn, & Major Blascovich, 2016). Given the hostile election environment, we propose DM will predict how much individuals valued these election-relevant cognitions (Heckhausen & Heckhausen, 2008; Suessenbach, Loughnan, Schönbrodt, & Moore, 2019). This motive represents a desire to coerce others into submission/obedience and a fear of being so coerced; it relates to retaliatory behaviour in dictator games, social dominance orientation (i.e., beliefs that one’s ingroup should be superior to outgroups, Pratto, Sidanius, Stallworth, & Malle, 1994), and antagonistic self-protection (i.e., narcissistic rivalry; Back et al., 2013; Suessenbach et al., 2019). Along with desires to be voluntarily respected/admired (prestige) and to take responsibility in and for one’s group (leadership), it constitutes one of three components of a broad desire for social power (Suessenbach et al., 2019). In sum, we propose DM as a proxy for the value of situationally challenged election-relevant cognitions, thus predicting reduction-seeking behaviour.

According to cognitive dissonance theory, one powerful reduction mechanism is negating challenging information (i.e., subtracting dissonant cognitions; Festinger, 1957). This can be achieved by giving credence to election conspiracies (e.g., Cichocka et al., 2016; Kruglanski et al., 2018; van Prooijen & Jostmann, 2013) as to (pre-emptively) adjust outcomes (i.e., we haven’t really lost; we were cheated), group-identity (i.e., we are still great; the other side was unfair), or world view (i.e., most Americans are like me; the statistics are rigged). Hence, just before the election we predicted a positive relationship between Trump voters’ DM and their beliefs in election conspiracies (BEC; hypothesis 1). Just after the election we predicted a decline, possibly a reversed, relationship between the winning (Trump) voters’ DM and BEC, as the challenge should have been dissolved (hypothesis 2). Similarly, we predicted a positive relationship between DM and BEC in the losing (Clinton) voters (hypothesis 3). Finally, we explored how differences among voters in dominance, prestige, and leadership (DoPL) motives predicted voting preference when controlling BEC.
Method

Participants

Pre-election cohort size was based on a power analysis indicating about $n = 250$ participants necessary to detect a small to medium mean difference of $d = .30$ in DoPL motives (see similar effect sizes in Choma & Hanoch, 2017). Post-election cohort $N$ was determined by the maximum sample size given our budget. We resampled data for participants who failed our attention checking question, excluding $n_{pre-election} = 5$ and $n_{post-election} = 18$ participants; resulting in $n_{pre-election} = 250$ (102 females, $M_{age} = 32.51, SD_{age} = 11.46$) and $n_{post-election} = 500$ (230 females, $M_{age} = 32.77, SD_{age} = 12.18$). Among males we sampled about twice as many Clinton as Trump voters. Among females we sampled about four times as many Clinton as Trump voters. All samples were collected via www.prolific.ac, restricted to US American registered voters who reported the intention to vote or had voted for either Trump or Clinton. Participants were reimbursed with $0.40$ for their participation in any one study. Sample sizes, hypotheses, and statistical models were preregistered (https://osf.io/nz6qt/); complete dataset and reproducible R script can be found here: https://osf.io/s6u6m/. This study received the approval of the local research ethic committee.

Material

Each DoPL motive was measured with 4 items (e.g., DM: “When people challenge me I want to put them down hard”; Suessenbach et al., 2019). BEC was measured as agreement with three items based on accusations made by Trump (e.g., Trump, 2016a, 2016b, 2016c, 2016d; see Items 1 to 3 in Table 1). We also measured agreement to three additional excuses for losing an election not explicitly offered by Trump but only included one of these items in
our analysis (see Item 4 in Table 1). All items were measured on a 6-point Likert scale from “Strongly disagree” to “Strongly agree”.

(Insert Table 1 here)

Procedure

The pre-election/post-election sample was collected one and two days before/after the US election on the 8th of November 2016 and introduced as a study on personality, voting preferences, and opinions regarding the 2016 US election. Participants were registered voters for the 2016 US election with the intention to vote (pre-election) or had already voted (pre- and post-election) for either Trump or Clinton. After checking these requirements and obtaining participants’ informed consent, we asked for intention/vote (pre-election) or vote (post-election). Following this, participants filled in the 12 DoPL items, three items regarding BEC, and three additional excuses followed by standard demographic questions (i.e., age, gender, occupation). Participants were not fully debriefed pre-election, only post-election, in case some participated in both parts. We gave all participants an email address for any questions.

Results

Belief in election conspiracies

(Insert Table 2 here)

Cronbach’s αs were sufficient across all measures, $.70 < αs < .87, however, the additional excuse item did not correlate with BEC, $r(748) = -.09, p = .056$ (see Table 2). We conducted a preregistered linear regression of BEC on DoPL motives, dummy coded voting preference (Trump = 0), dummy-coded study part (pre-election = 0), and all possible
interactions between DM, voting preference, and study part (Figure 1). Note, that including prestige and leadership motives in these models controlled for shared/non-specific hope to gain power (Suessenbach et al., 2019). Thus, all DM effects reported here refer to residualised effects (Vize, Collison, Miller, & Lynam, 2018); nonetheless, results were essentially equivalent when removing prestige and leadership motives (see Figure A1, Tables A1 & A2 in Appendix). BEC was positively related to DM for Trump voters pre-election, $\beta = 0.24$, $t = 2.93$, $p = .004$ (hypothesis 1). Post-election, this relationship significantly weakened, $\beta = -0.21$, $t = -2.04$, $p = .042$ (interaction term; hypothesis 2), to essentially 0 ($\beta = 0.24 - 0.21 = 0.03$) but did not reverse. Independent of study part and voting preference, the prestige motive was positively, $\beta = 0.11$, $t = 3.18$, $p = .002$, and the leadership motive negatively related to BEC, $\beta = -0.08$, $t = -2.32$, $p = .021$. Trump voters had generally higher BEC than Clinton voters pre-election, $\beta = -1.41$, $t = -11.90$, $p < .001$. This difference remained, though weaker, post-election, $\beta = 0.32$, $t = 2.22$, $p = .027$.

Testing hypothesis 3, we re-coded voting preference (Clinton = 0) and study part (post-election = 0) and repeated our analysis, demonstrating that DM was positively related to BEC in Clinton voters after the election, $\beta = 0.11$, $t = 2.15$, $p = .032$. Though this relationship was descriptively smaller pre vs post-election, there was no significant difference in pre-post regression slopes, $\beta = -0.04$, $t = -0.51$, $p = .607$.

(Insert Figure 1 here)

Analysis of additional excuse item #4 showed Trump voters’ DM did not relate to beliefs that Clinton’s child had a more positive impact than Trump’s children pre-election, $\beta = -0.18$, $t = -1.80$, $p = .072$ (hypothesis 1). Nonetheless, in line with our predictions (hypothesis 3), DM was significantly positively related to the corresponding belief in Clinton voters post-election, $\beta = 0.14$, $t = 2.44$, $p = .015$. Neither of these two relationships differed pre- and post-election.
(ps > .080; hypothesis 2). However, given little reliability of results concerning such single items (Postmes, Haslam, & Jans, 2013), we will not further interpret these results.

Power motives and voting for Trump or Clinton

Three pre-registered Bonferroni corrected 2(gender: male vs female)*2(voting preference: Trump vs Clinton) ANOVAs with the DoPL motives as DVs assessed pre-election differences in social power motives between Trump and Clinton voters, controlling for gender. On average males had higher DM than females ($M_{\text{males}} = 10.09$ vs $M_{\text{females}} = 8.03$), $F(1, 246) = 8.76$, $p = .010$, $\eta^2_G = .03$, as did Trump voters ($M = 10.71$) compared to Clinton voters ($M = 8.62$), $F(1, 246) = 7.99$, $p = .015$, $\eta^2_G = .03$. There was no interaction ($p = 1$). Neither prestige nor leadership motives significantly differed for males vs females, Trump vs Clinton voters, or any combination of these variables. Results remained essentially unchanged when using only unique variance of each DoPL motive as DVs (i.e., using the residuals from regressing each DoPL motive on the respective other two).

Finally, in an exploratory mediation model based on pre-election data, we investigated whether voters’ BEC explained the relationship between DM and voting for Trump over Clinton. The positive relationship between voters’ DM and their probability to vote for Trump over Clinton, $b = 0.11$, $p < .001$, was fully mediated by BEC, $b = -0.01$, $p = .725$ (see Figure 2). Thus, desire to dominate others and belief in false conspiracies combined to predict preference for Trump.

(Insert Figure 2 here)

Discussion
We correctly predicted Trump voters facing defeat pre-election endorsed beliefs in false conspiracies as a function of their DM. This effect disappeared post-election, since Trump’s victory arguably attenuated previous challenges to election-relevant cognitions (e.g., the expectation to win; the belief that one’s in-group is superior). Clinton voters’ DM positively predicted BEC post-election, though weakly and only descriptively stronger than pre-election. These findings support the idea that DM predicts individuals valuing election-relevant cognitions and negating factual information (i.e., adopt conspiracy beliefs) which challenge these (cf. Festinger, 1957). As such they extend our knowledge of DMs and could prove valuable in predicting BEC in the future. By utilising authentic BEC in a real-life scenario these findings complement more controlled studies using hypothetical scenarios (e.g., van Prooijen & Jostmann, 2013), showing that challenging valued cognitions can produce conspiracy beliefs in meaningful natural settings.

Exploratory analyses showed higher DMs for Trump voters and males, relative to Clinton voters and females. Trump potentially attracted more dominance-driven voters, as his ideas were more strongly based on dominance mechanisms (e.g., Henrich & Gil-White, 2001; Suessenbach et al., 2019) - forcing deference to the US from other states, or certain sub-groups’ superiority over others (e.g., “Caucasian” & “Males” over “Mexicans”; Degani, 2016; Filipovic, 2016). To some extent these higher DMs might have benefitted Trump as they predicted higher BEC which in turn predicted a higher probability to vote Trump. Finally, independent from pre/post-election assessment and voting preference, residualised prestige and leadership motives related to BEC positively and negatively, respectively. As with or without controlling for these shared social power influences DM showed equivalent results when predicting BEC and given that we had no hypotheses for prestige and leadership we will not further interpret these results.
Study limitations include BEC items only being based on Trump’s statements (although we matched phrasings to voter intention). Thus, we can neither compare Trump and Clinton voters’ general BEC nor its relationship with DM. Similarly, the interpretation of Trump benefitting from dominance-driven voters’ conspiracy endorsements is limited to these specific conspiracies. Note that for this study we could not find authentic conspiracies of Clinton voters (even Russian election meddling seemed more accurate than conspiracy; e.g., Entous, Nakashima, & Miller, 2016); nonetheless, if possible, future studies should assess a wider range of actual conspiracy beliefs. Furthermore, we did not assess the impact of individual election-relevant cognitions but assumed all were challenged. Differentiating them would have been difficult in a naturalistic setting; nonetheless, future studies could attempt to develop items more clearly phrased towards certain cognitions or create controlled lab conditions which challenge specific cognitions. Finally, although the process from challenging information to adopting conspiracy beliefs is straight forward to assume we did not measure its individual steps. Future studies could improve on this by using more suitable methods; for example, researchers could measure negative affect with EMG (cf. Larsen, Norris, & Cacioppo, 2003) after experimentally challenging valued cognitions. This negative affect should then be reduced in individuals adopting conspiracy beliefs.

Saturated by “post-truth” and “alternative facts” we must determine factors relating to endorsing evidence-absent opinions. We used such statements from Trump and found DM predicted Trump voters’ BEC prior to potential defeat in, and Clinton voters’ after defeat following, the 2016 US election. Beliefs decoupled from reality are especially dangerous in the political sphere. Our research suggests that lowering fears of being dominated by the other party may reduce self-protective BECs. This could be achieved, for example, by mutually enforced stricter civility norms in politics.
Appendix

(Insert Figure A1 here)

(Insert Table A1 here)

(Insert Table A2 here)


Table 1. Depicting 3 items measuring belief in election conspiracies offered by Trump (Items 1 to 3) as well as one additional excuse for losing the election not offered by Trump. Wording was adapted to match participant’s voting preference (i.e., we replaced “Donald Trump” with “Hillary Clinton” and vice versa; Curly brackets) and study part (i.e., we used the present tense, pre-election, and the past tense post-election; Squared brackets).

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Item wording</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rigged pre-election polls</td>
<td>The pre-election polls are {were} rigged against Donald Trump [Hillary Clinton] in a way that they are {were} showing more voters in favour of Hillary Clinton [Donald Trump] than there actually are {were}.</td>
</tr>
<tr>
<td>2</td>
<td>Voter fraud</td>
<td>At this year’s election, more than 2% of votes in favour of Hillary Clinton [Donald Trump] will actually be {have actually been} invalid due to voter fraud but will be {have been} counted towards the valid votes for Hillary Clinton [Donald Trump].</td>
</tr>
<tr>
<td>3</td>
<td>Unfair media coverage</td>
<td>The portrayal of Donald Trump [Hillary Clinton] in the media has been very unfair as compared to Hillary Clinton’s [Donald Trump’s] portrayal.</td>
</tr>
<tr>
<td>4</td>
<td>Positive impact of candidates’ children</td>
<td>Hillary Clinton’s child [Donald Trump’s children] had a lot more positive impact on voters than Donald Trump’s children [Hillary Clinton’s child].</td>
</tr>
</tbody>
</table>
Table 2. Correlations across pre- and post-election as well as across Trump and Clinton voters for DoPL motives and sum scored belief in election conspiracies (BEC) as well as one additional excuse item for losing the election (Add. item). Mean and [SD] in diagonal.

<table>
<thead>
<tr>
<th></th>
<th>Dominance</th>
<th>Prestige</th>
<th>Leadership</th>
<th>BEC</th>
<th>Add. item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominance</td>
<td>9.21 [4.00]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prestige</td>
<td>.30***</td>
<td>14.91 [3.61]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>.29***</td>
<td>.40***</td>
<td>14.48 [4.44]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEC</td>
<td>.23***</td>
<td>.10*</td>
<td>.07</td>
<td>9.54 [3.57]</td>
<td></td>
</tr>
<tr>
<td>Add. item</td>
<td>.06</td>
<td>.12**</td>
<td>-.06</td>
<td>-.09</td>
<td>2.62 [1.35]</td>
</tr>
</tbody>
</table>

Cronbach’s α .84 .78 .87 .70 -

*** p < .001; ** p < .01; * p < .05; after Bonferroni-Holm correction.

Table A1. Belief in election conspiracies (BEC) predicted by dominance motive, voting preference (Trump = 0), study part (pre-election = 0) and any interaction between these variables.

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.97</td>
<td>0.10</td>
<td>9.64</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Dominance</td>
<td>0.25</td>
<td>0.08</td>
<td>3.08</td>
<td>.002</td>
</tr>
<tr>
<td>Voting preference</td>
<td>-1.37</td>
<td>0.12</td>
<td>-11.56</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Study part</td>
<td>-0.21</td>
<td>0.12</td>
<td>-1.70</td>
<td>.090</td>
</tr>
<tr>
<td>Voting preference*study part</td>
<td>0.32</td>
<td>0.15</td>
<td>2.17</td>
<td>.030</td>
</tr>
</tbody>
</table>
Table A2. BEC predicted by dominance motive, voting preference (Clinton = 0), study part (post-election = 0) and any interaction between these variables.

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.30</td>
<td>0.04</td>
<td>-6.76</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Dominance</td>
<td>0.12</td>
<td>0.05</td>
<td>2.46</td>
<td>.014</td>
</tr>
<tr>
<td>Voting preference</td>
<td>1.05</td>
<td>0.09</td>
<td>12.27</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Study part</td>
<td>-0.11</td>
<td>0.08</td>
<td>-1.39</td>
<td>.166</td>
</tr>
<tr>
<td>Voting preference*study part</td>
<td>0.32</td>
<td>0.15</td>
<td>2.17</td>
<td>.030</td>
</tr>
<tr>
<td>Dominance*voting preference</td>
<td>-0.07</td>
<td>0.08</td>
<td>-0.85</td>
<td>.397</td>
</tr>
<tr>
<td>Dominance*study part</td>
<td>-0.05</td>
<td>0.08</td>
<td>-0.60</td>
<td>.547</td>
</tr>
<tr>
<td>Dominance<em>voting preference</em>study part</td>
<td>0.25</td>
<td>0.13</td>
<td>1.90</td>
<td>.057</td>
</tr>
</tbody>
</table>

° one-tailed test.
Figure 1. Belief in election conspiracies (BEC) predicted by dominance motive, voting preference, and study part; controlling for shared influences of the prestige and leadership motive. BECs for both Trump voters, pre-election, and Clinton voters, post-election, were significantly and positively related to the dominance motive (hypothesis 1 & 3, respectively). Moreover, the relationship between BEC and the dominance motive in Trump voters was significantly stronger pre-election than post-election (hypothesis 2).
Figure 2. Simple mediation model showing that, pre-election, the positive relationship between voters’ dominance motives (latent variable) and the probability to vote for Donald Trump over Hillary Clinton (measured variable; linked through logistic link function) was completely mediated by voters’ beliefs in election conspiracies (latent variable).
Figure A1. Belief in election conspiracies (BEC) predicted by dominance motive, voting preference, and study part; not controlling for shared influences of the prestige and leadership motive.
Footnotes

1) We removed items #5 (“As a woman Hillary Clinton has an advantage as most US voters would vote for any female presidential candidate.”) and #6 (“It doesn’t matter what kind of personalities presidential candidates have, the candidate with more campaign funds always wins.”) as they were tailored to the specific event of Trump losing the election. Stronger belief that a woman (Item #5) or the candidate with more campaign funds (Item #6) has an unfair advantage does not represent an excuse for a defeat for Clinton voters, as their candidate was female and she also was the candidate with more campaign funds (Narayanswamy, Cameron, & Gold, 2016).