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Threat, voting and candidate support. The impact of mortality salience

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Introduction: How does threat motivate political choices? An extensive literature has noted the importance of threat in influencing political behavior. A growing literature in political psychology has used the concept of "mortality salience" to examine the role of existential threat in political decisions. Scholars have argued that inducing mortality salience by asking individuals to think about their own death should result in either reinforcement of their existing political worldview, a shift to a more politically conservative view, or support for a "status quo" option more generally.

Methods: We performed two survey experiments (N = 484 and 1514) manipulating mortality salience and candidate features (Exp. 2). Experiment 1 was performed one week before the 2016 US presidential election and utilized the varying features of the candidates. Experiment 2 manipulated features such as experience level (representing the status quo or change) and partisanship.

Results: We find that mortality salience led to an increased likelihood of voting for Hillary Clinton, particularly for moderate and independent respondents. We also find that independent participants preferred the status quo candidate under mortality salience.

Discussion: We interpret the findings in both studies as supporting a connection between existential threat and preference for the status quo in psychological terms, at least for less partisan voters, rather than a conservative shift in ideological terms or a tendency to reinforce existing views.

KEYWORDS

presidential elections, voting behavior, candidate support, threat, mortality salience

1. Introduction

How does threat influence political choice? An extensive literature has noted the importance of threat perceptions in influencing political behavior (e.g., Miller and Krosnick, 2004; Merolla et al., 2007; Merolla and Zechmeister, 2009; Renström and Bäck, 2021). Importantly, a perception of foreign threats and terrorism has been shown to influence citizens' attitudes toward the use of military aggression (e.g., Huddy et al., 2005), and toward restricting civil liberties (e.g., Hetherington and Suhay, 2011). In the political psychological literature on threat, threat can be defined in varying ways. For instance, populist radical right parties often highlight the cultural threat that immigrants pose to the host society (Carter, 2018). Other kinds of threats that are group-based and directed toward one's ingroup also influence intergroup relations (Stephan et al., 2009; Renström and Bäck, 2021). While threats take different forms, the present article deals with a specific type of threat—existential threat influence political attitudes and choices using the concept of "mortality salience" (MS). Mortality salience—an emphasis on survival in one's motivations—has been shown to be

at the root of various aspects of human behavior and is thus a potential means to capture the role of existential threat in politics (Burke et al., 2013). While cultural or group-based threats often evoke anger (Renström et al., 2023), existential threat evokes existential anxiety, and is thus qualitatively different in nature.

A vast number of studies have analyzed the impact of existential threats on worldviews by experimentally manipulating reminders of death, increasing mortality salience (e.g., Burke et al., 2013). Some studies have examined the role of mortality salience in US Presidential elections where motivators involving fear have long been perceived as important, especially since 9/11 (e.g., Landau et al., 2004; Cohen et al., 2017). Two hypotheses have received the bulk of attention in the literature on the effects of MS on political attitudes. The worldview defense hypothesis, associated with Terror Management Theory (TMT), suggests that mortality salience leads individuals to become more defensive and to strengthen their attachment to their pre-existing ideology, be it liberal or conservative. Another hypothesis, known as the conservative shift hypothesis, associated with System Justification Theory (SJT), suggests that mortality salience should make both liberals and conservatives revert to a "system-justifying ideology," usually interpreted to mean politically conservative views (e.g., Jost et al., 2003). Both hypotheses have found support (Burke et al., 2013), with mortality salience increasing affirmation of pre-existing views in some studies and, in other work, resulting in a general shift toward conservatism. Burke et al. (2013; p. 195) reconcile these results by suggesting that there may be contextual features that explain under which conditions we observe behavior suggesting a conservative shift or a worldview defense.

Some recent work has suggested that the preference for "conservativism" in SJT be understood as a "status quo" in psychological terms (Kosloff et al., 2016; p. 36), rather than a "conservative" shift in conventional ideological terms. In other words, the political aspects of system justification mean that choices representing change are less attractive in the context of threat. Such reasoning leads to a *psychological status quo hypothesis*. We draw on this argument here and suggest that to understand the impact of mortality salience on presidential vote choice we must distinguish between supporting one's own preexisting views, supporting an ideologically conservative candidate, and making choices supporting the status quo.

In this paper we present two experimental studies that aim to test the above-mentioned hypotheses, and especially the psychological status quo hypothesis. The first study takes advantage of the unique opportunity that the 2016 US Presidential Election presented and investigates how existential threat impacted individuals' likelihood to vote for Donald Trump (the conservative candidate) or Hillary Clinton (the status quo candidate). Even if this context presented a unique opportunity where the roles of ideology and status quo were reversed, where the conservative candidate represented change and the liberal candidate represented the status quo, the fact that Hillary Clinton was a woman complicates the interpretation of our results. As a female presidential candidate, Clinton would have been the first ever woman to be president of the United States, which implies that she also represented change in other ways than political. To better control for gender and other potential confounding factors, we performed a controlled experiment in a second study. The second study was designed to investigate how mortality salience impacts the likelihood that an individual would vote for a hypothetical candidate, in which candidate experience (change or status quo) and ideology were explicitly stated to test our hypotheses in a more controlled manner. In this experiment, the gender of the candidate was held constant. The combination of these two studies helps us shed light on the conflicting findings presented in the literature on mortality salience and voting.

2. Theory

2.1. Terror management, system justification theory, and mortality salience

Terror Management Theory (TMT) argues that anxiety caused by the human awareness of one's mortality leads to construction and support of cultural worldviews, or shared values and beliefs. The theory, introduced by Becker (1973), proposes that cultural worldviews function as a "buffer" against existential anxiety, which leads to a sense of control over potential threats (Greenberg et al., 1986, 1990; Solomon et al., 2015), making them essential for creating a sense of self-esteem and protection against existential anxiety (e.g., Harmon-Jones et al., 1997).

By contrast, System Justification Theory (SJT, see, e.g., Jost and van der Toorn, 2011) argues that existential threats will lead not to defending one's own cultural worldview but rather the current "system" and its existing social, economic, and political arrangements (Sterling et al., 2016). According to Sterling et al. (2016; p. 2), SJT "predicts a stronger tendency to defend, justify, and bolster the societal status quo when an individual is confronted with existential or epistemic threats." Thus, while TMT implies that existential threat leads to a strengthening of one's *own* existing views, SJT typically expects threat to elicit greater alignment with *society*'s definition of "conservative beliefs, opinions, and values" (Sterling et al., 2016; p. 3).

Many experimental studies in social psychology have explored these theories, focusing on the *mortality salience hypothesis*, which is evaluated using experimental paradigms that induce mortality salience (MS) with death-related questions. A range of studies have supported the TMT cultural worldviews theory with a variety of attitudinal and behavioral variables (Burke et al., 2010). Meanwhile, many studies have found effects of mortality salience in line with SJT, with existential threats causing more system-justifying, and thus more "conservative," attitudes (Willer, 2004; Echebarria-Echabe and Fernández-Guede, 2006; Ullrich and Cohrs, 2007; Van de Vyver et al., 2016; Cohen et al., 2017).

2.2. Mortality salience and political attitudes and behavior

The TMT and SJT findings for intergroup relations have natural implications for questions of political conflict and choice. Individuals' political attitudes and behavior are closely connected to the beliefs and values put forward by a culture or ingroup, as well as with the overall social system in which they operate. The literature linking MS to political attitudes has yielded mixed empirical results (Burke et al., 2013). Some researchers have found, in line with SJT, that an existential threat will lead to a preference for political conservatism (Jost et al., 2007). Meanwhile, TMT's suggestion that individuals will grasp onto any prevailing views, whether it is left or right, has also found support (Greenberg and Jonas, 2003).

Jost et al. (2003) conducted a meta-analysis on the possible associations between a variety of motivations and individual differences and political conservatism. They identified that a chronic fear of death and a low tolerance of ambiguity is strongly related to political conservatism. This argument forms the basis of the conservative shift hypothesis. Further, Jost and Napier's (2012) uncertainty-threat model suggests that there is a "fit" between uncertainty and threat, and the conservative ideology. They suggest that the two core components of the conservative ideologyresistance to change and opposition to equality-go hand in hand with reducing uncertainty and threat. SJT proposes that individuals gain certainty from continuing to support the societal system as it stands, even if it does not favor them, and a conservative system may be deemed a more secure option than the progressive or liberal left, which is often seen as a proponent of change (Jost et al., 2004, 2007).

In the context of vote choice, mortality salience has been shown to lead to an increased preference for Republican candidate George W. Bush—a result which can be interpreted as supporting the argument that a politically conservative outlook may buffer against the anxiety created by mortality salience (Landau et al., 2004), that is, for the conservative shift hypothesis. Further, experimental studies have shown that MS might increase adherence to a conservative ideology and nationalistic cognitions (Arndt et al., 2002; Jost et al., 2003; Cohen et al., 2005; Gailliot et al., 2006; Ogilvie et al., 2008).

In response to Jost et al. (2003), Greenberg and Jonas (2003) argue that the presence of existential threat should not push people in a politically conservative direction. Rather, such threat pushes individuals to adopt more extreme attitudes in line with their own pre-existing views, regardless of whether it is liberal or conservative, left or right. This is the basis of the *worldview defense hypothesis*, which has been supported in some empirical studies. For example, one study found that MS only increased support for extreme military action in individuals who were already conservative-leaning but not in those who were liberal (Pyszczynski et al., 2006). Other research has found that MS leads liberals to become more defensive of their liberal outlook (Castano et al., 2011).

Empirically, these sets of findings are seemingly contradictory. However, while there are many experimental studies exploring the effects of existential threat on ideological shifts and voting behavior, the mixed results have also led to speculation that such studies may fail to consider contextual factors occurring at the time of the data collection, such as major events and the political status quo (see e.g., Kosloff et al., 2016).

Sterling et al. (2016) explore this argument by trying to replicate the studies showing an increased preference for George W. Bush following a mortality salience manipulation. They study this by analyzing the 2012 election—in this election, there had been a 4year liberal Presidency prior, and thus a liberal position was the status quo. In this study, Sterling et al. (2016) find no effects of MS on candidate evaluations or voting intentions, finding instead an interaction between MS and system justification tendencies. They conclude that the lack of effect of mortality salience in the studies was most likely due to disagreement between participants as to what the political status quo was at the time.

As noted above, some scholars question whether SJT in fact should predict a *politically* conservative shift. Instead, individuals may respond to increased MS by showing a preference for a "status quo" candidate, which may not be the one that is most "conservative" in ideological terms (see, e.g., Sterling et al., 2016). Kosloff et al. (2016; p. 36) address this with a reconceptualization of the status quo concept as the "existing state of affairs":

A central tenet of the conservative shift perspective is that motivation to adhere to or defend the status quo is directly linked to conservatism. Yet, this framing may refer to "psychological conservatism"—as in, sustaining the system as it stands—rather than "political conservatism," *per se*.

This distinction is particularly important in the context of political choice. An MS induced anxiety buffer may lead individuals to become more *status quo* oriented in their attitudes, yet this may not necessarily reflect the conventionally politically conservative alternative.

2.3. Hypotheses on mortality salience and voting for presidential candidates

Drawing on the literature above, we base our first hypothesis on Terror Management Theory's (TMT) claim that MS leads to supporting one's own preexisting cultural worldviews:

H1 (worldview defense): When mortality salience is induced, individuals are more likely to vote for the candidate that better represents their own pre-existing political beliefs.

Meanwhile, System Justification Theory (SJT) argues that fear of death relates specifically to political conservatism. Drawing on this theory, we hypothesize that:

H2 (conservative shift): When mortality salience is induced, individuals are more likely to vote for the candidate that is more politically conservative leaning.

In the American political context, the Republican candidate is typically expected to be the ideologically conservative candidate. However, such candidates may not always be seen as the *psychologically* conservative option (see, e.g., Kosloff et al., 2016). Instead, this should depend on the particular context of the election, such that candidates representing the "status quo" in a broader sense should be favored over those representing "change," regardless of the specific ideology or values they represent. Following this line of argument, we present a third hypothesis:

H3 (psychological status quo): When mortality salience is induced, individuals are more likely to vote for the candidate that is perceived as representing the status quo.

2.4. Implications for the 2016 US Presidential election and overarching research design

Considering the US context, we can make a distinction between "conservative"—historically associated in US politics with center-right ideology advocating resistance to change—and the "psychological" status quo. In some cases, the Republican Party nominee would indeed both be the more ideologically conservative option *and* the option most associated with preserving the status quo, as was found in work on the 2004 and 2008 elections (Landau et al., 2004; Vail et al., 2009). However, in 2012, with politically leftof-center Obama seeking reelection, with a more centrist image, against a conventional candidate of the Republican establishment, mixed perceptions emerged of the candidate of the societal status quo (Sterling et al., 2016).

The 2016 Presidential election context presented a clear distinction between the politically conservative candidate and the candidate associated with the status quo. In addition to the 8-year incumbent status of the Democratic Party and the clear endorsement by Obama for Clinton as his successor, she also represented the political "establishment" for nearly 25 years. As First Lady, Senator, and Secretary of State under Obama, Clinton had been a persistent presence as a member of the political elite as well as a former Presidential candidate. Trump, ideologically seen as a right-of-center candidate by most metrics, was seen by all observers as an "outsider," lacking in political experience, and unexpectedly obtaining the Republican nomination against considerable resistance from the party's establishment. Meanwhile, Clinton's nomination battle against an anti-establishment contender from the left, Bernie Sanders, may have emphasized her association with the status quo. The news media routinely reinforced Clinton's role as a status quo candidate, while the impression of Trump as presenting a change from the status quo was equally widely shared by supporters and detractors alike.¹ With each of these factors working in concert, the Clinton-Trump contest presented a clear set of identities for status quo and change in the context of modern US presidential politics, a sentiment reflected in exit polls (Bannon, 2016).

In this paper we present two experimental studies that aim to test our three hypotheses. The first study takes advantage of the unique opportunity that the 2016 US Presidential Election presented and investigates how existential threat impacted likelihood to vote for Trump (the conservative candidate) or Clinton (the status quo candidate). As mentioned above, even if this context presented a unique opportunity where the roles of ideology and status quo were reversed, with the conservative candidate representing change and the liberal candidate representing the status quo, the fact that there was a female candidate running complicates the interpretation of the results. Had Clinton won the election, she would have become the first female president of the United States, which implied that she also represented change. To better control for gender and other potential confounding factors, we performed a second study based on a controlled experiment. This study was designed to investigate how mortality salience impacts the likelihood that an individual would vote for a hypothetical candidate, in which candidate experience (change or status quo) and ideology were explicitly stated to test our hypotheses in a more controlled manner. In this experiment, the gender of the candidate was held constant.

3. Study 1—A survey experiment during the 2016 Presidential election

3.1. Study design and participants

To examine the effects of existential threat in the 2016 US Presidential election, our first study is based on a survey experiment (using Qualtrics) including two conditions manipulating mortality salience or a control condition. The survey was launched 1 week before the US presidential election in November 2016. Participants were recruited through the online platform Prolific, which is a platform that gathers individuals interested in participating in research. Participants are paid a small reward for their participation. There is some debate regarding the data generated by similar platforms (Chmielewski and Kucker, 2020; Webb and Tangney, 2022). However, Prolific does seem to be the platform producing higher quality data (Peer et al., 2017, 2022; Palan and Schitter, 2018). While we acknowledge that the sample is not a random probability sample, Prolific samples have been found to be of high quality and be more diverse than for instance M-turk (Peer et al., 2017, 2022).

The experimental design consisted of two conditions, one mortality salience (MS) inducement and one control condition. Participants were randomly assigned to one of the conditions. In the MS condition, participants were asked to describe (1) what they think will happen physically to their body when they die, and (2) what emotions they feel when thinking about their own death. In the control condition, participants were asked to write about going to the dentist. This condition was designed to represent a possibly uncomfortable experience, but one that is not existentially threatening. This is a standard manipulation used in the previous mortality salience literature (Rosenblatt et al., 1989).

Participants (N = 484)² age ranged from 18 to 70 years old, with a mean of 31.7 years old. There were 220 (45.5%) women and 250 (51.7%) men, and 8 "other" (1.7%). Six participants (1.2%) did not respond to the gender question. In the sample, 373 (77.1%) participants identified as white, 36 (7.4%) black or African American, 4 (0.8%) American Indian or Alaska Native, 48 (9.9%) Asian, and 16 (3.3%) identified as other. Seven participants (1.4%) did not respond to the race question.

The lack of variation on the broad categorical race variables led us to create and utilize a simple white/non-white binary variable in the empirical analysis. Therefore, 373 respondents were coded as white and 111 as non-white (including the seven participants who did not respond). The level of education variable was measured on

¹ For example, Beinart (2016) stated that "in the era of Trump, Clinton and co. want to preserve the status quo, while their Republican opponents want radical change".

² Post-hoc power analyses indicated that the study was underpowered with a post-hoc power of 0.62. Given a small effect size, the study would have required about 1200 participants.

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a 5-point scale where 0 represents a high school education or less (n = 61, 12.6%), 1 = some college but no degree (n = 115, 23.7%), 2 = Associate's Degree (n = 53, 11.0%), 3 = Bachelor's Degree (n = 184, 38%), 4 = Master's Degree (n = 49, 10.1%), and 5 = professional school degree or Doctorate (n = 13, 2.7%). Nine participants (1.8%) did not respond to the education question. The religiosity variable was measured on a zero to four scale where 0 represents never attends religious services (n = 297, 61.3%), 1 = a few times a year (n = 98, 20.0%), 2 = once or twice a month (n = 26, 5.4%), 3 = almost every week (n = 21, 4.3%), 4 = every week (n = 36, 7.4%). Three participants (0.6%) did not respond to the religiosity question.

The Prolific panel is biased toward Democrats. While the number of Democrats that could participate was capped, selfidentified Republican panelists did not participate in similar numbers to Democrats, resulting in a sample of 165 (34.1%) Democrats, 189 (39.0%) Independents, 68 (14.0%) Republicans and 54 (11.2%) Something else. Eight participants (1.7%) did not respond to the Political party identity question. *Participant party identity* was measured with the question: Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else? Responses were coded at 4 levels: 1 = Republican, 2 = Democrat, 3 = Independent and 4 = Something else.

When starting the survey, participants were first informed about the study and ethical concerns. They were required to provide informed consent before the survey could start. The first survey question asked participants if they were eligible to vote in the upcoming election. If they stated no, the survey was shut down. Then followed some questions about demographic and socioeconomic background and about political attitudes. Participants were then introduced to the experimental manipulation (mortality or dentist condition).³ Then voting intention was assessed by asking participants to indicate whom they intended to vote for in the 2016 Presidential election.

3.2. Measures

Voting intention was the main dependent variable. This was assessed with a question asking participants to indicate whom they think they will vote for in the upcoming election. The responses were coded into three categories: "Hillary Clinton" (n = 250, 53.4%), "Donald Trump" (n = 94, 20.1%), and "other" (n = 124, 26.5%).⁴

TABLE 1 Distribution of participants' political party identity split on condition, Study 1.

	Mortality salience	Control
Republicans	38 (15.3)	30 (12.7)
Democrats	82 (33.1)	83 (35.2)
Independents	89 (35.9)	100 (42.4)
Something else	32 (12.9)	22 (9.3)
Total	241	235

Percentages are shown in parentheses. Participants with missing values on the political party identity question are excluded.

Mortality salience was the main independent variable, which was manipulated as described above, by asking respondents to think about what happens to their body when they die, and what they feel when thinking about their own death. The variable included in our multivariate analyses is a dummy variable describing if the respondents were in the Mortality salience condition (n = 248) or the control condition (n = 236).

Table 1 shows the distribution of political party identity between the conditions.

We also included several control variables, which have been shown to co-vary with preferences and voting for presidential candidates in previous US studies (see Valentino et al., 2018; e.g., Schaffner et al., 2018). Age was measured by participants' years of age. Gender was recoded into a dummy variable with women = 1 and men = 0. The other category was excluded due to few observations. Race was recoded into a dummy variable comparing whites (=1) to all other groups. Education was measured as highest level of education and religiosity as frequency of church attendance. Lastly, we measured political ideology with the item: "Some people describe political affiliation on a liberal to conservative scale. Please indicate where you would place yourself on such a scale." Response alternatives ranged from 1 = Clearly liberal to 10 =Clearly conservative.

4. Results

4.1. Descriptive results

An exploration of some descriptive statistics provides an initial snapshot regarding the possible impact that mortality salience (MS) has on an individual's intended vote choice. Figure 1 shows the share of individuals within the MS condition and control group, indicating that they intended to vote for a particular presidential candidate. The figure suggests that there are some readily apparent differences in the share of respondents that indicated that they would vote for each candidate depending on the condition to which the respondents were assigned.

The figure shows that in the MS condition there were more participants indicating that they intended to vote for Clinton

³ In addition, the respondents were asked to agree or disagree with some statements about the political parties. Following this, the respondents were asked whether they were registered, intended to vote and what the likelihood was that they would vote. Hence, there was a brief delay between the MS manipulation and our dependent variable, which may be important since previous research on mortality salience suggests that the "effects of explicit reminders of death on world view defense typically emerge only after a delay between MS and the dependent-variable assessment" (Burke et al., 2013: 189).

⁴ The "other" option groups together the choices "Gary Johnson" (n = 39), "Jill Stein" (n = 19) and "undecided" (n = 66). 16 did not respond to the vote intention question. While we were primarily interested in Trump and Clinton

voters, we included the "other" category voters since it was a sizeable portion of the sample and provides a baseline comparison. Analyses with the "other" category removed is found in the Supplementary material. The results did not substantially differ from the ones presented in the article.



than in the control group. Further, a somewhat lower number of participants intended to vote for Trump, Johnson, or Stein in the MS condition group. This suggests that there is a relationship between MS and vote intention.

4.2. Empirical analysis of the effect of mortality salience on vote choice

The evaluation of H2 is straightforward—if the MS condition leads to an increased likelihood of voting for Donald Trump, who can be classified as the most politically conservative candidate, the conservative shift hypothesis is supported. The evaluation of H3 is also straightforward if we assume that Hillary Clinton represented the status quo in the 2016 election, as we argue above. An increased likelihood of voting for Clinton, following the MS condition, would suggest support for the psychological status quo hypothesis (H3).

It is somewhat less straightforward to evaluate H1, the worldview defense hypothesis, which says that individuals are more likely to vote for the candidate that better represents their own pre-existing political views when MS is increased. We use two different approaches to evaluate this hypothesis. First, measuring the participant's pre-existing views by looking at the participant's partisanship, distinguishing between those who identify as "Democrat," "Republican," "Independent" or "Something else." Dummies for the partisanship variable are interacted with the MS condition to evaluate the worldview defense hypothesis. Second, we use a measure of worldviews based on the respondents' ideological self-placement (liberal-conservative; M = 4.29, SD = 2.52). This is used directly as a control in the first

analysis but to make interpretation of the "worldview" interactions most straightforward, this variable is categorized into three groups of the most equal possible size: Liberal, Moderate and Conservative voters.⁵ These dummies have also been interacted with the MS condition, to investigate whether individuals who place themselves on the Liberal side of the scale were more likely to vote for Hillary when given the MS condition and whether those placed on the Conservative side of the scale were more likely to vote for Trump when increasing MS.

The participant was given the option to choose between five vote intention alternatives. However, the choices other than Trump and Clinton are individually too small to produce variation for all independent variables in the multivariate analysis. Hence, we have created a three-category dependent variable to which we apply multinomial logit regression. Here, the reference category is vote intention for Clinton. Table 2 presents the coefficients, standard errors, and statistical significance from a multinomial logit model. The coefficients for the MS variable demonstrate that the condition has a negative and statistically significant impact on vote intention for Trump and other candidates when compared to vote intentions for Clinton. That is, in the mortality salience condition, support for Clinton increased.

⁵ One hundred fifty two Liberals with scores of 2 or less, 185 Moderates with scores between 3 and 5, and 147 Conservatives with scores of 6 or greater. In the Supplementary material, we split the groups according to the scale instead, that is, Liberals: 0, 1, 2, 3 (n = 212); Moderates: 4, 5, 6 (n = 177), and Conservatives: 7, 8, 9, 10 (n = 86), and present the same analyses. The results are not substantively different from the ones presented here.

TABLE 2 Vote intention multinomial logit model, Study 1.

	Trump	Other
Mortality salience condition	-0.85* (0.35)	-0.69** (0.27)
Age	0.03* (0.01)	-0.03 (0.02)
Gender ^a	-0.55 (0.36)	0.09 (0.27)
Race ^b	0.74 (0.45)	0.24 (0.31)
Education	-0.19 (0.13)	-0.15 (0.10)
Religious	-0.16 (0.15)	-0.07 (0.12)
Ideology	0.71*** (0.10)	0.45*** (0.07)
Independent ^c	1.88*** (0.55)	1.66*** (0.32)
Republican ^c	2.48*** (0.71)	0.90 (0.60)
Something else ^c	2.34*** (0.73)	2.78*** (0.46)
Constant	-5.55*** (1.04)	-1.64** (0.70)

Standard errors in parentheses. Vote intention for Clinton is base category.

***p < 0.001, **p < 0.01, *p < 0.05.

^aGender is coded women = 1, men = 0.

^bRace is coded white = 1, other = 0.

^cDemocrat is reference category.

Pseudo $R^2 = 0.33$.

H2, the conservative shift hypothesis, stated that when mortality salience is induced, individuals should vote for the candidate that is more politically conservative. Hence, we would expect that voting for Donald Trump would increase in the MS condition. However, the results do not support this idea, as there is no evidence here that voters in the MS condition are more likely to vote for the ideologically conservative and Republican candidate Trump.

H3, the psychological status quo hypothesis, stated that when mortality salience is induced, individuals should vote for the candidate that is perceived as representing the status quo. Hence, if participants in the MS conditions favored Clinton, this would support H3. To the extent that Clinton represented the status quo choice in the 2016 election, the results are consistent with the psychological status quo argument, thus supporting H3.

The effects of the MS condition on vote choice are plotted in Figure 2 and shown in Table 3. The figure shows the estimated effects of being exposed to mortality salience on vote intentions for the different candidates, where the bars show 95% confidence intervals around the estimated effects. The figure shows that vote intentions for both Trump and Other candidates were not significantly influenced by the manipulation but voting for Clinton was. When participants were exposed to mortality salience, they were more likely to vote for Clinton. Hence, these results support H3, the psychological status quo hypothesis. Yet, because our sample was leaning liberal from the start, we cannot completely rule out that H1, the worldview defense hypothesis is true, based on these analyses.

H1, the worldview defense hypothesis, stated that when mortality salience is induced, individuals should vote for the candidate that better represents their own pre-existing political beliefs. The multinomial logit model presented in Table 2 does not allow us to test Hypothesis 1 (worldview defense). Since the worldview defense hypothesis posits that increasing MS induces individuals to vote for candidates that represent their current political leanings, we present an additional model including an interaction between the categorical version of the respondent's ideology and the MS condition as well as a separate model using the party identity for this interaction. If H1 is true, we would expect a significant interaction effect between conservative ideology and MS condition, where conservatives exposed to mortality salience would increase in support for Trump. Likewise, we would expect an interaction between being Republican and MS such that Republicans should increase in support for Trump when exposed to mortality salience.

Table 4 presents the output from this interactive model. First, we see that being moderate and conservative, compared to liberal increases support for both Trump and other candidates, compared to Clinton. When it comes to party identity, being independent, something else or Republican seems to generally be related to support for both Trump and the other candidates compared to Clinton.

More importantly, the model output demonstrates that there are some interaction effects. There were no significant interactions with ideological position, as seen in Models 1 and 2.⁶ However, there were significant interactions between party identity and MS condition, as seen in Model 4, although not in Model 3. Hence, in the models using ideology, we found no support for the worldview defense hypothesis.

There were significant interaction effects when using party identity on voting for "other" compared to Clinton. The interactions showed that support for Clinton increased among both Independents and Republicans compared to Democrats in the MS condition. There was no interaction with those identifying as "something else." Hence, these results are not in line with what would be expected if H1 was true. Then we would expect Republicans to increase in support for Trump when exposed to the mortality salience, and Democrats to increase support for Clinton when exposed to mortality salience.

To better understand the interactions in Model 4, we plot the effect of the MS condition in each of the party identity groups and report the effects in Table 5. Figure 3 shows the effect of the MS condition within each political party identity group on voting for Clinton. As can be seen, there is only a significant effect of being exposed to mortality salience for independents and Republicans. The variation for Republicans is very large, which is not surprising since Clinton is not representing their party. Importantly, there was no effect for Democrats indicating that the death treatment did not increase previously held worldviews, hence, we did not find support for the worldview defense hypothesis (H1).

In sum, the results from the interactive model do not provide support for the worldview defense hypothesis—voters did not move

⁶ The coding of the political ideology variable was based on the ambition to reach as equal cell sizes as possible, however, this meant that the coding might not sufficiently have reflected the liberal and moderate category. Hence, we re-coded them so that 1-4 was coded as Liberals, 5-6 as Moderates and 7-10 as Conservatives. This did not substantively change the results and the analyses are included in the Supplementary material.



TABLE 3 Estimated effects of mortality salience on vote choice.

	Estimated effect (SE)	95% CI		
Trump	-0.04 (0.03)	-0.10	0.01	
Clinton	0.11 (0.03)**	0.04	0.18	
Other	-0.07 (0.04)	-0.14	0.01	

 $^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05.$

in the political direction they initially preferred when exposed to mortality salience.

In sum, the first experiment showed initial support for the psychological status quo hypothesis, particularly among individuals not strongly attached to a party. However, given that the 2016 US Presidential election candidates differed on many other traits than representing the status quo or change, such as gender, we designed a more controlled experiment to better understand how different characteristics of political candidates influence vote choice and under what circumstances.

5. Study 2—A controlled experiment manipulating candidate traits

5.1. Study design and participants

To test our hypotheses further in a more controlled manner, where we could keep gender constant, we conducted a second online survey experiment in which the traits of fictive candidates were manipulated. In April 2019, participants (N = 1514) were recruited through the online platform Prolific and reimbursed for their time. We screened participants on being US citizens.⁷ There were 801 (52.9%) women, 693 (46.8%) men, and 20 (1.3%) who did not answer. Age of participants ranged from 21 to 76 (M = 33.78, SD = 11.77). We aimed to recruit equal numbers of Republicans and Democrats, but as we found in our previous study, self-identified Republican panelists did not participate in similar numbers to Democrats, resulting in a sample of 733 (48.4%) Democrats, 216 (14.3 %) Independents, and 495 (32.7%) Republicans.⁸

The experimental design was a between-participants 2 (Mortality salience: death/dentist) \times 2 (Candidate experience: Status quo/change) \times 2 (Candidate party identity: Democrat/Republican) \times 3 (Participant party identity: Democrat/Independent/Republican) factorial design.⁹ The first factor was the mortality salience (MS) and control conditions, as conducted in Study 1. The second factor was the hypothetical candidate's experience, in which the description of the candidate indicated change or that they represented the status quo. The third factor was the party the candidate represented, manipulating whether the candidate was a Democrat or a Republican. Hence, we created four fictive candidates varying "status quo" or "change"

⁷ To increase the likelihood that participants were in fact US citizens, we included a question asking in what State they resided. This was not a mandatory question but only 2 did not respond.

^{8 70 (4.6%)} participants stated "something else."

⁹ A post-hoc power analysis based on a small effect size and a $2 \times 2 \times 2$ design with 1400 participants revealed a power of 0.72. This study was also underpowered and to reach a power of 0.95 would have required about 2500 participants.

TABLE 4 Vote intention multinomial logit model: ideology and party interactions, Study 1.

	(1)	(2)	(3)	(4)
	Trump	Other	Trump	Other
Age	0.04* (0.02)	-0.02 (0.02)	0.04* (0.02)	-0.02 (0.01)
Gender ^a	-0.66 (0.36)	0.052 (0.27)	-0.68 (0.36)	0.06 (0.27)
Race ^b	0.75 (0.44)	0.25 (0.31)	0.77 (0.45)	0.35 (0.31)
Education	-0.21 (0.13)	-0.15 (0.11)	-0.22 (0.14)	-0.14 (0.11)
Religion	-0.05 (0.14)	-0.05 (0.12)	-0.07 (0.15)	-0.06 (0.13)
Moderate	3.01** (1.08)	1.37** (0.43)	2.53*** (0.78)	1.16*** (0.34)
Conservative	5.22*** (1.18)	3.42*** (0.67)	4.53*** (0.84)	2.92*** (0.49)
MS condition ^c	0.16 (1.44)	-0.27 (0.53)	-15.68 (994.0)	0.49 (0.55)
Moderate \times MS condition	-1.25 (1.53)	-0.48 (0.64)		
Conservative \times MS condition	-1.50 (1.59)	-1.14 (0.86)		
Independent ^d	1.82*** (0.54)	1.70*** (0.33)	1.45* (0.61)	2.38*** (0.49)
Republican ^d	2.85*** (0.74)	1.03 (0.64)	3.34** (1.22)	2.71** (1.20)
Something else ^d	2.22** (0.75)	2.73*** (0.47)	1.48 (1.08)	3.21*** (0.71)
Independent \times MS condition			14.80 (994.0)	-1.49* (0.67)
Republican \times MS condition			13.66 (994.0)	-2.99* (1.36)
Something else \times MS condition			15.32 (994.0)	-1.17 (0.95)
Constant	-6.34***(1.28)	-1.99**(0.64)	-5.65***(1.06)	-2.39*** (0.69)

Standard errors in parentheses.

***p < 0.001, **p < 0.01, *p < 0.05.

^aGender is coded women = 1, men = 0.

^bRace is coded white = 1, other = 0.

 ^{c}MS condition is coded 1 = mortality salience, 0 = control.

^dReference category is Democrat.

Pseudo \mathbb{R}^2 Model 1 and 2 = 0.33, Model 3 and 4 = 0.34.

TABLE 5 Estimated effects of mortality salience on vote for Clinton within each party identity group.

	Estimated effect (SE)	95% CI		
Democrat	0.05 (0.07)	-0.10	0.19	
Independent	0.17 (0.06)**	0.05	0.29	
Republican	0.34 (0.16)*	0.03	0.65	
Something else	0.10 (0.12)	-0.14	0.34	

 $p^{**} < 0.01, p^{*} < 0.05.$

profiles and party identity. Finally, participants' own party identity constituted the fourth factor.

On starting the study, participants were first informed of the study and requested to provide informed consent. This was followed by demographic questions and political attitudes questions. Participants were then introduced to the experimental manipulation on mortality salience (mortality salience or dentist condition). They were then (randomly) presented with one of the four hypothetical candidate profiles that were designed to represent either the status quo (Candidate X) or change (Candidate Y), and either a Democrat or Republican candidate. We chose to keep

the gender of the candidate constant. The candidate profiles were described as follows:

"Candidate X. Male. Age 56. The [Republican/Democratic] candidate has spent several decades in the state capital as a legislator, where he has been widely seen as an effective policy-maker. He supports continuing the most successful parts of the previous administration's agenda and does not advocate major changes."

"Candidate Y. Male. Age 56. The [Republican/Democratic] candidate is primarily a businessman, with no previous experience holding public office but a reputation for successful entrepreneurship. He has campaigned on a clear agenda to make major political reforms when elected to office."

Following the presentation of the profiles, participants indicated their vote likelihood for the candidate.

5.2. Measures

Likelihood of casting a vote was the main dependent variable. Participants were asked how likely it is that they would vote for the candidate if there was an election today on a scale from 1 = Not likely to 100 = Very likely.



Mortality salience was the main independent variable and was manipulated as in Study 1. The second independent variable was *candidate experience*, which was manipulated by highlighting whether the candidate had a history of being a politician or not (see stimulus text). The third independent variable, *party identity of the candidate*, was manipulated by informing participants whether the candidate belonged to the Democratic or Republican party.

Finally, *participants' own party identity* was measured with the question: Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else? Responses were coded at 4 levels: 1 = Republican, 2 = Democrat, 3 = Independent and 4 = Something else. The last category, "something else," was excluded from the analyses to simplify the analyses, but additional analyses with this group can be found in the Supplementary material.

Control variables included age, gender (coded binary with women = 1), highest level of education (measured on a 16-level scale from "Less than 1^{st} grade" to "Doctorate degree") and race (coded as white = 1, otherwise 0).

6. Results

6.1. Descriptive results

Table 6 details the number of participants, the mean of vote likelihood, and the standard deviations in each cell of the manipulated factors.

6.2. Empirical analysis of the effect of mortality salience and candidate traits on vote choice

To evaluate our hypotheses, H1, the worldview defense hypothesis, which says that individuals are more likely to vote for the candidate that better represents their own pre-existing political views when MS is increased, H2, the conservative shift hypothesis, which states that individuals are more likely to vote for the conservative candidate when MS is increased, and H3, the psychological status quo hypothesis, which states that individuals are more likely to vote for the status quo candidate when MS is increased, we ran a factorial ANCOVA. The ANCOVA used vote likelihood as outcome variable. The independent factors were mortality salience condition (MS/control), Candidate party identity (Democrat/Republican), Experience (representing status quo/change), and participant party identity (Democrat/Republican/Independent). Moreover, we controlled for age, gender, race and highest education level.¹⁰

If H1 is true, we would expect an interaction between MS condition, Candidate party identity and Participant party identification such that in the MS condition, participants would prefer the candidate that is aligned with their own political position; that is, Democrats should prefer the Democratic candidate and Republicans should prefer the Republican candidate. If H2 is true, we should expect an interaction between MS condition and candidate party identity such that participants in the MS condition should prefer the Republican candidate over the

¹⁰ Analyses without the control variables are found in the Supplementary material. The results did not substantively change.

	MS condition		Control condition			Total	
Candidate PID	Change	SQ	Total	Change	SQ	Total	
Democrat	44.60 (24.23)	55.49 (26.91)	50.39 (26.22)	45.00 (23.47)	58.97 (25.85)	51.77 (25.59)	51.07 (25.90)
	N = 130	N = 175	N = 329	N = 166	N = 156	N = 322	N = 651
Republican	46.20 (28.08)	48.89 (27.03)	47.65 (27.50)	48.28 (29.08)	48.46(29.30)	48.37 (29.15)	48.03 (28.36)
	N = 130	N = 152	N = 282	N = 148	N = 148	N = 311	N = 593
Total	45.33 (26.03)	52.42 (27.13)	49.13 (26.84)	46.54 (26.27)	53.60 (28.12)	50.10(27.43)	49.62 (27.13)
	N = 284	N = 327	N = 611	N = 314	N = 319	N = 633	N = 1244

TABLE 6 Means and standard deviations on vote likelihood in each cell, Study 2.

TABLE 7 F-values, p-values and partial h^2 for ANCOVA results explaining variance in vote likelihood based on all the independent factors in the design and their interactions, Study 2.

Factor	F	p	η_p^2		
MS condition	0.63	0.43	0.001		
SQ candidate	25.62	< 0.001	0.021		
Candidate PID	0.45	0.50	0.000		
PID	22.13	< 0.001	0.037		
$MS \times SQ$ candidate	0.73	0.39	0.001		
$MS \times Candidate PID$	0.03	0.85	0.000		
$MS \times PID$	0.05	0.95	0.000		
SQ candidate \times Candidate PID	3.96	0.05	0.003		
SQ candidate \times PID	8.80	< 0.001	0.015		
Candidate PID \times PID	251.78	< 0.001	0.302		
$\label{eq:MS} \begin{array}{l} MS \times SQ \text{ candidate} \times Candidate \\ PID \end{array}$	0.91	0.34	0.001		
MS \times SQ candidate \times PID	2.38	0.09	0.004		
$\mathrm{MS}\times\mathrm{Candidate}\mathrm{PID}\times\mathrm{PID}$	1.49	0.23	0.003		
$\mathrm{SQ} \times \mathrm{Candidate} \ \mathrm{PID} \times \mathrm{PID}$	2.86	0.06	0.005		
$\mathrm{MS}\times\mathrm{SQ}\times\mathrm{Candidate}\mathrm{PID}\times\mathrm{PID}$	0.58	0.56	0.001		
Covariates					
Age	0.05	0.82	0.000		
Gender	2.57	0.11	0.002		
White	2.17	0.14	0.002		
Education	0.99	0.32	0.001		

MS, Mortality salience condition (Death =1, Dentist = 0), SQ = Experience condition (Status quo = 1, Change = 0); Candidate PID, Candidate party identity (Democrat = 0, Republican = 1); PID, Participant Party Identity (1 = Republican, 2 = Democrat, 3 = Independent). Gender is dummy coded with women = 1, men = 0, Race is dummy coded using White = 1, all others = 0. Education is measured on a 16-level scale treated as interval.

Democratic candidate. If H3 is true, we should expect an interaction between MS condition and experience of the candidate, such that participants in the MS condition should prefer the status quo candidate over the change candidate.

The results of the ANCOVA are presented in Table 7.

As can be seen in Table 7, there was a main effect of experience such that the candidate advocating the status quo (M = 52.98, SD = 27.63) was preferred over the candidate that advocated change (M

= 45.92, SD = 26.07). There was also a main effect of participant party identity. Pairwise follow-up Bonferroni post-hoc tests showed that the Republican participants in general rated vote likelihood as highest (M = 54.36, SD = 27.40), which was significantly higher than the Democrat participants, p < .001 (M = 46.04, SD = 27.82), while the independent participants (M = 51.15, SD = 22.96) did not differ significantly from either Republicans or Democrats.

Based on the hypotheses, we would expect an interaction between MS condition and candidate party identity, and participant party identity (H1), an interaction between MS condition and candidate party identity (H2), and an interaction between MS condition and experience of the candidate (H3), depending on which of these hypotheses were true. As can be seen in Table 7, none of the predicted interactions turned out significant.

There was an interaction between experience of the candidate and candidate party identity. Simple effects follow-up tests showed that when the candidate represented the status quo, vote likelihood was higher for the Democratic compared to the Republican candidate, F (1.1166) = 3.74, p = 0.05 (mean difference, 3.96, *SE* = 2.05).

Interestingly, there was a significant interaction between candidate experience and participant party identification. The simple effects analysis showed that for Democrat and Independent participants, the vote likelihood was significantly higher when the candidate represented the status quo compared to when the candidate represented change, $F_{\text{DemocratPID}}$ (1,1166) = 51.42, p < .001; $F_{\text{IndependentPID}}(1,1166) = 4.83$, p = .03, (mean difference_{DemocratPID} = 13.44, SE = 1.87, p < .001; mean difference_{IndependentPID} = 7.56, SE = 3.42).

In addition, there was, an interaction between candidate party identity and participant party identity. Not surprisingly, Republican participants rated higher vote likelihood for the Republican candidate, *F* (1.1166) = 223.38, *p* < 0.001 (mean difference = 31.79, *SE* = 2.13), Democratic participants rated higher vote likelihood for the Democratic candidate, *F* (1.1166) = 288.13, *p* < 0.001 (mean difference = 31.81, *SE* = 1.87), while independent participants made no difference between the Democratic and Republican candidate, *F* (1.1166) = 0.76, *p* = 0.39 (mean difference = 2.99, *SE* = 3.44).

While the overall interaction between MS condition, experience of candidate and participant party identity did not reach conventional significance levels, simple analyses showed significant differences. The simple effects analysis showed that in the mortality salience condition, both Independents and Democrats rated higher vote likelihood for the status quo candidate



compared to the change candidate, $F_{\text{IndependentPID}}(1.1166) =$ 8.00, p = 0.005; $F_{\text{DemocraticPID}}(1.1166) = 20.13$, p < 0.001, (mean difference_{IndependentPID} = 14.25, SE = 5.04, mean difference_{DemocraticPID} = 12.07, SE = 2.69). Republicans in the mortality salience condition did not differ between the status quo or change candidate, F(1.1166) = 0.00, p = 0.99. In the control condition, Democrats still rated higher vote likelihood for the status quo candidate, F(1.1166) = 32.13, p < 0.001 (mean difference = 14.81, SE = 2.61), and Republicans still did not differ in vote likelihood between the status quo or change candidate, F(1.1166) = 1.04, p = 0.31, and neither did the Independents, F(1.1166) = 0.04, p = 0.85.

Hence, the independents are driving the effect such that in the mortality salience condition, their vote likelihood for the status quo candidate increased, and their vote likelihood for the change candidate decreased, compared to the control condition. Democrats and Republicans react the same: Democrats prefer the status quo candidate regardless of mortality salience condition, while republicans do not make a difference between the status quo candidate and the change candidate in either condition. These results are plotted in Figures 4, 5. These results indirectly provide some support for H3, the psychological status quo hypothesis, since some respondents seem to be influenced to vote for the status quo candidate under mortality salience. However, this was true only for individuals who identified as independents. We believe that this result makes sense since individuals identifying as independents are likely to be more easily nudged to vote for one or the other main party candidates since they do not have a preferred presidential candidate representing their "group" that also has a clear chance of winning the election. It must be noted, though, that these results should be seen as preliminary since the overall interaction was not significant.

Finally, there was a close to significant interaction between candidate experience, candidate party identity and participant party identity. The simple effects analysis showed that the Democratic participants strongly preferred the status quo candidate, when the candidate was Democrat, F(1.1166) = 65.39,

p < 0.001 (mean difference = 19.65, SE = 2.43). This was true also for the Independents; when the candidate was Democrat, they preferred the status quo candidate over the change candidate, F (1.1166) = 4.82, p = 0.03 (mean difference = 10.81, SE = 4.93). The Republicans did not differ between the status quo and change candidate when the candidate was Democrat, F(1.1166) =1.00, p = 0.76. When the candidate was Republican, Republican participants still made no difference in vote likelihood between the status quo and change candidate, F(1.1166) = 0.54, p = 0.47. Democratic participants still preferred the status quo candidate when the candidate was Republican, F (1.1166) = 6.39, p = 0.01 (mean difference = 7.23, SE = 2.86), while independent participants made no difference between the status quo and change candidate when the candidate was Republican, F(1.1166) = 0.80, p = 0.37. In sum, again, the independents are driving the effect where they prefer the status quo candidate when that candidate is Democrat. The Democrats always prefer the status quo candidate, while Republicans make no difference between the status quo and change candidate, regardless of candidate party identity.

To sum up the results from Study 2, we see a pattern where the status quo candidate is generally preferred. This result is in line with previous research showing that people, in general, hold strong preferences for the status quo (Samuelson and Zeckhauser, 1988; Schweitzer, 1994; Skitka et al., 2002; Eidelman et al., 2009). This was particularly true for Democratic participants, while Republicans seem were relatively unaffected by candidate experience.

More interesting, and giving some support to our argument about the psychological status quo, is that independents who were exposed to mortality salience were more likely to vote for a status quo candidate than a change candidate. One reason why we only find an effect among respondents identifying as independents may be that these individuals are more easily "pushed" toward a specific candidate when exposed to threat, since they do not have strong partisan identity that makes them connected to a Republican or Democrat candidate. The fact that partisan hostilities and affective polarization are high, and have been so for the past 10–15 years in the US (see e.g., Iyengar et al., 2019), makes it less likely that



an individual who identifies with one of the main political parties will change their vote intention for a presidential candidate when experiencing threat.

7. General discussion

In this paper, we examined whether existential threat leads to preferences for specific types of presidential candidates. The results found here in a survey experiment performed the week before the US presidential election in 2016 show support for a hypothesis saying that when mortality is salient, individuals are more likely to vote for the candidate that is perceived as representing the status quo since death-related thoughts led to an increased likelihood of supporting Clinton. In a second study, we experimentally manipulated candidate traits (status quo or change), in addition to mortality salience, which allowed us to further evaluate further the hypotheses about status quo and change. The results suggested that individuals were more likely to vote for a candidate that represented the status quo than a candidate representing change, but only if they did not identify with one of the major parties. With partisanship being such a significant component in vote choice, and considering that the US is highly affectively polarized (e.g., Iyengar et al., 2019), it is perhaps unsurprising that this part of peoples' identity is not affected by relatively weak contextual manipulations. Hence, in both studies, those who did not identify with one of the major parties were more likely to be affected by the manipulation.

It seems plausible that the relatively weak effects we found in the present studies may be indicative of potentially stronger effects in other types of party systems. In many other Western democracies, the party system contains multiple parties, which means that there are options in the middle for voters that are not strongly attached to the most leftist or the most rightist parties. This is important since the furthest-from-center parties are also the ones where voters seem to be most identified with their party and consequently most biased in their perception of both the own and other parties (Renström et al., 2023). Given this, it is possible that mortality salience may have greater sway on voting decisions in multi-party systems.

We suggest that these results are most consistent with research on the impact of MS on political attitudes that has emphasized the political context as an important conditional feature (see, e.g., Kosloff et al., 2016). That is, this finding builds on Sterling et al. (2016) interpretation that the lack of impact of MS in experiments performed before the 2012 election between Obama and Romney may have been the result of ambiguity as to which of the candidates better represented the status quo. Such an interpretation could also reconcile other research on US presidential elections. In the 2004 and 2008 elections, voters would have had more clarity about which candidates represented the status quo, and in both elections, experiments show that MS increased support for George W. Bush (in 2004) and John McCain (in 2008), both being Republican candidates (Landau et al., 2004; Vail et al., 2009). Our study of the 2016 election, where the status quo distinction between the candidates was particularly strong, adds to these findings. Our results suggest that a candidate perceived as representing the status quo, rather than the politically more conservative candidate, can gain support under threat. In addition, our controlled experiment looking at candidate traits suggests that a candidate representing "change" is likely to lose voters under existential threat. Hence, we conclude that "psychological stability" rather than conservatism or right-wing ideology is the candidate attribute that provides the link between mortality salience and voting behavior.

The precise mechanism explaining an increased preference for the status quo following mortality cues remains somewhat unclear. From the literature, it can be argued that the status quo represents the "safe" alternative. Much psychological research shows that people generally prefer the status quo and oppose change (Skitka et al., 2002; Eidelman et al., 2009). Moreover, such effects may be moderated by experiences of threat. Threat eliciting fear increases risk estimates, precautionary planning and uncertainty (Lerner et al., 2003), leading to risk-aversive choices (Lerner and Keltner, 2000, 2001).

While the notion that Clinton represented a "status quo" candidate is based on several factors (e.g., association with the incumbent, nature of policy proposals, establishment reputation, experience), we cannot in the first study determine the precise mechanism through which those sensitive to MS might have seen Clinton as a "safer" choice. This is also the reason why we performed a second study where we, in a more controlled setting, manipulated some traits of individual political candidates. In this study, we added information on both candidate experience and whether they were proponents of change or not, and the results provided some support for the idea that there may be an increased preference for the status quo when mortality salience is induced. To fully understand the mechanism explaining the preference for the status quo candidate following mortality salience further controlled experiments are needed. As suggested, concerns for safety and security seem to be reasonable suggestions for mediating factors, but this should be established in a more controlled setting.

8. Limitations and implications

A limitation in our first study is that we cannot isolate the impact of other candidate features related to Hillary Clinton as a presidential candidate that do not relate to her role as the status quo choice yet may have contributed to an increased impact of MS on support for her. However, the second study provides some evidence that this mechanism is plausible in a more general context. Furthermore, we do not interpret our findings as consistent with the intuition behind prominent alternatives that have been suggested in the previous literature. One attribute that has been discussed as influencing the impact of MS is charisma (Cohen et al., 2017). For example, Kosloff et al. (2016; p. 139), show that "MS heightened liking of charismatic candidates who shared the perceiver's political orientation" when performing an experiment manipulating charisma. Most observers of the 2016 US election campaign would not, however, see Clinton as the more charismatic candidate (see, e.g., Stevenson, 2016; Tsipursky, 2016; Cohen et al., 2017),¹¹ suggesting that charisma is not part of the explanation why she would gain support when MS is increased.

Another candidate feature that is relevant to discuss in the 2016 US election context is gender. Here the literature has suggested a stereotype bias effect, where female candidates is likely to be hindered when MS increases, as TMT suggests that existential threat should lead to stronger adherence to stereotypes (see, e.g., Schimel et al., 1999). In a study manipulating the gender and gender stereotypic traits of candidates, Hoyt et al. (2009; p. 233) show that under mortality salience, female participants preferred the more agentic candidate, regardless of candidate sex, and males preferred the agentic male candidate, finding support for stereotype bias processes. Being a female candidate, Clinton should clearly not

have benefitted from such stereotype bias processes, regardless of whether she may have been seen as agentic or not. Hence, such mechanisms are not likely to explain the results found here.

In the second study, we found no main effects and few interactions with MS. This indicates that the manipulation was not as strong as we expected. Recently, there has been some debate concerning the validity of the manipulation of mortality salience and its effects. We do not take a position in this debate but establish that the MS manipulation does not seem to be very powerful. In addition, both our studies were underpowered, meaning that even if the expected effects exist, our studies had low probabilities of capturing these effects. That could imply that a stronger manipulation or larger samples is needed. Our argument, that the feelings evoked by threat, such as fear and anxiety, may still be important factors in explaining support for change or stability. This weakness of the manipulation may also have influenced the outcomes such that we only see the expected effects on the independents. Even though it is reasonable to expect that they are the ones most influenced by contextual factors, we still believe that a stronger manipulation evoking fear or anxiety also should influence more strongly identified partisans. We therefore suggest that future research considers other ways of evoking such emotions. Indeed, our results partly contradict those of Cohen et al. (2017) who found that mortality salience increased support for Trump. However, that was only relative to the control condition and not relative to Clinton. Support for Clinton remained unaffected by the MS condition. Such inconsistencies further highlight the need to clearly disentangle the mechanisms under which MS leads to support for different candidates.

While the present article focused on existential threat and provides some information that aids in disentangling the effect of such threat, threat could also come in other forms. To explain preference for different candidates, we suggest also exploring other forms of threats. This could be group-based threats for instance. A recent study showed that populist rhetoric framing immigration as threatening increases anger and affective polarization (Renström et al., 2023). It is plausible that such rhetoric would also influence preferences for particular political candidates or parties.

Another limitation in our studies is that in the US election the candidates varied on gender in addition to other characteristics. In the second study, we chose to keep gender constant by describing all candidates to be men. Since our design was already extensive, we chose not to include gender. However, this is another factor that may influence vote choice and should be further explored.

Another limitation is that the descriptions of the candidates in Study 2 did have some features that might have influenced the results. For instance, we presented the candidate representing change as a "businessman" with skills in "entrepreneurship." It is possible that if this candidate was presented in another way, still representing change, the results might have differed. In addition, it would be desirable to include a more direct measure of whom the participants perceive represents the status quo.

Finally, given small effect sizes and inclusion of interactions, our studies are likely underpowered (Blake and Gangestad, 2020). Thus, studies with a significantly larger sample are desired. With an increased sample size, it would also be possible to analyze further differences between groups, for example between partisans that are strongly or weakly attached to their party. This would allow us to evaluate whether weakly attached Democrats or Republicans

¹¹ See, for example, http://www.upi.com/Top_News/Opinion/2016/09/ 29/Why-the-pundits-are-wrong-about-Hillary-Clinton-dominating-thedebate/2991475157343.

behave in a manner similar to those who identified as independents in our study when exposed to an existential threat.

Trump's campaign was referred to as the "Campaign of Fear" (New York Times, 2016), emphasizing the danger posed by, for example, terrorism. However, our results suggest that when exposed to existential threat, it is not certain that the type of candidate that Trump represented, one advocating change rather than stability, would benefit. Our results are instead in line with research that suggests that Hillary Clinton may have had an advantage over Trump when anxiety over threats such as terrorism increased (see Albertson and Gadarian, 2015, 2016). If Clinton was seen as a status quo alternative, this suggests that she was not necessarily disadvantaged by Trump's threatening rhetoric in the campaign, at least in the context of voter persuasion.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the corresponding author, without undue reservation.

Ethics statement

The study was reviewed and approved by the regional ethics board at Lund University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

HB and RC came up with the original idea and created most of the material for the first study. ER designed the second study

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with help from HK. RC and ER were mainly responsible for the data analyses. HB wrote the article draft. ER and HB revised the manuscript. All authors contributed to developing the manuscript.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpos.2023. 1040644/full#supplementary-material

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