

## THE POLITICS OF FEAR: IS THERE AN IDEOLOGICAL ASYMMETRY IN EXISTENTIAL MOTIVATION?

John T. Jost

*New York University*

Chadly Stern

*University of Illinois, Urbana-Champaign*

Nicholas O. Rule

*University of Toronto*

Joanna Sterling

*Princeton University*

A meta-analysis by Jost, Glaser, Kruglanski, and Sulloway (2003) suggested that existential needs to reduce threat were associated with political conservatism. Nevertheless, some maintain that fear plays as prevalent a role on the left as the right. In an attempt to resolve this issue, we reviewed evidence from 134 different samples ( $N = 369,525$ ) and 16 countries—a database 16 times larger than those previously considered. Although the association between fear of death and conservatism was not reliable, there was a significant effect of mortality salience ( $r = .08\text{--}.13$ ) and a significant association between subjective perceptions of threat and conservatism ( $r = .12\text{--}.31$ ). Exposure to objectively threatening circumstances, such as terrorist attacks, was associated with a “conservative shift” at individual ( $r = .07\text{--}.14$ ) and aggregate ( $r = .29\text{--}.66$ ) levels of analysis. Psychological reactions to fear and threat thus convey a small-to-moderate political advantage for conservative leaders, parties, policies, and ideas.

**Keywords:** political conservatism, existential motivation, fear, threat, meta-analysis

The nexus between fear and politics is one that attracts a great deal of popular and academic interest along with a dizzying heterogeneity of opinion and judgment (e.g., Strauss, 2016). One news report suggested, for instance, that the “fear

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Address correspondence to John T. Jost, Department of Psychology, 6 Washington Place, 5th floor, New York University, New York, NY 10003; E-mail: john.jost@nyu.edu

of death" was driving the 2016 Republican Party primary race for president in the United States (Judis, 2015). Another article, entitled "Donald Trump and the Politics of Fear," began this way:

"People are scared," Donald Trump said recently, and he was not wrong. Fear is in the air, and fear is surging. Americans are more afraid today than they have been in a long time: Polls show majorities of Americans worried about being victims of terrorism and crime, numbers that have surged over the past year to highs not seen for more than a decade. Every week seems to bring a new large- or small-scale terrorist attack, at home or abroad....Overall crime rates may be down, but a sense of disorder is constant....Fear pervades Americans' lives—and American politics. Trump is a master of fear, invoking it in concrete and abstract ways, summoning and validating it. More than most politicians, he grasps and channels the fear coursing through the electorate. And if Trump still stands a chance to win in November, fear could be the key. (Ball, 2016)

An opinion article by the psychologist Arie Kruglanski (2015) likewise conjectured that fear contributed to Trump's popularity, at least in part, because "existential anxieties...spawn yearnings for order and predictability" that "privilege simplistic concepts that lack nuance and lend significant edge to leaders who talk tough and offer what psychologists call 'closure.'"

These observations fit a long history of theorizing in social science about the social and psychological appeal of right-wing ideology, especially extreme right-wing ideology. For example, members of the Frankfurt School emphasized the role of fear and threat in stimulating support for the Nazi movement in Germany (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). According to this view, potential authoritarians "do not succeed in making the important developmental step from mere 'social anxiety' to real conscience. Fear of punishment by external authorities rather than self-chosen and ego-assimilated principles continue to be the primary determinant of their behavior" (p. 455). Through psychodynamic mechanisms, such as displacement and projection, these theorists argued that "fear of being victimized can be expressed against" socially sanctioned scapegoats such as Jews, Gypsies, Communists, liberals, gay people, and other minority groups in society (p. 485).

Why would there be a psychological connection between threat and conservative, right-wing ideology? According to Wilson (1973), the experience of fear and threat motivates one to "cling" to the status quo and to resist social change. He argued, for instance, that "The common basis for all of the various components of the conservative attitude syndrome is a *generalized susceptibility to experiencing threat or anxiety in the face of uncertainty*" (p. 259, emphasis in original). Jost, Glaser, Kruglanski, and Sulloway (2003) sought to elaborate on these ideas by developing a theory of political conservatism as motivated social cognition. These authors proposed that there is a natural correspondence—or, as Tomkins (1963) put it, an "ideo-affective resonance"—between epistemic and existential needs to manage

uncertainty and threat, on one hand, and the two core values of political conservatism, namely respect for *tradition* and *hierarchy* (or *inequality*), on the other. When one confronts a world that appears dangerous and unpredictable, it is possible to find solace in the maintenance of what is familiar and known (the status quo) and entrust one's fate to powerful, prestigious authority figures. From this perspective, liberal concerns for tolerance, progress, diversity, and equality may seem luxurious, if not irresponsible.

## HISTORICAL AND ANECDOTAL EVIDENCE

The social historian Richard Hofstadter (1952/1965) identified a “paranoid style” that was often (but not exclusively) associated with right-wing politics in the United States. He recounted that “panic, which came with the general Western reaction to the French Revolution” was “heightened” by “the response of certain reactionaries, mostly in New England and among the established clergy, to the rise of Jeffersonian democracy” (p. 10). Hofstadter traced a style of political thinking that involved “heated exaggeration, suspiciousness, and conspiratorial fantasy” (p. 3) to a wide range of “pseudo-conservative”<sup>1</sup> and right-wing movements throughout the 19th and 20th centuries, including anti-Masonic, anti-Catholic, and anti-Mormon organizations; opposition to the income tax amendment to the U.S. Constitution and Roosevelt’s “New Deal”; the John Birch society and the fear of Communism that drove Senator McCarthy’s purges; and the unsuccessful presidential candidacies of Robert Taft, Barry Goldwater, and George Wallace (see also Bennett, 1995; Lipset & Raab, 1978). According to Hofstadter, “The restlessness, suspicion, and fear shown in various phases of the pseudo-conservative revolt give evidence of the anguish which the pseudo-conservative experiences in his capacity as a citizen. He believes himself to be living in a world in which he is spied upon, plotted against, betrayed, and very likely destined for total ruin” (p. 45).

In a book entitled *Fear: The History of a Political Idea*, Corey Robin (2004) wrote that “fear has undermined liberal commitments to freedom and equality, empowering some of the most revanchist, conservative forces in American life” (p. 250). In the aftermath of the terrorist attack of September 11, 2001, former Vice President Al Gore criticized the “radical right” as “a coalition of those who fear other Americans as agents of treason, as agents of confiscatory government, as agents of immorality” (Gore, 2004, p. 790). As a presidential candidate in 2007, Demo-

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1. Hofstadter (1952/1965) followed Adorno et al. (1950) in characterizing the subjects of his analysis as “pseudo-conservative” because “although they believe themselves to be conservatives and usually employ the rhetoric of conservatism...[t]hey have little in common with the temperate and compromising spirit of true conservatism in the classical sense of the word” (p. 43). As Adorno et al. put it, “The pseudo-conservative is a [person] who, in the name of upholding traditional American values and institutions and defending them against more or less fictitious dangers, consciously or unconsciously aims at their abolition” (p. 676).

crat Barack Obama objected to the “fearmongering” he perceived during the Republican primary debates (Begley, 2007). For several years, media critics have complained about Fox News’s use of scare tactics to build support for right-wing causes: “Fear...is precisely what [Roger] Ailes [of Fox News] is selling: His network has relentlessly hyped phantom menaces like the planned ‘terror mosque’ near Ground Zero” (Dickinson, 2011). Upon accepting the Democratic nomination for president in 2016, Hillary Clinton criticized her Republican counterpart, Donald Trump, on the grounds that he “wants us to fear the future and fear each other.”

Despite these historical and anecdotal examples, some have argued that fear plays just as prevalent a role on the political left as it does on the right (Anson, Pyszczynski, Solomon, & Greenberg, 2009; Brandt, Wetherell, & Reyna, 2014; Castano et al., 2011; Charney, 2014; Greenberg & Jonas, 2003; Malka, Soto, Inzlicht, & Leikkes, 2014). Oft-cited cases include President Lyndon B. Johnson’s well-known “Daisy Chain” advertisement that preyed upon fears of a nuclear war—although the advertisement aired only once on television during the 1964 campaign (Begley, 2007).<sup>2</sup> Some authors have also resisted the notion that threatening circumstances are more conducive to conservative (vs. liberal) ideological outcomes. Huddy and Feldman (2011) noted that Americans were far more supportive of President George W. Bush and his foreign policies after September 11, 2001 (than before), but these changes in public opinion were not necessarily reflected in conservative self-identification at the aggregate level of analysis. The authors concluded that, “The perceived threat of terrorism lends support to strong national security policy but does not affect Americans’ broad political ideology or their position on social policies more broadly” (p. 464).

At the same time, a number of historical and archival studies in social and political psychology have indicated that threatening circumstances tend to increase the relative popularity of conservative, authoritarian, and right-wing candidates, policies, and ideologies—and to decrease the relative popularity of liberal, libertarian, and left-wing candidates, policies, and ideologies (Doty, Peterson, & Winter, 1991; McCann, 1997; Peterson, Doty, & Winter, 1993; Rickert, 1998; Sales, 1972, 1973). Likewise, evidence from personality psychology suggests that individual differences in fear of death and perceptions of a dangerous world correlate with right-wing (vs. left-wing) orientation (Altemeyer, 1998; Duckitt, 2001; Wilson, 1973). These and many other studies were reviewed in quantitative fashion by Jost et al.

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2. An anonymous reviewer also raised the example of Hillary Clinton’s “3 A.M. phone call” advertisement, but it should be pointed out that this advertisement was used in her 2008 primary campaign against fellow Democrat Barack Obama—as a challenge from the *right*, not the left. In any case, the pertinent issue, which we seek to address in this article, is whether threat-based political communication is likely to be as *effective* in gaining support for liberal (vs. conservative) causes, regardless of how common this type of communication is. It is quite possible, for instance, that liberal political operatives often *assume* that such tactics are far more useful for their purposes than they actually are.

(2003), who conducted the first meta-analytic study to characterize the politics of existential motivation.

## META-ANALYTIC EVIDENCE

In an effort to integrate 50 years of theory and research on the social, cognitive, and motivational underpinnings of adherence to left-right (or liberal-conservative) ideology, Jost et al. (2003) reviewed studies carried out between 1958 and 2002 that linked variability in political attitudes to situational or dispositional variability in (a) epistemic motives to reduce uncertainty and (b) existential motives to reduce threat. The theoretical assumption was that these motives would be tied to conservative ideological preferences for traditionalism (or resistance to change) and the acceptance of hierarchy (or inequality). Consistent with this perspective, a meta-analytic review of 88 studies conducted in 12 countries involving 22,818 individual cases or participants confirmed that (a) epistemic motives associated with intolerance of ambiguity, dogmatism, avoidance of uncertainty, cognitive simplicity, and personal needs for order, structure, and closure, as well as (b) existential motives associated with death anxiety and system-level threats were positively related to the endorsement of conservative or right-wing positions, parties, and leaders. Here, we focus on the connection between existential motivation and ideological preferences.

Notably, two other meta-analytic reviews have reached the same conclusions as Jost et al. (2003). First, Onraet, Van Hiel, Dhont, and Pattyn (2013, Study 2) reviewed the results of 76 studies based on 109 independent samples and 22,086 research participants from five different countries. Some of these studies (involving 21 samples) were included in Jost et al.'s earlier meta-analysis, but most (88 samples) were not. Onraet et al. found that death anxiety ( $r = .24, p < .001$ ), neurotic anxiety ( $r = .24, p < .001$ ), perceptions of a dangerous world ( $r = .33, p < .001$ ), and various other measures of "external threat" (such as terrorism [ $r = .32, p < .001$ ] and economic crisis [ $r = .37, p < .001$ ]) were positively and significantly related to the endorsement of conservative, rightist (as opposed to liberal, leftist) attitudes. The authors noted that their "results corroborate Jost et al.'s (2003) main conclusion that threat is related to right-wing attitudes" (p. 241).

A second meta-analysis by Burke, Kosloff, and Landau (2013) focused more narrowly on the question of how experimental manipulations of mortality salience (a method designed to investigate hypotheses derived from terror management theory) affect political attitudes. They reviewed the results of 31 experiments involving 3,162 research participants from four different countries. All but one of these studies were published after 2003, and none were included in Jost et al.'s (2003) meta-analysis. Results based on 21 tests of the hypothesis that mortality salience would increase conservative responding upheld the "conservative shift" hypothesis ( $r = .22, p < .02$ ), consistent with Jost et al.'s meta-analysis. Burke et al. also conducted 15 tests of the "worldview defense" hypothesis that mortality

salience would increase the intensity of whatever opinions one held prior to the experimental manipulation; this hypothesis was upheld as well ( $r = .35, p < .01$ ), and the two effect sizes did not significantly differ.

The meta-analytic reviews conducted by Jost et al. (2003), Onraet et al. (2013), and Burke et al. (2013) are quite informative, especially because they provide converging evidence of an “elective affinity” between fear and threat, on one hand, and attraction to conservative ideology, on the other. At the same time, each has limitations. Although Jost et al.’s article was the most comprehensive review on this topic at the time of its publication, it included very few studies on certain topics, such as death anxiety, mortality salience, and terrorist attacks. Furthermore—as Van Hiel, Onraet, and DePauw (2010) pointed out—there were some studies conducted between 1958 and 2002 that were missed. The main limitation of Jost et al.’s review, however, is that it is now out-of-date. In part because of the article’s success in stimulating further research, far more studies have been conducted on the politics of epistemic and existential motivation in the past 14 years than in the previous 50 years (see also Jost, Sterling, & Stern, *in press*).

For example, a great many studies conducted after the publication of Jost et al.’s (2003) meta-analysis suggest that conservatives score higher than liberals on subjective measures of fear and threat (e.g., Federico, Hunt, & Ergun, 2009; Hennes, Nam, Stern, & Jost, 2012; Hibbing, Smith, & Alford, 2014; Jost et al., 2007; Jugert & Duckitt, 2009; Van Hiel, Cornelis, & Roets, 2007; van Leeuwen & Park, 2009). In a series of experiments conducted by terror management theorists, liberal college students exhibited a strong preference for Democratic presidential candidates under normal (or control) conditions but switched their support to Republican candidates following subliminal and supraliminal death primes (Cohen, Ogilvie, Solomon, Greenberg, & Pyszczynski, 2005; Landau et al., 2004; Ogilvie, Cohen, & Solomon, 2008; Vail, Arndt, Motyl, & Pyszczynski, 2009). Furthermore, a plethora of studies indicate that objectively threatening circumstances, such as terrorist attacks, tend to precipitate ideological shifts toward more conservative leaders, opinions, and values—even among self-identified liberals (e.g., Bonanno & Jost, 2006; Echebarria-Echabe, & Fernández-Gude, 2006; Economou & Kollias, 2015; Gailliot, Schmeichel, & Baumeister, 2006; McCann, 2014; Nail, McGregor, Drinkwater, Steele, & Thompson, 2009; Schüller, 2015; Thórisdóttir & Jost, 2011; Ullrich & Cohrs, 2007; Van de Vyver, Houston, Abrams, & Vasiljevic, 2016; Willer, 2004). Thus, a much larger empirical database is now available to investigate specific hypotheses about the politics of existential motivation.

Some of these more recent studies were reviewed by Onraet et al. (2013), but most were not. Their database was approximately the same size as Jost et al.’s (2003), but it was more focused and included a larger number of tests of the hypothesis that fear, anxiety, and threat would be associated with political conservatism. Despite these strengths, the authors made a number of conceptual and methodological decisions that strike us as problematic. First, Onraet et al. argued for a strong categorical distinction between “internal” (psychological) and “external” (sociological, economic, and political) forms of threat—although they noted that the two were positively and significantly correlated, with  $rs$  ranging from .36

to .44 ( $p < .001$ ). As social psychologists, we are wary of treating “internal” forms of threat (such as death anxiety) as qualitatively different from “external” forms of threat (such as exposure to terrorism)—especially insofar as the effects of the latter may be mediated by the former.<sup>3</sup> A second, related problem with the internal/external distinction, which the authors acknowledge, is that “individuals adhering to right-wing attitudes [may be] more prone to externalize their anxieties... by blaming societal circumstances, rather than looking inwards” (p. 244). Indeed, this very idea was central to Adorno et al.’s (1950) conception of the authoritarian personality.

A third concern is that Onraet et al. (2013) included dogmatism, ethnocentrism, and superstition as *measures* of conservative ideology. This seems inappropriate, insofar as there are ongoing scientific controversies about the extent to which conservatism is empirically related to each of these other variables. Fourth, Onraet et al. excluded pertinent data in ways that might be considered arbitrary and unnecessary. When studies in their database contained two measures of political ideology (such as right-wing authoritarianism and social dominance orientation), the authors randomly selected one of the two scores and dropped the other. Likewise, if a given study contained three measures of political ideology that included ideological self-placement, the authors selected the measure of ideological self-placement and dropped the other two. From our perspective, this wastes valuable data, so we took steps in our meta-analysis to incorporate (through averaging procedures) all available measures of political ideology. Fifth, Onraet et al. adopted what they described as “rather conservative strategies that generally underestimate the true magnitude of effect sizes,” such as coding nonsignificant results as zero and deriving “the lower limit effect estimates from the reported significance level” in the absence of more specific information (p. 238). In contrast, we attempted to obtain more precise effect size estimates by contacting the original authors of an article and asking for more information (or obtaining the datasets and performing additional calculations ourselves).

The meta-analysis by Burke et al. (2013) focused exclusively on mortality salience experiments in which people are asked to think about their own death. This paradigm is useful for addressing the question of whether there is an elective affinity between feelings of threat and endorsement of conservative (as opposed to liberal) ideology, but it is a rather narrow way of construing threat. One key limitation is the fact that one of the *control* conditions used most often in these experiments (thinking about a painful visit to the dentist’s office) is suboptimal because it also induces feelings of threat, albeit in a milder form. The distinction between fear of pain and fear of death may be important for testing hypotheses derived from terror management theory but is not necessarily germane to the question of

3. Onraet et al. (2013) claim that “internal and external threats solicit different processes” and their effects are “qualitatively different” (p. 244), but it is unclear to us what this might mean. In their meta-analysis, they included four studies of “test anxiety,” which they classified as an “internal threat,” although it refers to fear concerning a specific external event—namely, an academic examination. We found their terminology unclear on a number of levels and concluded that test anxiety, which may well differ from one academic subject to another, was probably unhelpful for determining whether fear and threat (in general) are more conducive to conservative (vs. liberal) ideological outcomes.

whether feelings of fear and threat in general promote conservative (vs. liberal) attitudes and opinions.

Several additional features of the Burke et al. (2013) meta-analysis render it less than ideal for resolving questions about the politics of existential motivation. First, several studies included in Burke et al.'s meta-analysis employed dependent variables that were not necessarily ideological, such as support for the use of violence (or military force). Although support for violence may *correlate* with conservatism in Israel and the U.S. (and perhaps elsewhere), it is hardly a "pure" measure of ideology and is likely affected by other non-ideological factors, such as feelings of frustration, aggression, and out-group hostility. Second, in more than half of the studies included in Burke et al.'s meta-analysis, ideology was estimated on the basis of single issues—such as support for capital punishment, belief in evolution, and attitudes toward religious martyrs. These single issue measures strike us as potentially unreliable and noisy, especially when the issues themselves are semantically related to the subject of death. Therefore, we excluded such studies from our review in favor of those that measured left-right preferences directly in terms of ideological self-placement or indirectly on the basis of multi-item scales that combined attitudes on a variety of issues.

A third concern is that many of the experiments reviewed by Burke and colleagues (2013) featured interacting (or moderating) variables, such as priming participants at the outset with "compassionate Biblical values," secure relational attachment, or descriptions of warfare as akin to violence in the animal kingdom. To the extent that mortality salience exerts many different kinds of effects—such as increasing conformity to norms or values that are highly accessible, affiliating with others in the immediate social environment, denying one's animal nature, and derogating those who flout culturally prevalent ideals (and the literature on terror management theory suggests that it does all of these things and many more)—it is quite possible that some of these myriad consequences of mortality salience obscure the true nature of its effects on ideological affinities. To overcome the limitations of previous meta-analyses in this area, then, we sought to identify the largest number of high-quality studies in which feelings of threat were measured or induced and left-right (or liberal-conservative) ideological preferences were measured in a valid, reliable manner.

## UNRESOLVED ISSUES

It should be emphasized that—despite many conceptual and methodological differences, the three meta-analyses by Jost et al. (2003), Onraet et al. (2013), and Burke et al. (2013) all point to the same conclusion, which is that feelings of threat and exposure to threatening circumstances are significantly associated with the endorsement of conservative or rightist (as opposed to liberal or leftist) attitudes. Despite the relative uniformity of evidence that has accumulated, skepticism persists in some quarters of the social sciences. A number of authors deny that there is any meaningful relationship between conservative ideology and existential mo-

tives to reduce fear and threat (Anson et al., 2009; Brandt, Wetherell, & Reyna, 2014; Castano et al., 2011; Charney, 2014; Greenberg & Jonas, 2003; Malka et al., 2014).

Furthermore, some theoretical perspectives in social psychology are inconsistent with the notion that threat would be associated with conservatism. For instance, Brandt, Wetherell, et al. (2014) noted that “threat-compensation perspectives” (Proulx, Inzlicht, & Harmon-Jones, 2012) imply that “people will react to threats by affirming their ideological in-group and core ideological values (i.e., liberals affirming liberal values and vice versa)” (p. 308). This hypothesis has also been advanced by terror management theorists (e.g., Anson et al., 2009; Castano et al., 2011; Greenberg & Jonas, 2003). Thus, Pyszczynski (2004) wrote that “reminders of mortality increase one’s tendency to like and support those who share one’s political orientation” (p. 843).<sup>4</sup> Huddy and Feldman (2011) dubbed this the “ideological intensification hypothesis” and pointed out that it is at odds with the “conservative shift hypothesis” (see also Burke et al., 2013).

Thus, some degree of doubt or controversy persists as to whether there are reliable ideological differences in fearfulness, sensitivity to threat, and existential motivation, and whether situations that are subjectively or objectively defined as threatening tend to increase the psychological appeal of conservative (or rightist) ideological outcomes and decrease the psychological appeal of liberal (or leftist) outcomes. These are key questions about the politics of fear, and answering them should be an important priority for basic and applied social science. What is needed, it seems to us, is an integrative review and quantitative synthesis of the available evidence, which has been accruing at a fairly rapid rate since the meta-analysis published by Jost et al. (2003). In this article, we provide just such an integrative synthesis and also consider two issues not systematically addressed in prior reviews.

First, some have suggested that personal needs for security (and certainty) should be associated with social conservatism but not economic conservatism (Johnston, 2012, 2013; Malka & Soto, 2015; Malka et al., 2014). Presumably, this is because liberal economic policies, which include support for welfare and public health care programs, may provide more of a “safety net” than conservative economic policies. On the other hand, the economic status quo in the U.S. and other Western nations is quite clearly capitalist, and there is some reason to believe that the justification of economic inequality under capitalism is at least partly motivated by existential motives to manage threats associated with economic protest and mass rebellion (e.g., Adorno et al., 1950; Altemeyer, 1998; Hennes et al., 2012; Jost et al., 2003; Sidanius & Pratto, 1999). Although most of the studies we could find utilized general measures of political ideology that combine social and economic

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4. Although he did not dwell on the possibility, Pyszczynski (2004) cited two reasons why an elective affinity might develop between existential motivation and conservative rhetoric and ideology: (1) “reminders of mortality make people long for structure and order, and pushes them to accept quick and easy answers” (p. 845); and (2) “people are caught between the potential for growth and open-mindedness, but held back by the fears that lead them to cling to old, simple-minded answers that maintain the status quo” (p. 845). These ideas are highly compatible with Jost et al.’s (2003) analysis of political conservatism as motivated social cognition.

attitudes, our review may provide some tentative insight into the generalizability of the relationship between existential motivation and ideological orientations.

Second, it seems useful to distinguish between *fear*—an emotional reaction to a certain, specific, well-defined threat, and *anxiety*—an emotional reaction to an uncertain, imprecise, or vague (ill-defined) threat. In responding to Hibbing et al.’s (2014) proposal that conservatives are more sensitive than liberals to negative or threatening stimuli, Lilienfeld and Latzman (2014) wrote that:

The data point not to global differences in negativity bias, but to differences in threat bias, most likely emanating from differences in fearfulness....The difference between negativity bias and threat bias is hardly semantic. The personality literature points consistently to the existence of largely orthogonal higher-order dimensions of negative emotionality (NE) and Constraint...Most evidence suggests that Constraint, more than NE, is the principal nexus of individual differences in threat sensitivity, especially when perceived dangers are relatively clear-cut....[T]he literature suggests that liberals and conservatives differ in threat sensitivity, presumably reflecting individual differences in Constraint (see also Jost et al. 2003), but not in their attunement to the negative....In sum, the principal difference between liberals and conservatives appears to lie not within the domain of NE, but rather within Constraint and probably fearfulness in particular, manifesting itself in differential sensitivity to reasonably clear-cut threats. (p. 319)

Likewise, Castano et al. (2011) argued that “Conservatives may be more fearful of death, as some data suggest and as Jost et al.’s Motivated Social Cognition model contends, but this does not necessarily imply that they experience greater anxiety when presented with death stimuli” (pp. 617–618). These speculations are broadly consistent with the results of a telephone survey conducted in the aftermath of September 11, 2001, which suggested that individuals who perceived a *high threat of future terrorist attacks* strongly supported President George W. Bush and his policies, whereas those who experienced *high levels of anxiety* in response to the attacks were less supportive of the president and his policies (Huddy, Feldman, Taber, & Lahav, 2005). Our meta-analytic review therefore focused on ideological differences in existential motivation with respect to specific (rather than nonspecific) threats—that is, fear rather than anxiety.<sup>5</sup>

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5. For this reason, we excluded from our review studies focusing on ideological differences in neuroticism (cf. Lilienfeld & Latzman, 2014), which constituted 75% of the “internal threat” studies reviewed by Onraet et al. (2013). Some studies suggest that conservatives are more neurotic than liberals (Onraet et al., 2013; Verhulst, Eaves, & Hatemi, 2015), whereas others suggest the opposite (Gerber, Huber, Doherty, Dowling, & Ha, 2010)—but the overall effect, as estimated with meta-analysis, seems to be very close to zero (Sibley, Osborne, & Duckitt, 2012, p. 668). The totality of the evidence, in any case, contradicts Ball’s (2016) claim that “neuroticism...correlates strongly with liberal political attitudes.” Jost and Thompson (2000) proposed that the relationship between conservatism and neuroticism should be negative for members of advantaged groups but positive for members of disadvantaged groups in society, insofar as the latter (but not the former) face conflicts between feeling good about themselves and feeling good about the status quo.

## METHOD

### STUDY SELECTION

We located nearly 100 published and unpublished studies for the present meta-analysis using several different means. First, we included relevant studies cited in previous meta-analyses by Jost et al. (2003), Onraet et al. (2013), and Burke et al. (2013). Second, we used various academic search engines (e.g., PsycINFO, Google Scholar) to search terms related to political (e.g., ideology, conservatism, system justification) and psychological variables (e.g., threat, mortality salience) and their combinations. Third, we consulted papers citing Jost et al.'s article to determine whether they included relevant data or citations. Fourth, we examined the reference sections of recent articles and used "snowball" methods to identify additional studies of possible relevance. Fifth, to reduce the possibility that publication bias would skew the average effect size estimates of the meta-analysis, we requested unpublished data by contacting colleagues and sending an open call to the Society for Personality and Social Psychology electronic mailing list on July 20, 2015.

From these studies, we applied two criteria for inclusion in the meta-analysis. First, we required that at least one measure of political ideology was administered in the study. To obtain precise estimates of the relationship between existential threat and political ideology, we only analyzed studies that included measures of ideology that were fairly general in nature (e.g., ideological self-placement, right-wing authoritarianism, social dominance orientation, system justification), paying special attention to social and economic dimensions of ideology. We excluded studies that assessed ideology in terms of a single issue (e.g., attitudes toward gun control or evolution) or in a manner that seemed highly specific to a given time and place. Second, we restricted our review to studies that included either measures or manipulations of constructs related to fairly intense fears, such as the fear of death; mortality salience; and either subjective perceptions or objective exposure to highly dangerous or threatening circumstances, such as criminal and terrorist attacks. This yielded 134 distinct samples and a total of 369,525 individual participants who contributed to the effect size estimates. We coded each study/sample for author, publication year, relevant political variable(s), relevant psychological variable(s), and sample characteristics (i.e., sample size and participant source).

### EFFECT SIZE CATEGORIES

To calculate effect sizes, we separated studies (or samples) into five categories. The first included studies examining the association between fear of death and political ideology. The second included studies investigating the effects of mortality salience manipulations on political ideology. The third included studies examining the association between subjective perceptions of social, economic, or physical threat and political ideology. For the purposes of this review, we excluded percep-

tions of specific, ideologically defined social groups (e.g., Democrats vs. Republicans) as threatening, insofar as belief-based groups will, by definition, be more or less “threatening” depending on a person’s ideology (e.g., Brandt, Reyna, Chambers, Crawford, & Wetherell, 2014). The fourth category included individual-level studies examining the association between exposure to objective circumstances that were socially, economically, or physically threatening and subsequent measures of political ideology. A fifth and final category included those studies in which only aggregate (e.g., state-level or country-level) data concerning exposure to threat and/or political ideology was available. We conducted separate analyses with respect to each of these five categories of existential motivation.

### STATISTICAL ANALYSES

We report all relevant point estimates in online tables that are archived on the website of the Open Science Framework (<https://osf.io/w7vj7/>). Several samples included multiple effect size estimates. In these situations, we averaged these to estimate a single independent effect size for each sample prior to statistical aggregation. We will refer to the former as “tests of the hypothesis” and the latter as “independent effect estimates.” We conducted the meta-analyses using Pearson’s correlation coefficient ( $r$ ) as the effect size. When studies reported a different effect size (e.g., Cohen’s  $d$ , log odds), we converted these to  $r$  using equations provided by Borenstein, Hedges, Higgins, and Rothstein (2009). If the original articles failed to report a given effect size, we calculated Pearson’s  $r$  from  $F$ - or  $t$ -statistics using Wolf’s (1986) equations.

Once we obtained all of the effect sizes and converted them to Pearson’s  $r$ , we used Comprehensive Meta-Analysis Software (CMA; Borenstein, Hedges, Higgins, & Rothstein, 2005) to meta-analyze the effects for each of the five categories of existential motivation. To carry out the meta-analysis, we first converted the Pearson  $r$  estimates into Fisher’s Z scores; this unbounds the estimates, providing a less biased standard error of the aggregate effect sizes (McNemar, 1962). Using the Fisher’s Z scores, we calculated an unweighted average effect size for each category and a weighted average effect size that accounted for the different sizes of the samples using the inverse variance (Rosenthal, 1991). We indicate significance for both the unweighted and weighted effect sizes and calculated 95% confidence intervals for the weighted effect sizes.

### EXAMINING PUBLICATION BIAS AND EFFECT SIZE HETEROGENEITY

For each category, we also conducted two “file-drawer” analyses to estimate the degree to which the statistical significance and size of the average effect was likely influenced by publication bias (Orwin, 1983; Rosenthal, 1979). To the extent that publication bias influences the significance and size of a given effect, this would

suggest that the average reported effect size overestimates the true population effect.

To assess the role of publication bias on the size of the average effect, we estimated Egger's regression to measure the deviation from the assumption of no bias (Egger, Davey Smith, Schneider, & Minder, 1997) and mapped the effect sizes using funnel plots with potentially missing effect sizes imputed using Duval and Tweedie's (2000) trim-and-fill procedure. Because Egger's regression is suboptimal when it comes to small sample sizes, we also calculated an *effect size fail-safe N* using the equation provided by Orwin (1983). This value estimates the number of unpublished studies averaging a null effect size needed to reduce the reported effect size to a preselected "trivial" value. We set this value at  $|r| = .10$  because an effect of this size would indicate that the variables share only 1% of their variance, and Cohen (1988) considered this value to represent the lower bound of a "small" effect in the population. Given the wide range of sample sizes, we estimated each effect with and without extremely large samples (i.e., those accounting for more than 25% of the total sample size in each category) because such samples can strongly influence the average weighted effect size. After reporting summary effect sizes with all samples, we summarize additional analyses that exclude the extremely large samples.

We were also interested in the extent to which the observed dispersion in effect size estimates was due to true heterogeneity of effect sizes, which would suggest the need for further investigations into moderators of these effects (or random error). We report two statistics to shed light on this question:  $Q$  and  $I^2$ .  $Q$  provides a test of the null hypothesis that all studies share a common effect size.  $I^2$  provides a standardized measure of the proportion of real heterogeneity compared to the total observed dispersion in effect sizes.  $I^2$  values range from zero (i.e., all dispersion is random error) to 100 (i.e., all dispersion is true heterogeneity; Borenstein et al., 2009).

## RESULTS

### FEAR OF DEATH

Although Jost et al. (2003) had identified only one published study that reported a correlation between scores on a "fear of death" scale and political conservatism, there have been at least 33 subsequent tests of the hypothesis carried out in five different countries. Of these, 14 showed a significant positive relationship (indicating that greater fear of death was associated with a more conservative orientation), 4 showed a significant negative relationship, and 15 showed no significant relationship. The association between fear of death and political conservatism emerged in Belgium (Soenens & Duriez, 2012), the Netherlands (Onraet et al., 2013), and—with respect to social/cultural attitudes (Crowson, 2009), economic attitudes (Hennes et al., 2012; Nilsson & Jost, 2016), and overall ideological self-placement (Jost et

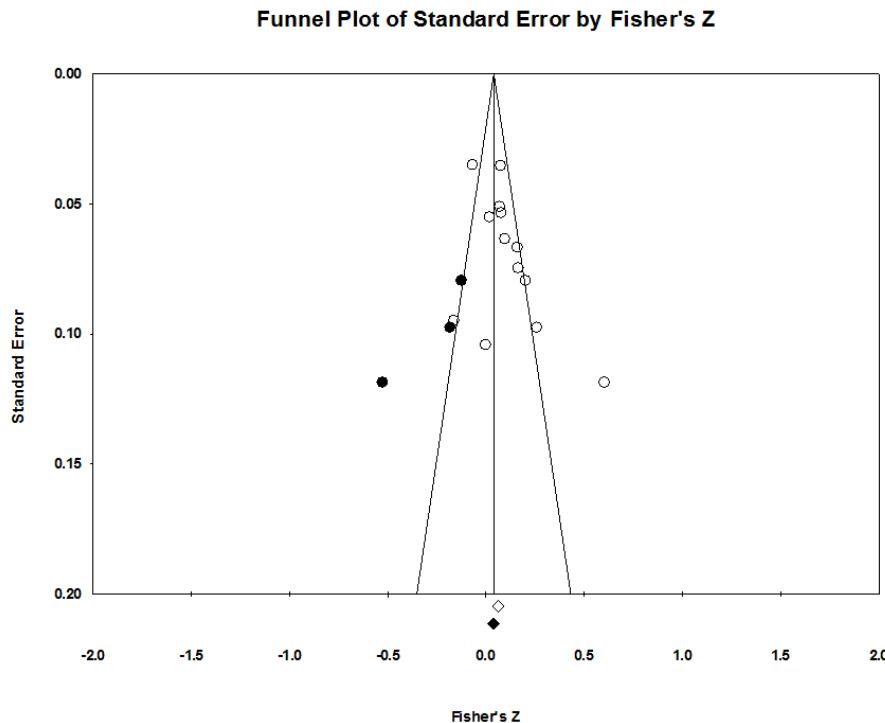


FIGURE 1. Funnel plot of actual (open circles) and imputed (filled circles) effect sizes for studies examining the relationship between political conservatism and fear of death.

al., 2007)—in the U.S. However, the relationship was not significant in Sweden (Nilsson & Jost, 2016) or Australia (Ray & Najman, 1987). It is perhaps noteworthy that fear of death was significantly associated with system justification in 5 out of 6 cases, but it was only associated with right-wing authoritarianism and social dominance orientation in 1 of 4 cases each.

Summarizing the studies yielded 14 independent effect sizes with a significant average unweighted effect size ( $r = .10$ ) but a nonsignificant weighted effect size,  $r = .02$ , 95% CI [-.01, .04]. Unpublished data collected at Chapman University constituted over 27% of the total sample, meeting our criterion for “extremely large.” Excluding this study resulted in larger mean estimates: unweighted,  $r = .12$ ; weighted,  $r = .06$ , 95% CI [.03, .09]. Egger’s regression showed slight evidence of bias in the distribution of the effect sizes,  $B = 2.99$ ,  $SE = 1.41$ ,  $t(11) = 2.13$ ,  $p = .06$ . The funnel plot and trim-and-fill analyses suggested that three additional (missing) studies would correct for this predilection and bring the weighted effect size close to zero,  $r = .04$ , 95% CI [.01, .07] (see Figure 1). Because the weighted effect size was already smaller than  $\pm .10$ , we did not calculate an *effect size fail-safe N* for this category. The  $Q$  statistic was significant,  $Q(12) = 52.85$ ,  $p < .001$ , leading us to reject the null hypothesis that the studies share a common effect size. This conclusion was further supported by the  $I^2$  value, which suggested that approximately 77% of the observed dispersion in effect sizes was due to real effect size heterogeneity.

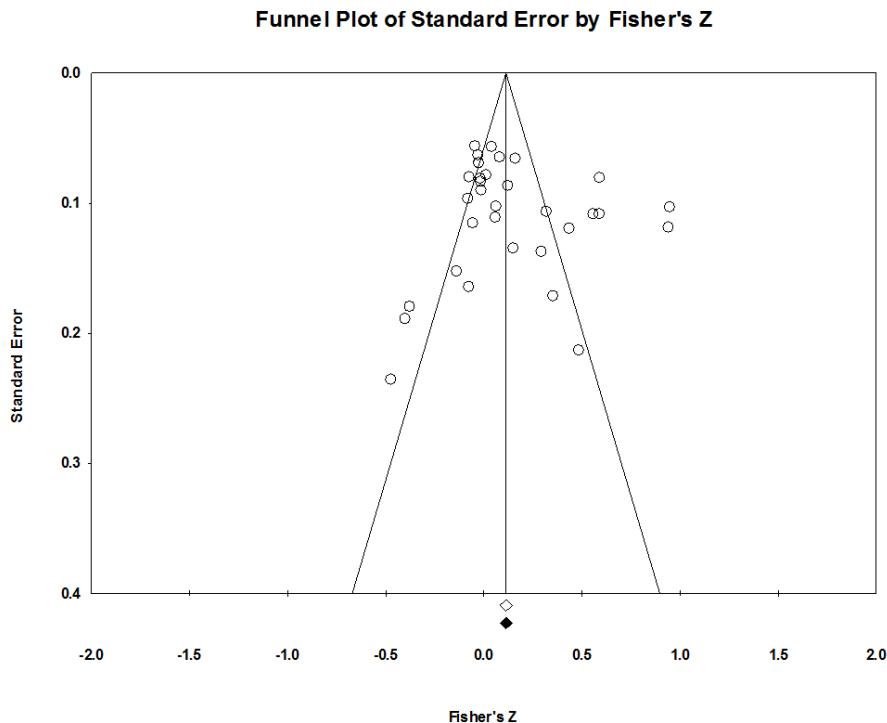


FIGURE 2. Funnel plot of actual (open circles) and imputed (filled circles; none present) effect sizes for studies examining the relationship between political conservatism and mortality salience.

## MORTALITY SALIENCE

At the time of Jost et al.'s (2003) meta-analysis, few published articles had investigated the relationship between mortality salience and ideology (and even in those cases ideology was measured indirectly, in terms of bond-setting for prostitutes and severity of punishment for criminals). There have now been at least 45 tests of the hypothesis that mortality salience increases the psychological appeal of conservative leaders, opinions, and policies—just over twice as many as Burke et al. (2013) reviewed.

Although 14 of these upheld the hypothesis (often with very strong effect sizes), there are clearly important moderating variables involved in mortality salience. Indeed, significant negative effects were obtained in six cases with special sample characteristics. Mortality salience appeared to strengthen *liberal* preferences among racial minorities (Francis, Burke, & Kraus, 2010), among students who were already extremely liberal (Castano et al., 2011), and among participants high in attachment security (Weise et al., 2008). There was no significant effect of mortality salience in the 24 other cases; more than half (13) of these null results came from studies conducted by Crawford (unpublished). The results of one study, which was conducted in Switzerland, suggested that experiencing the death of relatives

or close friends increased political conservatism among conservatives but had no effect on liberals (Chatard, Arndt, & Pyszczynski, 2010).

Both the unweighted ( $r = .13$ ) and weighted ( $r = .08$ , 95% CI [.06, .11]) average effect sizes were positive when aggregating across all 45 tests of the hypothesis (which yielded 34 independent effect sizes). When the extremely large sample from Chatard et al. (2010) was excluded, the unweighted ( $r = .13$ ) and weighted ( $r = .11$ , 95% CI [.08, .14]) effect sizes remained significant. Egger's regression showed no evidence of bias,  $B = 1.55$ ,  $SE = 1.51$ ,  $t(31) = 1.03$ ,  $p = .31$ ; the funnel plot confirmed these results and suggested that no additional (missing) studies would be needed to attain a symmetrical distribution of effects (Figure 2). The *effect size fail-safe N* indicated that five studies averaging a null effect would be needed to reduce the weighted average effect size to  $r = .10$ . The  $Q$  statistic was significant,  $Q(32) = 272.29$ ,  $p < .001$ , leading us to reject the null hypothesis that the studies share a common effect size. This conclusion was further supported by the  $I^2$  value, which suggested that approximately 88% of the observed dispersion in effect sizes was due to real effect size heterogeneity. Thus, mortality salience did precipitate an overall "conservative shift," but there was also some evidence of ideological intensification among extreme liberals.

## SUBJECTIVE FEELINGS AND PERCEPTIONS OF THREAT

We identified 186 tests of the hypothesis that perceptions of a dangerous world and perceptions of the world as a "competitive jungle" are associated with conservative or right-wing orientation (Altemeyer, 1998; Duckitt, 2001). An inspection of the results indicates consistent support for this hypothesis, with 112 of the 186 tests upholding the hypothesis, often very strongly, in a diverse array of samples from Belgium, Canada, France, Italy, the Netherlands, South Africa, Sweden, and the U.S. Perceptions of dangerous and competitive worlds were robustly associated not only with right-wing authoritarianism and social dominance orientation but also with overall ideological self-placement (Federico et al., 2009; Jost et al., 2007; Nilsson & Jost, 2016; van Leeuwen & Park, 2009), implicit conservatism (van Leeuwen & Park, 2009), and economic (but not general) system justification (Nilsson & Jost, 2016). A significant negative correlation emerged in only one case, with no significant association in the remaining 73 tests of the hypothesis (nearly all of which came from unpublished studies conducted in New Zealand by Cantal).

There are an additional 174 tests of the hypothesis that feelings and perceptions of insecurity or threat in relation to a wide range of social stimuli would be associated with conservative or right-wing orientation, as hypothesized by Adorno et al. (1950), Wilson (1973), Altemeyer (1998), and Jost et al. (2003), among others. This hypothesis was upheld in 127 out of the 174 cases for samples from Canada, Germany, Israel, the Netherlands, Poland, Switzerland, the U.K., and the U.S. In 28 other cases, the effect was not significant, and in 19 cases the effect size was significantly negative.

Aggregating 62 independent effect sizes across all tests of the hypothesis that subjective perceptions of threat would be associated with conservative or right-wing orientation, the unweighted average effect size was positive and moderate-to-strong in magnitude ( $r = .29$ ). However, the sample sizes from the World Values Survey used by Malka et al. (2014) were extremely large (accounting for 69% of the total unique  $n$ ), and the very weak results from that article drastically lowered the weighted average effect size to the point that it became quite small, despite remaining statistically significant,  $r = .12$ , 95% CI [.11, .12]. When Malka et al.'s (2014) data were excluded from calculations, the unweighted ( $r = .29$ ) and weighted ( $r = .23$ , 95% CI [.22, .24]) average effects sizes were both more compatible and more robust.<sup>6</sup> In five of the samples (including Malka et al., 2014), the psychological measure combined feelings of uncertainty with feelings of subjective threat (see Johnston, 2012; Johnston & Wronski, 2015). To obtain a purer estimate of the relationship between subjective threat and ideology, we excluded these five samples and recalculated the average effect sizes, showing even stronger effects than before (unweighted  $r = .31$ ; weighted  $r = .26$ , 95% CI [.25, .27]).

After excluding only studies with extremely large samples, Egger's regression indicated significant bias in the distribution of effect sizes,  $B = 2.28$ ,  $SE = 1.06$ ,  $t(55) = 2.15$ ,  $p = .04$ . The funnel plot reflected this as well, suggesting that an additional 23 missing studies would be needed to attain a symmetrical distribution of effects; including these 23 studies would reduce the mean effect size ( $r = .18$ , 95% CI [.16, .19]), but it would remain statistically significant (see Figure 3). The *effect size fail-safe N* indicated that 96 studies averaging a null effect would be needed to reduce the weighted average effect size to  $r = .10$ . The  $Q$  statistic was significant,  $Q(56) = 867.87$ ,  $p < .001$ , leading us to reject the null hypothesis that the studies share a common effect size. This conclusion was further supported by the  $I^2$  value, which suggested that as much as 94% of the observed dispersion in effect sizes was due to real effect size heterogeneity.

## EXPOSURE TO OBJECTIVELY THREATENING CIRCUMSTANCES

Our literature search returned 59 tests of the hypothesis that exposure to objectively threatening circumstances—such as terrorist attacks, governmental warnings, and exposure to information about seismic shifts in racial demography—would be associated with “conservative shift” when it comes to responses given by individual research participants. In 35 out of 59 cases, the effect sizes were positive

6. Differences between the results of Malka et al.'s (2014) research and those of other studies may be attributed to the fact that these researchers estimated the “need for certainty and security” using responses to a subset of five items that, according to the authors, “contrasted motivations for security, tradition, and conformity with motivations for self-direction and stimulation” (p. 1038). Inter-item correlations and scale reliability for these five items were extremely low, and the items appear to have been drawn from five different subscales of Schwartz's (1992) Value Priorities Scale, which typically includes a total of 56–57 items to measure 10 value priorities that differ substantially across individuals and cultures. The extent to which this unorthodox approach produced a clean measure of individual differences in existential motivation is unclear.

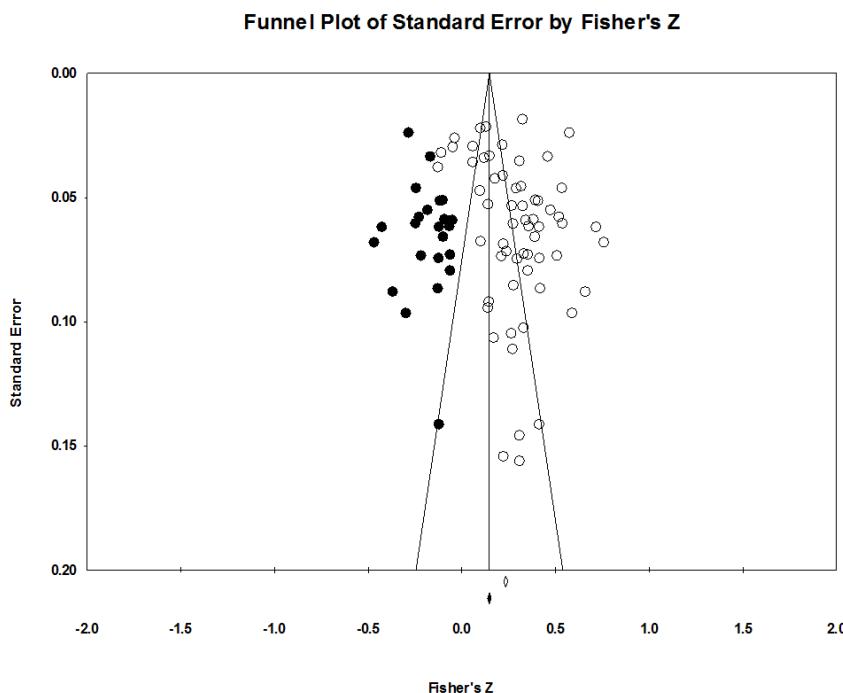


FIGURE 3. Funnel plot of actual (open circles) and imputed (filled circles) effect sizes for studies examining the relationship between political conservatism and subjective threat.

and statistically significant. These tests were conducted in an especially diverse array of countries. There was one case in which exposure to objectively threatening events precipitated a liberal or left-wing shift (in Germany), but a number of robust conservative shifts were observed (in the U.S., U.K., Germany, Spain, and Israel).

Aggregating 34 independent effect sizes across all 59 tests of the hypothesis, both unweighted ( $r = .14$ ) and weighted ( $r = .07$ , 95% CI [.07, .08]) average effect sizes indicated that the effect of exposure to objectively threatening circumstances was associated with a preference for conservative leaders, parties, opinions, values, orientations, and policies. Although the sample sizes utilized by Economou and Kollias (2015) accounted for over 90% of the total unique  $n$ , excluding them from the calculations changed the unweighted ( $r = .14$ ) and weighted ( $r = .08$ , 95% CI [.07, .09]) average effect sizes very little, and both remained significant. Egger's regression showed evidence of bias in the distribution of effect sizes,  $B = 1.39$ ,  $SE = 0.60$ ,  $t(31) = 2.30$ ,  $p = .03$ , and the funnel plot suggested that including the 12 additional studies needed to produce a symmetrical distribution would lower the mean effect size slightly,  $r = .07$ , 95% CI [.05, .08] (see Figure 4). Because the weighted effect size was already below  $|r| = .10$ , we did not calculate an *effect size fail-safe N* for this category. The  $Q$  statistic was significant,  $Q(32) = 194.17$ ,  $p < .001$ , leading us to reject the null hypothesis that the studies share a common effect

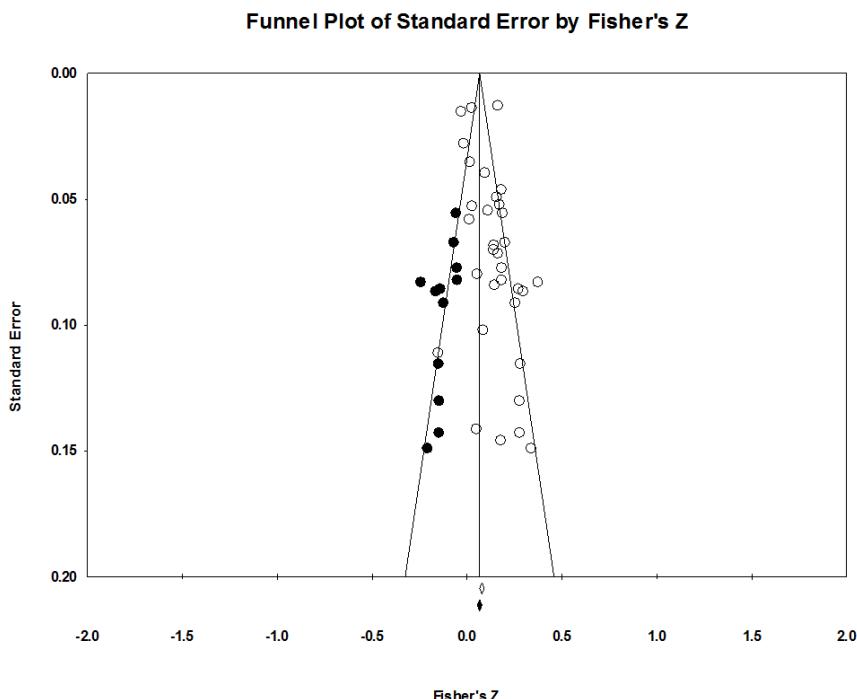


FIGURE 4. Funnel plot of actual (open circles) and imputed (filled circles) effect sizes for individual-level studies examining the relationship between political conservatism and objective threat.

size. This conclusion was further supported by the  $I^2$  value, which estimated that approximately 84% of the observed dispersion in effect sizes was due to real effect size heterogeneity.

In the course of our literature search, we came across four additional studies that measured responses to threat at an aggregate level of analysis (such as cross-state comparisons or the results of some sample of public opinion polls). We excluded these studies from consideration in the other four categories for two reasons. First, many of the articles did not report sample sizes in terms of individual respondents, which prevented us from weighting them appropriately to calculate the full range of statistics reported for our other tests. Second, we wanted to ensure that conclusions based on the preceding four categories would be entirely unaffected by "Simpson's paradox," which suggests that group-level trends may disappear or even reverse at the individual level of analysis (Blyth, 1972). Nevertheless, these four studies, which were conducted over a 40-year period, are potentially important for developing a comprehensive understanding of the relationship between threat and political ideology. Taking an unweighted average of the effect sizes observed in these studies, we see very strong support for the hypothesis that threat would be associated with "conservative shift,"  $r = .48$  (with  $r_s$  ranging from .29 to .66).

## GENERAL DISCUSSION

In his first inaugural address—in the midst of the Great Depression and just a few weeks after Adolf Hitler had taken over as chancellor of Germany—President Franklin D. Roosevelt (1933) famously declared to the American people that “the only thing we have to fear is...fear itself—nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance.” There is no way of knowing whether Roosevelt held the theory that threatening circumstances are, for psychological reasons, significantly more conducive to conservative, reactionary, and authoritarian aims than to liberal, progressive aims, but many social historians and behavioral scientists in the intervening decades have indeed offered such theories. More specifically, it has been suggested that fear plays an especially prominent role on the political right and that highly threatening events increase the social and psychological appeal of conservative (as opposed to liberal) leaders, opinions, and policies (e.g., Adorno et al., 1950; Bennett, 1995; Hofstadter, 1952/1965; Lipset & Raab, 1978; Robin, 2004; Wilson, 1973). These claims were fairly well supported by a meta-analytic review conducted by Jost et al. (2003), although the number of studies pertaining to the relationship between existential motivation and political ideology were relatively small in number at that time. A narrative review by Hibbing et al. (2014) reached a similar conclusion, as did quantitative reviews by Onraet et al. (2013) and Burke et al. (2013).

Nevertheless, skeptics continue to deny that meaningful ideological differences in existential motivation exist, claiming instead that liberals and conservatives are equally fearful and that exposure to highly threatening circumstances produces symmetrical (but opposite) effects of “ideological intensification” (e.g., Anson et al., 2009; Brandt, Wetherell, et al., 2014; Castano et al., 2011; Chambers, Schlenker, & Collisson, 2013; Charney, 2014; Greenberg & Jonas, 2003; Huddy & Feldman, 2011; Proulx et al., 2012). In contrast, a theory of political ideology as motivated social cognition proposed by Jost et al. (2003) suggests that there is an “elective affinity” between existential needs to reduce threat and politically conservative rhetoric and ideology, insofar as the latter tends to offer relatively simple, decisive, rigid, orderly, familiar, conventional, efficient, black-and-white, hierarchical, and authoritative solutions to social problems, challenges, and opportunities. In an effort to resolve at least some aspects of these theoretical disagreements and to avoid scientific stalemate, here we conducted a meta-analytic review of evidence from 134 different samples and 369,525 participants drawn from at least 16 countries (Australia, Belgium, Canada, France, Germany, Israel, Italy, Netherlands, New Zealand, Poland, South Africa, Spain, Switzerland, Sweden, the U.K., and U.S.). The overwhelming majority of these studies were conducted in the last decade, suggesting not only that this topic is one that has been garnering substantial research interest but also that the time is ripe for another integrative, quantitative review.

The results of our meta-analysis showed that, although the association between fear of death and conservatism was not reliable, there was a significant effect of mortality salience on conservative preferences, as in previous reviews. In a few

### Relationships between Political Ideology and Specific Fears

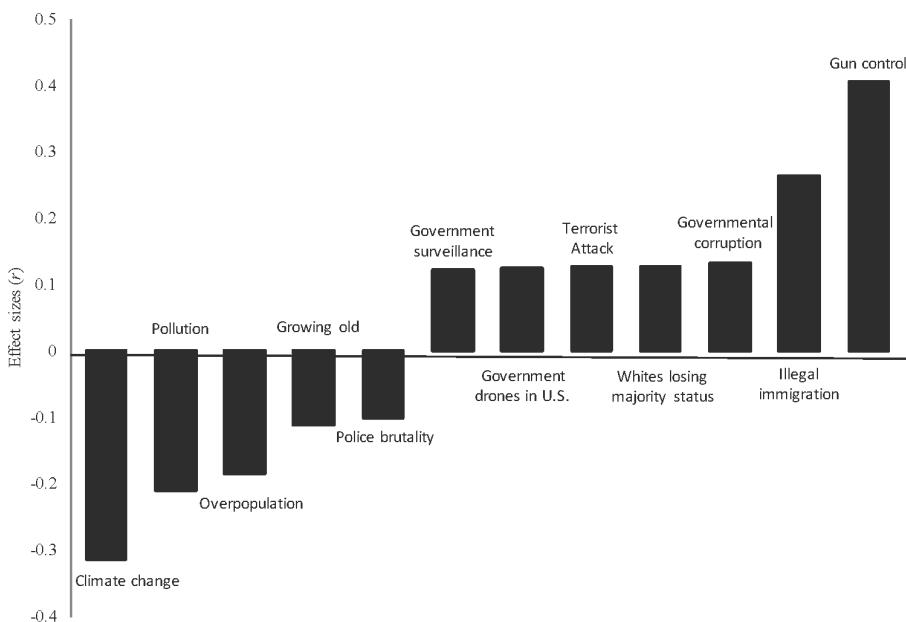


FIGURE 5. Correlations between ideological self-placement and “fear” of specific stimuli included in the Chapman University survey.

Note. Respondents to the Chapman University survey ( $N = 1287$ ) rated 73 different stimuli. We thank Christopher Brader for making their data available to us. To adjust for the fact that there were 73 different ideological comparisons, we used a cut-off point of  $|r| = .10$  to designate a small effect size, as in the meta-analysis itself. Positive effect sizes above indicate that conservatives reported being more “afraid” of seven stimuli, whereas negative effect sizes indicate that liberals reported being more “afraid” of five stimuli. For the other 61 stimuli, the correlation between political ideology and fear was not significant.

cases, however, mortality salience did seem to strengthen *liberal* preferences—among racial minorities, students who were already extremely liberal, and those who were high in attachment security. We also observed a significant association between subjective perceptions of threat—such as the holding of dangerous and competitive worldviews—and conservatism. Furthermore, exposure to objectively threatening circumstances, such as terrorist attacks, was associated with more conservative (or less liberal) preferences, whether these preferences were measured at the individual level of analysis or at the aggregate level of public opinion. It should be noted that many of the average effect sizes were modest in magnitude (particularly when adjusting for publication bias), and none of the overall effect sizes may be considered “large” by the standards of behavioral research (e.g., Cohen, 1988). This should not be too surprising, given the relative stability of partisan and ideological commitments (not only within individuals but within families and regions, even across generations) and the sheer multiplicity of personal and institutional factors that shape political preferences (e.g., see Johnston, 2006; Jost, Federico, & Napier, 2009). In light of these forces, it seems to be a remarkable fact

of social and political psychology that subjective feelings and objective exposure to fearful and threatening stimuli contribute to observable “conservative shifts” more often than not. It should also be noted that the average effect sizes we obtained were quite a bit larger when we excluded very large, multinational surveys, which tended to measure constructs of interest with very few items that exhibited poor measurement reliability.

In our view, the evidence reviewed here is enough to conclude that, in general, threatening circumstances contribute to a political environment that is more conducive to conservative than liberal ends and that conservatives are somewhat more sensitive than liberals to potentially threatening stimuli. The effect sizes, overall, are heterogeneous and not as great as some might have expected, but they are statistically significant and meaningful nonetheless. If researchers can agree on this basic fact, at least when it comes to the present historical period, we can move on to more specific questions, such as why liberals and conservatives fear the specific stimuli that they do. An extensive survey of 1,287 U.S. citizens conducted by Chapman University revealed that political ideology correlated with fear ratings for only 12 of 73 different stimuli. In Figure 5, we have graphed the effect sizes for these comparisons in order of their magnitude.

Conservatives were more likely than liberals to report being “afraid of” gun control, illegal immigration, corruption by governmental officials, Whites losing their majority status in the U.S., terrorist attacks, the domestic use of drones, and governmental surveillance. Some of these stimuli—such as terrorism, illegal immigration, and demographic shifts—are well known to scholars of existential motivation, whereas others are not. It will be interesting to see whether conservative fears of governmental corruption, surveillance, and the use of drones persist during periods of conservative governance, or if this reflects attitudes toward the Obama administration (or liberal governance) in particular. For their part, liberals reported being more “afraid” than conservatives of climate change, pollution, overpopulation, and police brutality, as well as of growing old. It is perhaps noteworthy that most of these liberal “fears” (with the exception of “growing old”) seem to be political or environmental concerns rather than personal ones *per se*. Future research would do well to explore the question of whether liberals tend to experience dangers such as climate change, overpopulation, and police brutality as existential threats to their own sense of safety, or as social problems to be tackled, and whether conservatives likewise tend to experience threats associated with gun control, illegal immigration, demographic shifts, and governmental overreach in personal, existential terms or in a more abstract, ideological sense.<sup>7</sup> Researchers would also do well to investigate the extent to which each of these “fears” is driven by rational versus irrational considerations, on the assumption that the latter will be more difficult to address through traditional modes of persuasive argumentation in the context of deliberative democracy.

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7. Republican efforts to suppress voter turnout among racial and ethnic minorities may suggest to some that conservatives perceive demographic shifts as politically (as well as personally) threatening (e.g., see Hajnal, Lajevardi, & Nielson, 2017).

In any case, the results of our meta-analysis indicate that there is indeed an ideological asymmetry with respect to existential motivation, much as previous work in social history and political psychology has suggested. It would appear that psychological reactions to fear and threat convey a modest political advantage for conservative (and rightist)—as opposed to liberal (or leftist)—leaders, parties, and ideas. It is conceivable that the connection between existential motivation and conservative ideology is an “adaptive” one in the narrow sense that it promotes effective coordination and collective action, although intense partisanship may not be helpful for democratic functioning or for nations as wholes. As Vice President Al Gore (2004) put it, “fear gives the modern Republican Party its well-noted cohesiveness and its equally well-noted practice of jugular politics” (p. 790). Although the studies we have reviewed here do not address the implications of fear and threat for cohesive and aggressive political action, they do provide reason enough for liberals to worry that heightened levels of existential motivation—if they are not assuaged in time—may tip the balance against them in electoral contests. Thus, in his very last State of the Union Speech, President Obama (2016) asked earnestly, drawing an implicit, albeit pointed contrast between the societal implications of historical moments of conservative and liberal inspiration, respectively: “Will we respond to the changes of our time with fear, turning inward as a nation, and turning against each other as a people? Or will we face the future with confidence in who we are, what we stand for, and the incredible things we can do together?”

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