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Political orientation moderates worldview defense in response to Osama bin Laden's death

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Abstract

The current study examines Americans' psychological responses to Osama bin Laden's death. We tracked changes in how different participants responded to dissimilar others from the night of bin Laden's death for five weeks. Liberal participants reported lower worldview defense (i.e., a defensive reaction to uphold one's cultural worldview) immediately after bin Laden's death but then returned to similar levels as their conservative counterparts over time. Conservative participants reported greater worldview defense during each point of the study and did not significantly change over time. These temporal differences between liberals and conservatives were only present in the year of bin Laden's death and not one year prior before. The current findings demonstrate that liberals and conservatives may react differently after major societal events in predictable ways considering their moral foundations.

Keywords

political psychology; field study; worldview defense; moral foundations theory

The death of Osama bin Laden was one of the most significant political events of 2011. People took to the streets to celebrate the demise of a leader who organized one of the largest terrorist attacks in American history. Indicators of his death were everywhere—newspaper headlines, Internet media outlets, TV programs, and Facebook status updates. Vendors even enjoyed a large increase in the sale of American flags (Rowell, 2011).

bin Laden's death initiated a period of reflection on how the U.S. had changed in the decade since September 11th, 2001 (Silver, 2011). For example, Morgan and colleagues (2011) took a retrospective look at the psychological impact of 9/11, noting both positive and negative consequences. Among the positive reactions were a greater sense of social closeness, more prosocial behaviors, and greater enthusiasm for the country and government. Yet people also

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reacted with misplaced aggression towards various ethnic and religious groups, and public support for war greatly increased. These reactions—both positive and negative—may be attributed to differences in how individuals defend their moral and cultural worldviews in the face of threats to cherished values (Morgan et al., 2011). Several social psychological theories are consistent with the idea that people “rally around” cultural institutions that offer a sense of security and safety when important values are threatened (Jost, Glaser, Kruglanski, & Sulloway, 2003; Lambert, Schott, & Scherer, 2011; Pyszczynski, Solomon, & Greenberg, 2003).

Research comparing time periods of low versus high threat demonstrate that at the societal level, attitudes and behaviors can change as a function of threat (Doty, Peterson, & Winter, 1991; Van de Vyver, Houston, Abrams, & Vasiljevic, 2015). When the architect of 9/11 died, some Americans may have experienced a surge of positive emotions and relief. Others might have felt scared, anticipating retaliation. Considering the wide variety of potential responses to bin Laden’s death (Haidt, 2011), it is unclear how the event altered Americans’ perceptions of those who are dissimilar to them. For example, some individuals may have felt a surge of nationalism, which is associated with harsher attitudes towards outgroups (Skitka, 2005). Other individuals may have considered bin Laden’s death as a symbolic end to the threat of terrorism; these individuals could have experienced *increased* liking for outgroup members.

In the current study, we examine Americans’ psychological responses to Osama bin Laden’s death. Despite the ubiquity of the coverage of bin Laden’s death, no studies to our knowledge have examined the psychological effect that it had in its immediate aftermath. We took advantage of this naturalistic event as soon as it happened (the night bin Laden died) to examine individuals’ immediate responses to a major societal event. bin Laden’s death was highly relevant to people’s values and beliefs about their country, with the likelihood of different meanings depending on people’s political orientation (Haidt, 2011). Because his death likely had high relevance to people’s values and moral beliefs, we expected that their attitudes toward outgroup members would be affected by it. This study can extend literature that observes dramatic shifts in behavior and attitudes after major national and political events (Doty et al., 1991; Festinger, Riecken, & Schachter, 1964; Garfin, Holman, & Silver, 2015; Haidt, 2011; Skitka, 2005) by demonstrating that these shifts may not necessarily be seen on the average population level (i.e., a main effect). Instead, they may be seen only among certain subsections of the population or may be moderated by individual differences that tap into core values (i.e. political orientation).

Moral Foundations Theory and Tolerance Towards Dissimilar Others

Liberals and conservatives tend to draw on different sets of moral foundations that stress different sets of values (Graham, Haidt, & Nosek, 2009). Liberals tend to endorse values that protect individuals from harm and extend fairness to others. Conservatives tend to draw on a broader set of values that include those stressed by liberals, but also loyalty to one’s ingroup, authority/respect, and purity.

In their study of moral foundations, Graham and colleagues (2009) asked participants how much money would have to be paid to violate an ingroup norm (a proxy for willingness to compromise that particular value). When confronted with a wide host of scenarios (including burning their country's flag in private, saying something bad about their nation on a talk-radio show in a foreign nation, and renouncing their citizenship to become a citizen of another country), conservative participants demanded a higher sum of money than liberal participants, suggesting that conservatives are more sensitive to protecting their ingroup and less likely to make tradeoffs that compromise ingroup values. Indeed, after September 11th, conservatives often reported more nationalist and patriotic attitudes towards their country, including the extent to which they displayed the American flag (e.g., on their clothing, car, or home; Skitka, 2005). However, this study of patriotic attitudes only assessed conservative's actions at one time point. Thus, it is unclear whether the occurrence of 9/11 led conservatives to be more patriotic or if they displayed this behavior prior to the attacks. Alternatively, liberals are more likely to perceive statements of fairness and actions that protect others from harm as more self-relevant than conservatives (Graham et al., 2009).

When hearing of a major political event such as bin Laden's death, it is likely that individuals would interpret this news in light of their values and beliefs. Because liberals and conservatives rely on different values, it seems likely that reactions to bin Laden's death would be polarized according to one's political orientation. Indeed, under threat, conservatives respond with harsher judgments of those who are different from them (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992). In contrast, liberals show *more liking* for a dissimilar other when exposed to the same threat (Greenberg et al., 1992). Researchers attribute this partisan polarization to liberals' focus on tolerance, which is an extension of their moral foundation of extending fairness to others. As a result, we expected that when faced with the prospect of someone criticizing their cultural worldview, conservatives would evaluate that person negatively, while liberals would evaluate that person positively. Further, we expected that this polarization would be most salient immediately after bin Laden's death, and decrease over time as his death becomes less salient.

Further evidence that conservatives and liberals might provide polarized responses to bin Laden's death comes from research on authoritarianism (Feldman & Stenner, 1997; Greenberg et al., 1992; Konrath, Guglielmello, Salerno, & Winter, 2007). Authoritarianism is a personality construct that is closely related to conservatism that stresses obedience to authorities and outgroup aggression (Jost et al., 2003). Feldman and Stenner (1997) measured the relationship between perceived threat, ethnocentrism, and moral values in a national election survey. They found that among individuals high in authoritarianism, perceived threat was associated with higher ethnocentrism and greater endorsement of punitive measures (e.g. support for the death penalty). Among low authoritarianism individuals, the higher the perceived threat, the *less ethnocentric and punitive* attitudes became. In other words, threats perceived in their social environment seemed to make a relatively conservative group of people *more* conservative, and a liberal group *more* liberal. In a related study, a more personal threat (i.e. reminders of one's own death) caused similar polarizations: highly authoritarian people rated dissimilar others more negatively, but less authoritarian people became *more accepting* to dissimilar others (Greenberg et al., 1990).

These results parallel the findings from studies examining political orientation (Greenberg et al., 1992). Finally, in a recent study, liberal and conservatives' moral foundations and prejudice toward Muslims were measured six weeks prior to and 1 month after the 2005 London bombings (Van de Vyver et al., 2015). After the bombings, there was more prejudice toward Muslims, greater endorsement of in-group loyalty, and less endorsement of ensuring fairness for others. This study suggests that moral foundations can wax and wane according to major value-based world events and that these changes often differ by political orientation. How do *reductions* in threat alter perceptions of outgroup members though? This was the objective of the current study.

Alternative Explanation: Terror Management Theory

Taken together, these studies suggest that the same event can polarize individuals depending upon their pre-existing political beliefs. However, an alternative explanation suggests that coverage of bin Laden's death would increase negative evaluations of dissimilar others because *any* mention of death reminds individuals of their own impending mortality (Pyszczynski et al., 2003). Terror Management Theory (TMT) posits that individuals are motivated to alleviate the anxiety that arises from the knowledge of death's inevitability (Greenberg, Pyszczynski, & Solomon, 1986). To manage this anxiety, people often cling to cultural worldviews in an effort to connect with something that extends beyond their physical death (see Solomon, Greenberg, & Pyszczynski, 2004). This defensive reaction is called "worldview defense." As a result, inducing death-related thoughts (i.e., mortality salience) causes more critical evaluations of dissimilar others because they threaten one's cultural worldviews (Greenberg et al., 1990).

After Osama bin Laden died, newspapers and websites were saturated with detailed reports of his death and also reminders of his initial attacks. Researchers have found that writing at length about the emotions aroused by 9/11 has similar effects on people as writing about their own death (Landau et al., 2004). Even incidental exposure to reminders of death, such as through embedded webpage advertisements in online surveys, can increase death-related thoughts and elicit negative reactions towards dissimilar others (Chopik & Edelstein, 2014). Thus, mere mentions of words like "death" and "terrorism" may be sufficient to prime mortality salience and its consequences. As a result, it is possible that participants might negatively evaluate dissimilar others because of an increase in the accessibility of death-related thoughts. We included measures of mortality salience and media usage to examine whether they predicted greater worldview defense. These measures were included to examine whether changes in views towards dissimilar others could be attributable to mechanisms described by TMT (i.e., through exposure to death-related cues) or by exposure to the death of Osama bin Laden more specifically.

The Present Research

According to moral foundations theory, *how* individuals interact with those who are dissimilar or challenge their worldview is derived from a complex organization of values and beliefs. As a result, when news of bin Laden's death saturated media outlets, it is likely that the extent to which individuals responded by defending their worldview against dissimilar

others varied as a function of political orientation. Conservatives, who stress values related to loyalty towards their ingroup, may have responded to bin Laden's death with higher worldview defense, and this effect should be strongest immediately after his death, when these values were most salient. Liberals, who stress values of extending fairness to others and protecting individuals from harm, may have responded to bin Laden's death with *lower* worldview defense immediately after his death. After this initial polarization of worldview defense, it is likely that liberals and conservatives would return to a less polarized state as the notoriety of bin Laden's death, and the accessibility of their respective values, wears off (mirroring a type of "dose-response" relationship).

In the current study, we report an important step toward understanding how individuals' attitudes towards dissimilar others shifted in the immediate aftermath of a major cultural event (i.e. Osama bin Laden's death). In two large, cross-sectional internet samples separated by one year, we measured how people's worldview defense varied according to the temporal proximity to bin Laden's death. We employed an already approved IRB study on world defense completed in 2010 so that we could assess immediate reactions to bin Laden's death in 2011. Part 2 of the study (i.e., the Primary Sample) began the night Osama bin Laden died and continuing until five weeks later. We examined whether bin Laden's death had an enduring influence on how people reacted to others who challenge their cultural worldviews. By comparing participants who took the survey at a time of high event salience (i.e. in the hours and days immediately after his death) with participants who took the survey at a time of low event-salience (i.e. later in the month), we were able to test how reactions to his death changed depending on the salience of it.

Part 1 of the study (i.e., the Comparison Sample) consisted of a comparison sample of participants who completed a survey one year prior to bin Laden's death was also examined to see whether the temporal changes in worldview defense were specific to the aftermath of his death. The comparison sample (in 2010) was comprised of data for which the original IRB application was submitted to collect. The primary sample (in 2011) was the 2010 survey reposted to collect reactions to bin Laden's death. The current study draws on the research methods from a large body of previous research examining psychological reactions to major events *in situ* (Festinger, Back, Schachter, Kelley, & Thibaut, 1950; Festinger et al., 1964; Garfin et al., 2015; Garfin, Silver, Gil-Rivas, et al., 2014; Garfin, Silver, Ugalde, Linn, & Inostroza, 2014; Gelkopf, Berger, Bleich, & Silver, 2012; Hawkins, McIntosh, Silver, & Holman, 2007; Juth, Silver, Seyle, Widyatmoko, & Tan, 2015; Schachter & Burdick, 1955; Seyle, Widyatmoko, & Silver, 2013; Shultz, Walsh, Garfin, Wilson, & Neria, 2015; Silver, 2011; Wicke & Silver, 2009)

In the current study, we presented participants with two essays about the United States ostensibly written by two foreigners (one pro-U.S., one anti-U.S.). Worldview defense was operationalized as the difference between *approval* of the pro-U.S. author and essay and *disapproval* of the anti-U.S. author and essay. A larger discrepancy between how much people like someone who validates their worldview (a similar other) and how much people dislike someone who challenges their worldview (a dissimilar other) serves as a proxy for the defense of their cultural worldview, as in prior research (Greenberg et al., 1990; Schmeichel et al., 2009). Because people with different political orientations endorse

different values pertaining to these dissimilar others (Greenberg et al., 1992), we also examined the moderating role of political orientation.

Method

Participants

Primary Sample—Participants were 480 online American respondents (64.1% female, 76% Caucasian, $M_{age} = 34.54$, $SD = 12.99$) recruited through Amazon's Mechanical Turk (MTurk), which is a reliable and valid source of psychological data (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). Participation was limited to those in the United States, and participants were compensated \$.25. Recruitment took place continuously from Sunday, May 1st 2011 (the night Osama bin Laden died, within two hours of the announcement) through Monday, June 6th 2011. Participation rates were high across weeks (Week 1, May 1–7: $N = 93$; Week 2, May 8–14: $N = 138$; Week 3, May 15–21: $N = 84$; Week 4, May 22–28: $N = 65$; Week 5, May 29–June 6: $N = 100$). All respondents finished the survey in less than 10 minutes.

Comparison Sample—Participants in the Comparison Sample were 329 online American respondents (69.2% female, 73.9% Caucasian, $M_{age} = 33.68$, $SD = 13.39$). Participation was limited to those in the United States, and participants were compensated \$.25, as in the Primary Sample. Recruitment took place continuously for three weeks from Friday, May 14th 2010 through Friday, June 4th 2010, approximately one year prior to the death of Osama bin Laden and the collection of the Primary Sample. Participation rates were high across weeks (Week 1, May 14–20: $N = 76$; Week 2, May 21–27: $N = 94$; Week 3, May 28–June 4: $N = 159$). All respondents finished the survey in less than 10 minutes.

Procedure and Materials

Date of Study Completion—For the Primary Sample, temporal distance from bin Laden's death was measured in days since May 1st, with lower values reflecting completing the survey closer in time to bin Laden's death. At no time during the study were any references made to bin Laden. For the Comparison Sample, time was measured continuously from the beginning of the study collection to the end of the study collection (May 14 = 1; June 4 = 22).

Political Orientation—Participants answered two questions about the extent to which they would describe themselves as 1) liberal and 2) conservative (1=*Not at all*; 7=*Extremely*). The items were highly negatively correlated ($r = -.66$, $p < .001$), so they were recoded and averaged. Higher values indicate greater conservatism.

Media Usage—Participants were asked how often they used media (internet, newspaper, television) to learn about the news (1=*Never*; 7=*Daily*). Individuals with higher news consumption may have had more exposure to bin Laden's death or its political/social impact. This question was included to examine whether news consumption was related to worldview defense.

Death-Thought Accessibility—Because bin Laden’s death may have increased worldview defense via increases in mortality salience, we measured the degree to which participants were thinking about death. We measured death-thought accessibility to test if the results could be attributed to reminders of mortality, thus supporting the hypothesis that bin Laden’s death served as a terror management manipulation (Chopik & Edelstein, 2014). If this is not the case, we can conclude that the reactions toward dissimilar others are not attributable to death-thought accessibility in this instance. Death-thought accessibility was measured by a word-fragment completion task similar to prior research (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). Out of the 25 word fragments, 6 could be completed with a death-related word (e.g., coff _ _; which could be coffin or coffee).

Pro- and Anti-U.S. Essays—The study was ostensibly about worldview beliefs. Participants read two essays about the United States (one pro-U.S., one anti-U.S.) supposedly written by two foreigners (adopted from Greenberg et al., 1992), in a counterbalanced order. Participants evaluated the truth of each essay, their agreement with each essay, and rated the author’s likeability, intelligence, and knowledge. Higher scores indicated more positive evaluations. The essay evaluations were averaged and served as measures of *worldview-consistent* (pro-U.S. essay; $\alpha=.93$) and *worldview-inconsistent* (anti-U.S. essay; $\alpha=.87$) opinions. Worldview defense was defined as the difference between these measures (i.e., a difference score: worldview-consistent evaluations minus worldview-inconsistent evaluations). Higher scores mean that participants evaluated the worldview-consistent author more positively than the worldview-inconsistent author (i.e. they had greater worldview defenses; Chopik & Edelstein, 2014; Schmeichel et al., 2009). Copies of the pro- and anti-U.S. essays are available from the first author upon request and are available online at <http://www.tmt.missouri.edu/materials.html>.

Results

Preliminary Analyses

Order of essay presentation (pro- vs. anti-U.S.) did not interact with any variables (all p 's > .40), so data were collapsed across order for all analyses. Zero-order correlations indicated that more conservative participants reported higher worldview defense overall than more liberal participants (see Table 1 for Primary Sample). Date of study completion and death-thought accessibility were negatively associated, such that individuals who participated in the survey in the immediate aftermath of bin Laden’s death completed more death-related word fragments. Thus, death-related thoughts were more salient immediately after bin Laden’s death compared to later. Participants also had higher news consumption immediately after bin Laden’s death.

Multivariate Analyses

We tested whether the date of study completion, participants’ political orientation, and their interaction, influenced worldview defense. We conducted a regression analysis examining the main effects of date and political orientation, and their interaction on worldview defense. Variables were mean-centered before computing the interaction term. Death-thought accessibility and media usage were added as covariates in these analyses. As a reminder, if

bin Laden's death served as a terror management manipulation, death-thought accessibility should predict worldview defense and also interact with date and political orientation. These significant effects would show that reactions to bin Laden's death are affected more by general death-related cues rather than changes in the moral values espoused by liberals and conservatives.

There was a main effect of political orientation such that conservatives reported higher worldview defense overall compared to liberals, $\beta = .57, p < .001$. The date $\times$ political orientation interaction also emerged as significant, $\beta = -.25, p = .001$. As seen in Figure 1, more liberal participants reported the *lowest* worldview defense immediately after bin Laden's death and more conservative participants showed the *highest* worldview defense during the same period. Simple slopes analyses revealed that this effect was stronger for liberals than conservatives. For liberals, the slope of date was positive and significant, $\beta = .21, p = .001$. For conservatives, the slope of date was negative and not significant, $\beta = -.07, p = .26$. The difference between liberals and conservatives decreased over the time period of the study. There was no main effect of date, $\beta = .07, p = .11$, media usage, $\beta = .04, p = .34$, or death-thought accessibility, $\beta = -.04, p = .41$, on worldview defense.¹ The findings were identical after controlling for age and gender.

Analysis of Comparison Sample

Because we had additional data from when the study was approved by the IRB, we examined whether there was a temporal difference in the political orientation-worldview defense associations during a time when Osama bin Laden was still alive (i.e., the Comparison Sample collected coincidentally one year prior to his death). Identical regression analyses were conducted with the Comparison Sample. As in the Primary Sample, conservatives reported greater worldview defense, $\beta = .33, p < .01$. However, date of study completion, media usage, and death-thought accessibility were unrelated to worldview defense, all p 's $> .20$. Importantly, the date $\times$ political orientation interaction was not significant, $p = .40$.

We then combined both samples (total $N = 809$ participants) to test whether sample source (Primary (-1) v. Comparison (1)) moderated the association between date and political orientation in predicting worldview defense (a three-way, date $\times$ political orientation $\times$ Sample, interaction). This three-way interaction more directly tests whether the interaction between date and political orientation was present in one sample (after bin Laden's death) but not present in another sample (prior to bin Laden's death). Indeed, the three-way interaction in the combined sample was significant, $\beta = .24, p = .02$. Thus, the temporal differences between liberals and conservatives *were not present* a year prior to bin Laden's death in 2010 but *were present* immediately after bin Laden's death in 2011.

¹In a separate regression analysis, death-thought accessibility did not moderate any of the effects, p 's $> .40$. Thus, the current reactions among conservative and liberal participants are not attributable to general, death-related cues but rather the awareness of bin Laden's death. Excluding death-thought accessibility from the model led to identical results.

Discussion

The current study examined the immediate reactions to an important real-world national-level political event, Osama bin Laden's death. We found that liberal participants reported lower worldview defense immediately after bin Laden's death but then returned to similar levels as their conservative counterparts over time. Conservative participants' worldview defense did not significantly change over time, contrary to our hypotheses. Further, these ideological differences were not found one year prior to bin Laden's death. This suggests that there was a polarization among liberal and conservative participants immediately after bin Laden's death, but that these differences diminished over time. The study is the first to examine changes in intergroup relations following *reductions* in societal threat, particularly among partisan lines, whereas previous research has focused on *increases* in societal threat (Garfin, Silver, Gil-Rivas, et al., 2014; Silver, 2011).

The current findings are some of the first to show that the reactions among liberals and conservatives to major societal events that polarize the public (Feldman & Stenner, 1997; Haidt, 2011) correspond to the moral foundations upon which they rely (Graham et al., 2009; Van de Vyver et al., 2015). The differences between liberals and conservatives we observed in this study are consistent with theory and research on the moral foundations on which these two groups tend to rely (Graham et al., 2009). Among the many foundations they rely on, conservatives stress loyalty towards one's ingroup (Haidt & Graham, 2007). Highly conservative participants are more likely to respond with greater worldview defense when confronted with dissimilar others who criticize their ingroup. After bin Laden's death, liberal participants responded in a way that was consistent with the moral foundations of preventing harm and extending fairness to others (namely, greater tolerance for dissimilar others who criticize their worldview). Although conservatives reported greater worldview defense at every point in the study compared to liberals, the difference decreased in magnitude as the study continued. This effect was not seen in 2010 prior to bin Laden's death.

The effects were also present after controlling for death-related thoughts. Although death-thought accessibility was highest immediately after bin Laden's death, it did not predict worldview defense or moderate any of the effects of political orientation. The lack of a relationship between death-thought accessibility and worldview defense makes it unlikely that these reactions are explained by participants' fear of mortality in general. Since TMT predicts that increases in mortality salience cause individuals to defensively uphold their cultural worldviews, we can reasonably conclude that although bin Laden's death led to an increase in death-related thoughts, these thoughts did not initiate the defense of participants' cultural worldviews. It could very well be the case that our death-thought accessibility measure captured a general awareness of the coverage of bin Laden's death, but that this awareness was not sufficient enough to elicit the defensive responses suggested by TMT, because TMT methods make people directly thinking about their *own* deaths, rather than someone else's. As such, it strengthens the support for our hypothesis that the accessibility of values and beliefs among conservatives and liberals are driving these effects rather than general, death-related cues. Future research can help to reveal the exact circumstances under which such values are likely to be influential.

We can only speculate why this polarization by political party declined at later points in the study. This major event could have temporarily made people more attentive to their values or provided them with the opportunity to re-examine their place in the world and how they interact with others who are different from them in relation to their values. For example, perhaps liberal participants' values of tolerance (e.g. extending fairness to others; preventing harm) could have been more salient immediately after bin Laden's death and less so later, explaining why liberal participants showed less worldview defense initially but more worldview defense later. These values may not have been as accessible among participants who took the survey later on in the study; thus they might not have reacted in such a tolerant way towards dissimilar others. In the aforementioned study on the psychological effects of the London bombings, liberals showed the greatest increases in prejudice toward Muslims (Van de Vyver et al., 2015). The authors of the study drew on evidence that liberals tend to shift to more conservative positions when under threat (Nail, McGregor, Drinkwater, Steele, & Thompson, 2009; van Leeuwen & Park, 2009). In the current study, liberals showed the *lowest* levels of worldview defense after the death of Osama bin Laden. Based on the results of the study of the London bombings and the current study, it could be the case that liberals' values are more sensitive to major events or change more when they happen—becoming more conservative after increases in threat and more liberal after reductions in threat.

Conservatives' values (e.g. ingroup loyalty; authority/respect) explain why they might report greater worldview defense overall, but in the current study they appeared to be less affected by the news of bin Laden's death compared to liberals. One potential explanation for the null effects observed among conservatives could be their broad endorsement of moral foundations and values. Conservatives stress the same moral foundations as liberals (leading to the prediction of *greater* tolerance), but they also stress more foundations related to ingroup/loyalty and authority/respect (leading to the prediction of *lower* tolerance). Thus, the pull of two seemingly incompatible moral foundations when confronted with criticism from an outgroup member may lead some conservatives to report greater tolerance and other conservatives to report less tolerance, yielding an overall null effect. Unfortunately, we did not directly manipulate or measure the accessibility of moral values or relative importance placed on these values across the course of the study. Future research can examine if varying the accessibility of moral values leads to similar political polarization as found in the current study. The results of the current study also align with previous research showing conservatives' values may be more resilient to major societal events (Van de Vyver et al., 2015).

As with any cross-sectional study, our data cannot speak to the causal relations among the measured variables. It is possible, for example, that bin Laden's death may have shifted actual political orientations in a similar way as found after 9/11 (Huddy & Feldman, 2011; Lambert et al., 2011; Morgan et al., 2011; Pyszczynski et al., 2003). If so, there should have been significant correlations between the day of survey completion and political orientation that documented this shift. Since these two variables were unrelated, this possibility is unlikely. Correlational studies also leave open the possibility that third variables explain the results. Indeed, because we took advantage of a previously IRB-approved study to measure the effects of bin Laden's death immediately after it happened (i.e. starting that evening), we were not able to include several measures that would be needed to better understand exactly

why these effects occurred (e.g. direct measures of the accessibility of values). Of course there was no way to expect that such an event would occur, nor could we apply for an IRB amendment and add measures in time. However, we can rule out the possibility that these effects are specifically explained by the frequency of using media resources to learn about the news and the accessibility of death-related thoughts. These non-findings could speak to the pervasiveness of the story of bin Laden's death, however, since many people learned of the news from friends, relatives, or social media immediately after his death.

Despite our ability to rule out some alternative hypotheses, a host of alternative explanations exist that could explain the polarization of worldview defense among liberals and conservatives. For example, bin Laden's death could have emphasized the sitting president's military accomplishments or have filled individuals with anti-war sentiments, thus leading to an increase in liberal-based values of fairness and protecting others from harm. This hypothesis could be supported by the null effect observed among conservative participants. Conversely, other individuals may have interpreted bin Laden's death as a different type of threat that was not necessarily mortality-based. For example, individuals may have been skeptical about the murky details surrounding bin Laden's death or may have feared retaliation against the United States from bin Laden's allies. However, if bin Laden's death did serve as a function of general threat, we should have observed a main effect of time on worldview defense similar to the effects found in similar studies examining the onset of threat (Doty et al., 1991; Konrath et al., 2007). It is therefore more likely that major events such as bin Laden's death arouse different values and reactions from different people. Nevertheless, feelings of threat have also led to the same conditional, polarizing effects found in the current study (Greenberg et al., 1992; Konrath et al., 2007; Van de Vyver et al., 2015).

The wide diversity of possible emotional responses speaks to the very polarizing nature of this event. In the absence of random assignment, we cannot be certain whether the findings observed in the current study result from the accessibility of values among liberals and conservatives, differential responses to threats among liberals and conservatives, or a combination of both. Future studies can examine if experimentally manipulating reminders about bin Laden's death leads to the same polarization effects found in the current study. These studies can also examine the mediating role of value accessibility in the relationship between the onset of major societal events and worldview defense.

Despite these limitations, the present study extends research on political orientation to examine how individuals behave when their cultural worldviews are challenged. The study assessed individuals' immediate reactions to Osama bin Laden's death on the night he died until five weeks later in a broad sample of adults. We have documented important differences in how people responded in the immediate aftermath of bin Laden's death. These novel findings advance perspectives on how individuals respond to major societal events and the implications these may have for interactions with dissimilar others who challenge our core values (Festinger et al., 1964; Silver, 2011).

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Figure 1.

The relation between political orientation, proximity to the death of Osama bin Laden, and worldview defense. Simple slopes are plotted for individuals at one standard deviation above and below the means of political orientation and proximity to the death of Osama bin Laden (Aiken & West, 1991).

Table 1

Correlations Among Primary Study Variables

	1	2	3	4
1. Days from bin Laden's death (lower = closer to his death)				
2. Political Orientation (higher = more conservative)	-.04			
3. Media Usage (higher = more news consumption)	-.11 *	-.03		
4. Death-thought accessibility (higher = more)	-.10 *	-.00	.04	
5. Worldview Defense (higher = more defensive)	.06	.35 **	.03	-.05

$N_s=470-480$;

*
 $p<.05$,

**
 $p<.01$.