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Journal of Personality and Social Psychology, 2016,
Vol. 110, Issue 1, pp. 96 - 115, [http://
dx.doi.org/10.1037/pspp0000039](http://dx.doi.org/10.1037/pspp0000039).

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Why Bother? Death, Failure, and Fatalistic Withdrawal From Life

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The current research examines the conditions under which death contemplation will reduce, rather than increase, goal directed activity. By employing a goal-regulation perspective on the problem of death, we hypothesized that death awareness precipitates withdrawal from the goal for continued life when life is experienced as dissatisfying and hope for the future appears bleak. In Study 1, participants with low life satisfaction who contemplated goal failure responded to mortality salience with reduced desire for continued life. Studies 2–4 examined general goal motivation. Consistent with the idea that withdrawal from life precipitates a general state of reduced goal motivation, parallel effects were observed on the willingness to delay gratification for future outcomes (Study 2), orientation toward the future (Study 3), and behavioral activation system (BAS) sensitivity (Study 4). Moreover, Study 3 showed that these effects were mediated by a generally pessimistic attitude toward life. Finally, Study 5 assessed felt uncertainty and state depression, revealing that withdrawal from life was associated with reduced uncertainty but increased depression. Discussion is focused on implications for theories of threat and defense, and applications for understanding depression and suicide.

Keywords: death, goal-regulation, withdrawal, suicide, depression

If we're just going to die, what's the point of living?

—Bill Watterson (2005), *Calvin and Hobbes*

The knowledge of death undercuts human motivation like nothing else. In light of this basic fact of life, nearly all goal-directed action can appear pointless and absurd. Much like the musings of young Calvin in Watterson's philosophically minded cartoon strip, contemplating the inevitability of death leads many people to wonder whether there is a point of doing anything at all. Existentially oriented psychologists concur that thinking about death is often a source of depression and related mental health issues (e.g., Becker, 1973; Frankl, 1946/1986; May, 1969; Yalom, 2008). Within experimental social psychology, the deleterious effect of death awareness on goal motivation stands at the very heart of terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986). Indeed, according to Pyszczynski, Greenberg, Koole, and Solomon (2010) "the theory starts with the proposition that awareness of the inevitability of death in an animal biologically predisposed to live creates the potential for terror, which

would seriously impede goal-directed behavior unless managed in some way" (p. 726; italics added).

Despite the central importance of the link between death awareness and impeded goal activity in TMT, surprisingly little research has investigated this link. In fact, the preponderance of evidence suggests precisely the opposite, showing that death reminders often increase and facilitate goal striving (e.g., McGregor, Gailliot, Vasquez, & Nash, 2007; Peters, Greenberg, Williams, & Schneider, 2005). In the present research, we draw upon a goal-regulation framework (Carver & Scheier, 1998; Gray & McNaughton, 2000; Jonas et al., 2014; Nash, McGregor, & Prentice, 2011) to shed light on the conditions under which death thoughts will precipitate withdrawal from goal-directed activities, and produce a fatalistic attitude toward life in general.

A Goal Regulation Perspective on the Problem of Death

Social psychological perspectives on the problem of mortality propose that death awareness constitutes a discrepancy that arouses anxiety and motivates activity aimed at reducing the anxiety (Jonas et al., 2014; Pyszczynski et al., 2010). As mentioned above, TMT maintains that the knowledge of death is at odds with a biological drive for continued survival (Pyszczynski et al., 2010). Similarly, goal-regulation perspectives (e.g., McGregor et al., 2007) maintain that death entails a motivational conflict between the desire (i.e., goal) for continued life, and the knowledge that this goal will ultimately fail (Jonas et al., 2014). From

this perspective, *living* is itself a goal, and the knowledge of inevitable death is a constant source of frustration for this goal. When a goal is frustrated, people feel anxiously uncertain about whether to continue directing activity toward that goal, or submit to the idea that it will never be accomplished and therefore withdraw from it (Carver & Scheier, 1998). According to Gray and McNaughton's (2000) reinforcement sensitivity theory, goal conflicts characterized by uncertainty activate a neural subsystem termed the behavioral inhibition system (BIS). The BIS functions to regulate motivational conflicts by inhibiting focal goal pursuit and arousing an anxious state of vigilance aimed at finding a solution to the goal conflict. When a solution can be identified, the BIS and attendant anxiety are muted and goal directed activity can resume (for reviews see Jonas et al., 2014; McNaughton & Corr, 2004).

The conflict aroused by death awareness, however, has no direct solution. No matter how hard one tries to continue living, death is inevitable. Thus, death awareness represents a case in which the individual is in danger of remaining stuck in a BIS-mediated state of anxious uncertainty due to an inability to resolve the motivational conflict. Indeed, this is the basic premise of TMT—that the knowledge of death potentiates a state of existential paralysis (Pyszczynski et al., 2010). According to TMT, this predicament has led to the development of cultural worldviews that provide a symbolic solution to the problem of mortality by suggesting that life continues (literally or symbolically) beyond death (see Becker, 1973; Solomon, Greenberg, & Pyszczynski, 1991). If existence continues beyond the death of the body, then the desire for continued existence is no longer frustrated by the prospect of dying. Thus, cultural worldviews offer a means of reducing BIS activation by providing an opportunity for death transcendence, which liberates the goal for continued life from conflict. As such, death reminders motivate people to protect the cultural worldview from threat, and strive for personal significance by living up to cultural value standards (see Pyszczynski, Sullivan, & Greenberg, 2015 for review).

The reactive approach motivation (RAM) model (McGregor, Nash, Mann, & Phills, 2010) offers a similar explanation regarding how people resolve the goal conflict inherent in death awareness, but without recourse to symbolic death transcendence. According to this view, anxious uncertainty regarding a permanently conflicted goal (such as the goal for continued life vis-à-vis the knowledge of death) can be abated by directing activity toward an alternative goal that is not mired by conflict. By doing so, the individual can reengage approach-motivated activity, and thereby mute the BIS indirectly without needing to resolve the initial conflict. From this perspective, abstract ideological goals (such as defense of the cultural worldview, and striving toward cultural ideals) can be particularly effective levers of approach motivation because they are capable of sustaining continued approach over long periods of time (McGregor et al., 2010). Thus, the development of lifelong goals and devoting oneself to abstract ideals is attractive in the face of death, because such goals can always be summoned to reactivate an approach-motivated state and thereby quell anxiety (see McGregor, Prentice, & Nash, 2013 for a review).

Taken together, these theories converge on the idea that the motivational conflict aroused by death invigorates goal pursuit aimed at reducing anxiety. This is accomplished indirectly; in a

way that does not actually prevent death from occurring, but either reduces the implications of death for continued existence or turns the individual away from the conflicted goal by becoming involved in alternative pursuits.

Goal Frustration and Fatalistic Withdrawal

Although these indirect means of reducing the anxious uncertainty of the BIS are often effective when direct resolutions to a conflicted goal are unavailable, sometimes indirect strategies may also fall short. Attempting to mute death-related anxiety by devoting one's life to a personally important or culturally valued goal is contingent upon the belief that one possesses the ability to successfully complete the goal. Without a sense of efficacy and an expectation of success, people will not embark upon the goal in the first place, let alone continue to exert the ongoing effort required to bring the goal to fruition (Bandura, 1977; Carver & Scheier, 1998). Thus, experiences of failure in important goal pursuits can hinder palliative efforts in the face of death, and leave the goal in a state of conflict.

In such cases where mortality is salient and the ability to engage indirect means of palliation is hindered or outright thwarted, a goal regulation perspective maintains that the individual will remain in an anxious state of uncertainty (Jonas et al., 2014). This situation is unlikely to be tenable for very long, however, as the experience of anxiety is highly aversive and could lead to psychological abnormalities if left unchecked. Indeed, recent research suggests that mental disorders such as posttraumatic stress disorder (PTSD) entail an inability to engage psychological defenses following traumatic events involving direct confrontation with death (see Pyszczynski & Kesebir, 2011; Webber, Schimmel, Martens, Hayes, & Faucher, 2013). According to Pyszczynski and Kesebir (2011), severe trauma can disrupt anxiety-buffering capabilities by shattering protective worldview beliefs (cf., Janoff-Bulman, 1992), thereby rendering them ineffective at leveraging palliative defenses.

From a goal-regulation perspective, another option for resolving motivational conflict, and thereby reducing anxiety, is to disengage from the conflicted goal altogether (Carver & Scheier, 1998). When a goal is completely unattainable, goal disengagement is preferable to remaining anxiously locked in a state of uncertainty; especially to the extent that it facilitates the abandonment of unattainable goals in favor of alternative goals that are less fraught with conflict (Carver & Scheier, 1998) and thus capable of reengaging goal approach. Goal withdrawal is problematic, however, when considering the issue of death. In this case, goal disengagement involves withdrawing from life itself. Nevertheless, if one no longer wishes to live, then death ceases to conflict with one's goals and desires, and should therefore reduce anxiety.

Withdrawal from the goal of living may include cases of suicide, but does not necessarily entail active attempts at taking one's life. Rather, goal withdrawal in this case can simply involve giving up the will to live and mentally disengaging from the goal. In this sense, withdrawing from the goal of life consists of letting oneself go, and ceasing to exert the effort required to ensure ongoing survival (cf., Richter, 1957). Moreover, given that the goal for continued life is a superordinate goal that drives many lower-order pursuits, such as remaining physically healthy, securing a source of income, and even striving for symbolic life continuation (Pyszcz-

zynski et al., 2010; Pyszczynski, Greenberg, Solomon, & Hamilton, 1990), withdrawing from life involves withdrawing from all of these lower-level goals as well (Carver & Scheier, 1998). Thus, giving up on life entails a general state of goal withdrawal in which the individual loses all (or nearly all) goal motivation. We refer to this state as *fatalistic withdrawal* because it entails withdrawing from life and all subordinate goal-directed activity due to a fatalistic belief that one's actions will be ineffective in bringing about goal success (i.e., continued life) and thus pointless. We view this state as akin to learned helplessness (Seligman, 1975), wherein the individual stops struggling to resolve the conflict, and resigns himself to a hopeless state of depression (Abramson, Metalsky, & Allow, 1989).

In summary, we propose that when efforts to engage indirect means of resolving the conflict aroused by death awareness are met with frustration, death thoughts will trigger a state of fatalistic withdrawal from life and all goal activities. Rather than struggling in a BIS-mediated state of anxiety, fatalistic withdrawal entails saying "why bother?" and pessimistically resigning oneself to fate.

Empirical Evidence for Fatalistic Withdrawal

Evidence that confrontations with death can lead people to withdraw from life comes from various sources. First, real world examples of people disengaging from life by committing suicide are not uncommon. According to the [World Health Organization \(2012\)](#), approximately 800,000 people die by suicide each year, which accounted for 1.4% of all deaths in 2012 and was the fifteenth leading cause of death worldwide. Moreover, these statistics do not include those who merely attempt suicide, or those who contemplate killing themselves but never act on the impulse (cf., [Chatard & Selimbegović, 2011](#)). Thus, active withdrawal from life is a real phenomenon. Second, empirical studies have also observed instances of passive withdrawal from life. For example, several applied studies have found that people will give up on life following diagnosis of potentially fatal diseases, such as HIV and cancer ([Reed, Kemeny, Taylor, Wang, & Visscher, 1994](#); [Scheier & Bridges, 1995](#)). In cases such as these, the problem of death is more or less immediate, and options for palliative goal pursuit may be severely limited. Furthermore, and consistent with our reasoning, the tendency for patients in these studies to disengage from life has been shown to stem from a lack of hope for the future and a fatalistic acceptance that death is inevitable ([Reed et al., 1994](#); [Scheier & Bridges, 1995](#)).

More recently, experimental studies employing the mortality salience paradigm of TMT also support our reasoning ([Mikulincer & Shaver, 2012](#); [Routledge et al., 2010](#)). These studies attempted to understand how people respond to death thoughts when their ability to employ distal defenses is compromised. [Routledge et al. \(2010\)](#), for example, found that people with low self-esteem (i.e., those who lack the psychological protection afforded by the cultural worldview) reported reduced vitality ("aliveness and energy about living," p. 902) after contemplating death. People with low self-esteem also tend not to engage approach-motivation following mortality reminders ([McGregor et al., 2007](#); see also [Hayes, Prentice, & McGregor, 2015](#)), which is consistent with our proposition that fatalistic withdrawal results when palliative goal-approach is absent or hindered.

[Mikulincer and Shaver \(2012\)](#) found similar results when experimentally manipulating people's ability to employ anxiety-buffering defenses following mortality salience by inducing them to contemplate the inadequacies of their cultural worldview, undesired aspects of themselves, or separation from a significant other. Results showed that when distal defenses were blocked by these manipulations, death thoughts reduced performance on a remote associates test and increased helplessness-related emotions (e.g., hopelessness, depression, despair). This research shows that people can begin to feel helpless when they are unable to summon defenses against death concerns.

Taken as a whole, these studies suggest that confrontations with death can lead people to withdraw from life and experience aspects of what we refer to as fatalistic withdrawal. Moreover, this outcome appears only to occur when people are unable to obtain relief from BIS-related anxiety by engaging defenses that activate approach-oriented states.

The Present Research

Although the above research is consistent with the idea that death thoughts can trigger a withdrawal from life, the present research sought to test this idea more directly, and to examine the consequences of withdrawal for general goal motivation. According to our theoretical rationale, death thoughts should initiate a withdrawal from life when palliative approach-motivation is blocked by goal failure. Furthermore, by virtue of initiating a withdrawal from life, these conditions should also trigger a general reduction in goal motivation that is characteristic of the hypothesized fatalistic withdrawal state. In support of our reasoning, we present five studies examining the effect of death contemplation on the desire for life (Studies 1 and 5), general goal-approach motivation (Studies 2–4), and affective states related to anxious uncertainty and depression (Study 5). We used highly consistent methodology across all studies, and solicited large sample sizes to ensure the reliability of our results. In each study we manipulated death thoughts via a standard mortality (vs. dental pain) salience induction ([Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989](#)), and after a delay period (during which time anxiety-buffering defenses come online; see [Pyszczynski, Greenberg, & Solomon, 1999](#)), we manipulated participants' ability to engage palliative approach goals by having them recall a time in which they failed (vs. succeeded) at a goal that was very important to them. We expected mortality salience to reduce the desire for life and general goal motivation among participants asked to recall a failure, but not among those asked to recall a success.

We also sought to identify individual differences in the hypothesized process. We reasoned that a tendency to give up on life when attempts to mute death anxiety through goal approach prove difficult should be most pronounced among people who are unhappy and do not enjoy their life (i.e., low life satisfaction, low self-esteem). From a goal regulation perspective, people are most likely to withdraw from goals that do not appear to be going well ([Carver & Scheier, 1998](#)). As it pertains to the goal for continued life, people who are highly dissatisfied with how their life is going (i.e., low life satisfaction) should be most prone to give up on it. Similarly, TMT maintains that the overall belief that one's life is meaningful, significant, and worthy of death transcendence (i.e., self-esteem; see [Becker, 1971](#); [Pyszczynski, Greenberg, Solomon,](#)

Arndt, & Schimel, 2004) provides a buffer against death-related concerns. In other words, people who are highly satisfied with life and feel a sense of personal value are protected against the deleterious effects of death contemplation (Harmon-Jones et al., 1997; Routledge et al., 2010). In keeping with both of these perspectives, we reasoned that when an individual feels generally worthless and derives little or no enjoyment from life, they should see little reason to persist in their efforts to continue living following thoughts of death and failure. By contrast, people who feel a sense of personal significance and are generally satisfied with their life should be more reluctant to give up on life, even when experiencing difficulty engaging palliative goal approach. In short, these people enjoy living, and may therefore be more likely to persist in their desire for life and in striving toward their life goals, despite failure and salient death thoughts (cf., Martin, Ward, Achee, & Wyer, 1993; Sansone & Harackiewicz, 1996). To test this reasoning, we examined the moderating role of life satisfaction (Studies 1–5) and self-esteem (Study 5) in our results.

Study 1

Our first study was designed to test our main hypothesis that death thoughts will reduce the desire for life when palliative goal approach is blocked and life satisfaction is low. More specifically, after manipulating mortality salience and inducing participants to contemplate a time in which they failed to accomplish a goal that was personally important to them, we asked them to report the age at which they hope to die. We expected participants with low life satisfaction who contemplated death and failure to report wanting to die at a significantly younger age than controls.

Method

Participants and design. One-hundred and ninety-nine American residents recruited from MTurk participated in exchange for \$0.50. Six participants were excluded from the analysis for failing to complete all of the experimental materials, leaving a total of 193 participants (103 female, 90 male; $M_{\text{age}} = 35.3$, $SD = 10.8$) for the final analyses. Participants were randomly assigned to one of four conditions in a 2 (Salience: Mortality vs. Dental Pain) \times 2 (Goal Recall: Failure vs. Success) between-subjects factorial design.

Procedure. Participants were told that the study was about memories and plans for the future. They began by completing a series of personality questionnaires.

Life satisfaction. The first questionnaire assessed participants' general satisfaction with life. Specifically, participants rated their agreement (1 = *strongly disagree*; 7 = *strongly agree*) with four items assessing life satisfaction. These items read: "I am happy with my life just the way it is right now," "I don't need anything more out of life than what I have right now," "I want more out of life than what I currently have (reverse coded)," and, "I am satisfied with my current life situation" ($M = 3.95$, $SD = 1.30$, $\alpha = .81$).

Mortality salience (MS) manipulation. Next, participants completed a MS manipulation followed by two filler questionnaires to provide delay (see Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). Participants in the MS condition were asked to "Briefly describe the emotions that the thought of your own death arouses in you," and "Jot down, as specifically as you

can, what you think will happen to you as you physically die and once you are physically dead," whereas those in the control condition were asked two parallel questions regarding dental pain.

Goal recall manipulation. After completing the filler questionnaires, participants proceeded to the portion of the study that was ostensibly about memory recall, but actually served as our manipulation of goal failure. Participants were asked to recall a memory of a personal *failure* (or *success*). Specifically, they were instructed to:

Please take a minute and think back to a time in your personal life when you worked hard to achieve a particular goal *but that goal was not achieved* (and that goal was achieved). For example, this could be a time when you worked hard to achieve a grade in school, perhaps a promotion, or even perhaps a relationship goal. It is important to think only about an important personal goal that was *not met and thus you did not get the reward that you expected* (met and thus you got the reward that you expected).

After writing about one of these two topics, participants answered a few additional questions about their goal to maintain the integrity of the memory recall cover-story (e.g., "How long did you pursue this goal?").

Desire for life. The final two items comprised our dependent measure. Participants were asked to indicate at what age they *expected* to die, and more specifically for our hypothesis, at what age they *hoped* to die. The pattern of responses was identical on these items ($\alpha = .75$), so we averaged them for our analysis. Responses on the hope item ranged from 29 to 9,000 years of age, with 97.4% of responses lower than 150 years and only five responses exceeding 150 years. Similarly, responses on the expectation item ranged from 40 to 500, with only one response exceeding 150 years. To normalize the distribution of responses, we decided to establish 150 years as the upper limit, and therefore recoded responses that were above this limit to 150. This procedure successfully reduced skewness (raw skewness = 13.56, transformed skewness = .56). Averages for the composite life-desire variable were computed after each individual item was cropped.

Results and Discussion

We regressed life desire scores on MS, goal recall condition, life satisfaction, and all second and third order interaction terms (Aiken & West, 1991). This analysis revealed the predicted three-way interaction of MS \times Goal Recall \times Life Satisfaction, $b = 7.07$, $SE = 3.25$, $t(185) = 2.17$, $p = .031$ (see Figure 1). To probe this interaction, we began by investigating the simple interactions of MS \times Life Satisfaction within each of the goal recall conditions. This strategy yielded a significant effect of MS \times Life Satisfaction within the *failure* condition, $b = 7.33$, $SE = 2.41$, $t(185) = 3.04$, $p = .003$, but only a main effect of MS in the *success* condition, $b = 8.39$, $SE = 3.01$, $t(185) = 2.79$, $p = .006$. Simple effects tests within the *failure* condition showed that MS significantly reduced life desire at low life satisfaction, $b = -11.93$, $SE = 4.24$, $t(185) = -2.82$, $p = .005$, whereas it marginally increased life desire at high life satisfaction, $b = 7.18$, $SE = 4.35$, $t(185) = 1.65$, $p = .100$.

These results provide direct support for our hypothesis. Specifically, mortality salience decreased the desire for life among participants with low life satisfaction whose palliative efforts were

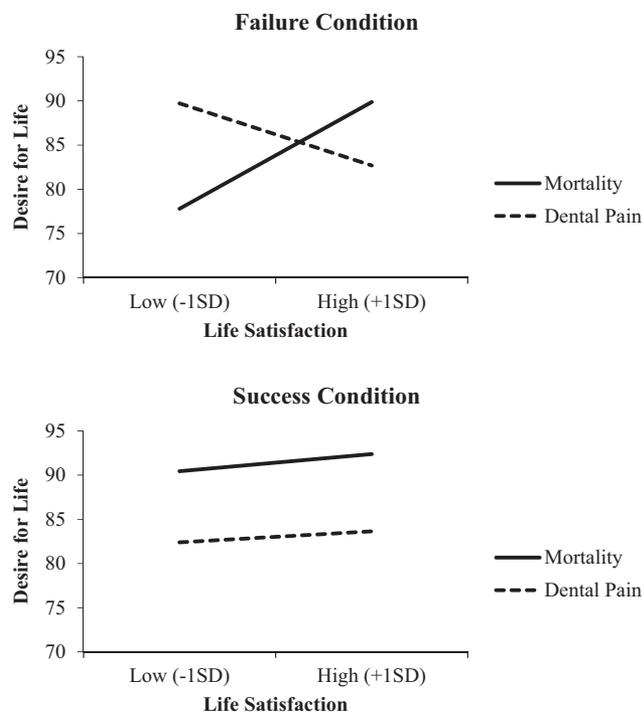


Figure 1. Interaction of mortality salience by failure by life satisfaction on desire for life in Study 1.

blocked by recalled goal failure. By contrast, participants with high life satisfaction, or those who recalled a goal success, responded to mortality salience with a general increase in the desire for life. Thus, consistent with our expectations, thoughts of death reduced the desire for life only when avenues for palliative goal approach were blocked by the failure manipulation, and only among participants who reported low life satisfaction. For these people, withdrawing from the goal of life is the only available option for reducing goal conflict under the circumstances, and given their general dissatisfaction with the way that their life is going, they were not resistant to the idea.

In Studies 2-4, we sought to extend our analysis by assessing general goal motivation under the same circumstances as those induced in Study 1. We reasoned that a withdrawal from the superordinate goal for continued life would instigate a concomitant withdrawal from all subordinate goal-directed activity—a state that we refer to as fatalistic withdrawal.

Study 2

Our second study was originally designed to test a different hypothesis. However, as our series of studies unfolded, it became clear to us that the results of this study were indicative of fatalistic withdrawal. Consequently, we present it as evidence for our theorizing.

In this study, we assessed the impact of our independent variables on the willingness to delay gratification as a function of life satisfaction. The willingness to delay gratification is a hallmark of full engagement in life goals, and is often critical to life success (Mischel, Shoda, & Rodriguez, 1989). Furthermore, people who

have given up on life often act impulsively, without consideration for the long-term consequences of their actions (Baumeister, 1990; Brezina, Tekin, & Topalli, 2009). The ability to delay gratification also requires effort (Baumeister, Bratslavsky, Muraven, & Tice, 1998), and is contingent upon hope that one's efforts will pay off in the future (Carver & Scheier, 1998; Zimbardo & Boyd, 1999). Given that fatalistic withdrawal, as we have conceptualized it, involves withdrawing from life goals due to a more general withdrawal from life itself, we reasoned that people in this state would be generally unwilling to exert the effort required to obtain delayed rewards.

Method

Participants and design. One-hundred and 83 American residents recruited from MTurk participated in exchange for \$0.50. Three participants were excluded from the analysis for failing to complete all of the experimental materials, leaving a total of 180 participants (97 female, 83 male; $M_{age} = 37.1$, $SD = 12.7$) for the final analyses. Participants were randomly assigned to one of four conditions in a 2 (Salience: Mortality vs. Dental Pain) \times 2 (Goal Recall: Failure vs. Success) between-subjects factorial design.

Procedure. The procedure was nearly identical to that of Study 1, except that we employed Diener, Emmons, Larsen, and Griffin's (1985) measure of life satisfaction ($M = 4.15$, $SD = 1.62$, $\alpha = .92$),¹ and assessed willingness to delay gratification rather than the desire for life as the dependent variable. Our measure consisted of four items designed to capture the degree to which participants are willing to sacrifice pleasure in the present in order to reap future rewards ($\alpha = .72$). More specifically, participants rated the extent to which they agreed (1 = *completely disagree*; 9 = *completely agree*) with five statements: "It is more important for me to enjoy life now than plan for the future (reverse coded)," "I am willing to sacrifice pleasure in the present because I know that it will bring me more rewards in the future," "I am afraid that if I sacrifice pleasure now, I will never experience many of the great things that life has to offer (reverse coded)," and "I want to have a good time now, even if my future might suffer as a result (reverse coded)." Higher composite scores on this scale indicate a greater willingness to delay gratification.

Results and Discussion

We regressed willingness to delay gratification on MS, goal recall condition, life satisfaction, and all second and third order interaction terms (Aiken & West, 1991). This analysis revealed the predicted three-way interaction of MS \times goal Recall \times Life Satisfaction, $b = .45$, $SE = .21$, $t(172) = 2.19$, $p = .030$ (see Figure 2). We probed this interaction in the same way as Study 1—by first investigating the simple interactions of MS \times Life Satisfaction within each of the goal

¹ This measure was positioned after the manipulations of mortality salience and goal failure in Studies 2-4. Although it is unorthodox to include a dispositional assessment following experimental manipulations, the manipulations did not exert a significant effect on life satisfaction across these studies (MS \times Failure, $F(1, 647) = .85$, $p = .358$; MS main effect, $F(1, 647) = .25$, $p = .618$; failure main effect, $F(1, 647) = 1.13$, $p = .288$), and the overall pattern of results mirrors that observed in Studies 1 and 5 which assessed life satisfaction prior to the experimental manipulations.

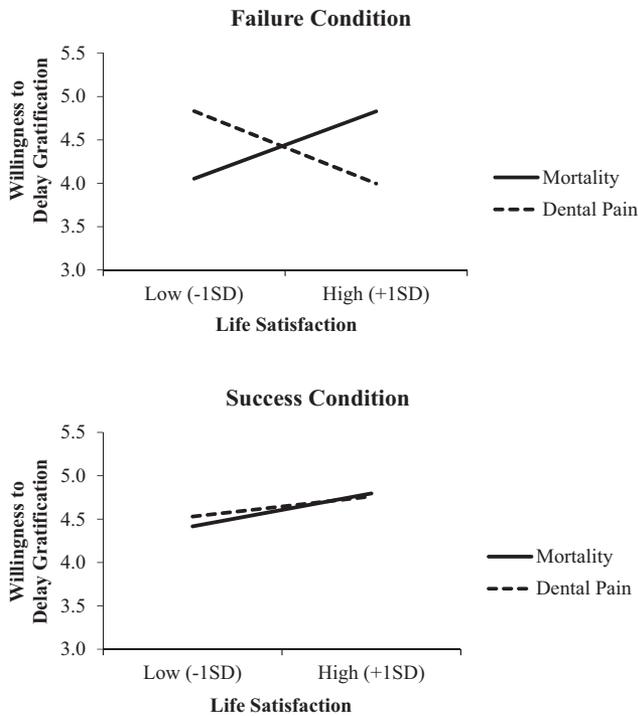


Figure 2. Interaction of mortality salience by failure by life satisfaction on willingness to delay gratification in Study 2.

recall conditions. This strategy yielded a significant effect of MS \times Life Satisfaction within the *failure* condition, $b = .50$, $SE = .15$, $t(172) = 3.35$, $p = .001$, but not in the *success* condition, $b = .05$, $SE = .14$, $t(172) = .32$, $p = .750$. Simple effects tests within the *failure* condition showed that MS significantly reduced willingness to delay gratification at low life satisfaction, $b = -.78$, $SE = .34$, $t(172) = -2.27$, $p = .025$, whereas it significantly increased willingness to delay gratification at high life satisfaction, $b = .83$, $SE = .33$, $t(172) = 2.50$, $p = .013$.

These results mirror those of Study 1, and extend our analysis by showing that the effects generalize to reduced goal motivation. Specifically, mortality salience decreased the willingness to delay gratification among participants with low life satisfaction whose palliative efforts were blocked by imagining a goal failure. Much like Study 1, a reverse effect emerged among participants with high life satisfaction, and in this case the effect was statistically significant. Thoughts of death in these circumstances led participants with high life satisfaction to increase their willingness to delay gratification. Although we did not hypothesize a complete reversal of the effect in this condition, this pattern is nevertheless consistent with our reasoning that high life satisfaction provides resilience in the face of death and failed efforts at palliation. Rather than give up under these circumstances, these participants became even more determined to strive for success in the future (cf., McGregor et al., 2007).

Study 3

Although Study 2 is consistent with our theoretical reasoning regarding fatalistic withdrawal, it was not originally conducted as a test of our hypotheses. As such, the results should be

interpreted with caution. Moreover, the items assessing willingness to delay gratification were designed with a hedonistic pleasure-seeking approach-orientation in mind. Thus, it remains possible (on the basis of Study 2 alone) that the effect is indicative of a concrete present-focused form of goal approach (see Jonas et al., 2014) rather than general goal withdrawal as we are suggesting. We therefore conducted an additional study to tease apart hedonistic approach from fatalistic withdrawal.

Accordingly, we used [Zimbardo and Boyd's \(1999\)](#) time perspective scale, which has subscales that assess orientations toward past, present, and future time perspectives. We measured only the future, present-hedonistic, and present-fatalistic orientation subscales because they seemed best suited to our research questions for several reasons. First, a future orientation is indicative of goal striving ([Miller & Brickman, 2004](#); [Petz & Wilson, 2008](#); [Zimbardo & Boyd, 1999](#)). According to [Zimbardo and Boyd \(1999\)](#), people who score high on this subscale are organized, driven by ambition, and willing to sacrifice present enjoyment in order to achieve future success. In other words, these people are fully engaged in life, and are actively pursuing their goals. Thus, giving up on life should lead to correspondingly low scores on this future orientation subscale. As such, we expected MS to reduce future orientation among participants with low life satisfaction who imagined goal failure.

We also assessed the present-hedonistic and present-fatalistic orientations. Present-hedonistic time perspective involves an engaged orientation toward the present that is characterized by happiness, excitement, and pleasure-seeking, without heed for future consequences. By contrast, a present-fatalistic time perspective is indicative of a disengaged and helpless attitude in which people are present-oriented by default, because they feel jaded and hopeless about the future and life in general ([Seligman, 1975](#)), and resigned to whatever fate unfolds. Present-fatalistic time-perspective thus represents a disengaged and cynical outlook on life in which personal defeat seems already assured (cf., [Scheier & Bridges, 1995](#)). Moreover, consistent with Study 1 and our theorizing that fatalistic withdrawal entails giving up on the goal of life itself, people who score high on this subscale also report wanting to live shorter lives ([Zimbardo & Boyd, 1999](#)). Thus, whereas the present-hedonism orientation involves a focus on the present characterized by approach-motivation for positive stimuli, the present-fatalism orientation involves a resignation to the present by virtue of feeling unable to influence the future. We expected parallel results to Studies 1 and 2 on the present-fatalism subscale, but not on the present-hedonism subscale. As these subscales are known to be positively correlated ([Zimbardo & Boyd, 1999](#)), we statistically controlled for the alternate perspective when examining each of the present-focused time perspectives.

Finally, Study 3 also sought to explicitly examine the intermediate process involved in fatalistic withdrawal (as assessed via lower future orientation and higher present-fatalistic orientation). According to our reasoning, death thoughts should produce withdrawal when an individual has lost hope for the future (cf. [Scheier & Carver, 1992](#)), and feels pessimistic about life in general. To test this reasoning, we measured a generally pessimistic outlook on life and the future prior to assessing our main dependent variables. We predicted that the three-way

interaction of MS \times Failure \times Life Satisfaction on fatalistic withdrawal would be mediated by pessimism.

Method

Participants and design. Participants were 300 MTurk workers living in the United States who participated in exchange for \$0.50. Eleven participants were excluded from analysis for failing to complete all experimental materials, leaving 289 participants for the final analysis (148 male, 140 female, one unspecified; $M_{age} = 33.24$, $SD_{age} = 11.67$). They were randomly assigned to one of four conditions in a 2 (MS vs. Dental Pain) \times 2 (Failure vs. Success) between-subjects factorial design.

Procedure. The procedure was nearly identical to that of Study 2, except for the dependent variables. In this study, participants answered items designed to assess pessimism followed by the main dependent variable that assessed the three time perspective orientation subscales: future, present-hedonistic, present-fatalistic.

Pessimism. Participants completed five items that we designed to tap a generally negative and pessimistic outlook of the future, and read: “Working hard does not guarantee a good life,” “I have high expectations for the future (R),” “I know that if I work hard now I will benefit from it in the future (R),” “I feel like society doesn’t have very much to offer me,” and, “I don’t think I’m ever going to make a lot of money.” Participants rated their agreement with these items on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*; $M = 3.53$; $SD = 1.19$; $\alpha = .76$).

Time perspective. Immediately thereafter, participants completed the three subscales of interest from *Zimbardo and Boyd’s (1999)* time perspective scale. These subscales represented present-hedonism (e.g., “It is important to put excitement in my life”), present-fatalism (e.g., “Since whatever will be will be, it doesn’t really matter what I do”), and future orientation (e.g., “When I want to achieve something, I set goals and consider specific means for reaching those goals”). The items were presented in a pseudorandom order, and participants rated their agreement with each item using a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*).

Results and Discussion

We began by computing composites of life satisfaction ($M = 4.31$, $SD = 1.52$, $\alpha = .91$), present-hedonism ($\alpha = .84$), present-fatalism ($\alpha = .80$), and future ($\alpha = .78$) orientations. To examine our main hypothesis, we conducted a broadest level omnibus F test consisting of a 2 (Salience: Death vs. Dental Pain) \times 2 (Goal Recall: Failure vs. Success) \times Life Satisfaction \times 3 (Time Perspective: Present-Hedonism vs. Present-Fatalism vs. Future) mixed ANOVA. As expected, this test yielded a significant 4-way interaction, $F(2, 562) = 3.41$, $p = .034$. To probe this interaction, we conducted separate regression analyses on each of the time perspective variables separately.

Present-fatalism time orientation. We regressed the present-fatalism scores on the main effects and interactions of our independent variable (*Aiken & West, 1991*) while controlling for present-hedonism (present-hedonism and present-fatalism subscales are known to be correlated and were in this study as well, $r = .43$). The analysis revealed a main effect of life satisfaction,

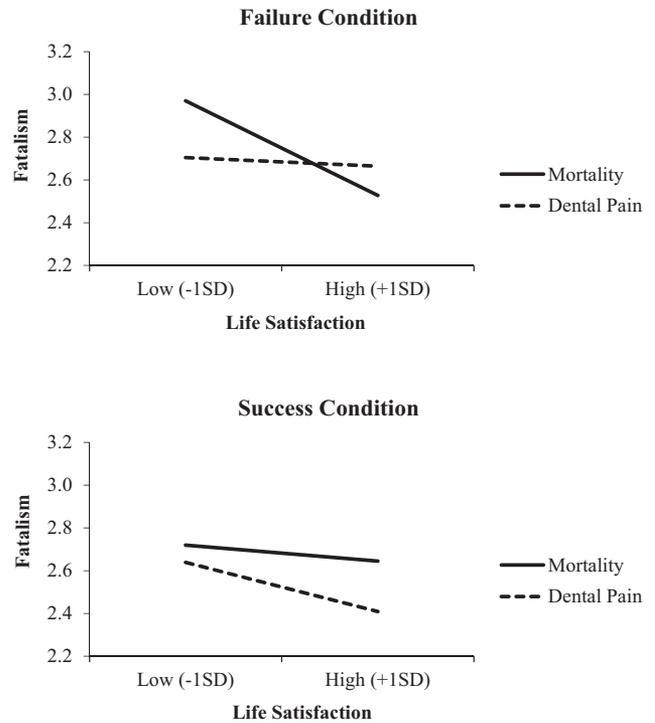


Figure 3. Interaction of mortality salience by failure by life satisfaction on present-fatalistic (controlling for present-hedonistic) time perspective in Study 3.

$b = -.07$, $SE = .02$, $t(280) = -3.17$, $p = .002$, and the expected three-way interaction of MS \times Goal Recall \times Life Satisfaction emerged marginally significant, $b = -.17$, $SE = .10$, $t(280) = -1.72$, $p = .086$ (see Figure 3).

We decided to probe this interaction because we predicted it a priori, and began by examining the simple interaction of MS \times Life Satisfaction within each of the goal recall conditions, as we did in Studies 1 and 2. As expected, these analyses revealed a significant interaction within the *failure* condition, $b = -.12$, $SE = .05$, $t(280) = -2.18$, $p = .030$, but not within the *success* condition, $b = .05$, $SE = .08$, $t(280) = .62$, $p = .536$. Simple effects tests within the *failure* condition revealed that MS increased present-fatalism at low life satisfaction, $b = .23$, $SE = .12$, $t(280) = 1.94$, $p = .053$, whereas it nonsignificantly decreased present-fatalism at high life satisfaction, $b = -.14$, $SE = .12$, $t(281) = -1.15$, $p = .253$.

Present-hedonism time orientation. We conducted same analyses on present-hedonism—this time controlling for present-fatalism. This analysis revealed a main effect of life satisfaction, $b = .07$, $SE = .02$, $t(280) = 3.24$, $p = .001$, which, notably, was in the reverse direction of that between life satisfaction and fatalism. This main effect was qualified by an interaction of Goal Recall \times Life Satisfaction, $b = .13$, $SE = .05$, $t(280) = 2.86$, $p = .005$, such that failure reduced hedonism at low life satisfaction, $b = -.19$, $SE = .10$, $t(280) = 1.90$, $p = .058$, and increased hedonism at high life satisfaction, $b = .20$, $SE = .10$, $t(280) = 2.13$, $p = .034$. These effects were not predicted, but may represent efforts to overcome thoughts of failure by focusing on good times

(among people with high life satisfaction) or on working harder to achieve success by resisting temptations (among people with low life satisfaction). Because these effects are tangential to the focus of our research, we do not discuss them further. Importantly for our purposes, the three-way interaction did not reach significance, $b = -.06$, $SE = .09$, $t(280) = -.64$, $p = .523$, which supports our reasoning that reduced willingness to delay gratification observed in Study 2 was not indicative of an increase in present-focused goal approach.

Future time orientation. Finally, we conducted the same analyses on future orientation (without covariates), revealing only a significant main effect of life satisfaction, $b = .09$, $SE = .02$, $t(281) = 4.45$, $p < .001$. The predicted three-way interaction of MS \times Goal Recall \times Life Satisfaction was nonsignificant, $b = .11$, $SE = .09$, $t(281) = 1.25$, $p = .212$.

Pessimism mediational analyses. Next, we used conditional process modeling techniques to examine the potential mediating role of pessimism on fatalism. We expected the three-way interaction of MS \times Failure \times Life Satisfaction on fatalism to be mediated by pessimism toward the future. Despite the fact that we did not observe significant total effects of the three-way interaction on hedonism or future orientation, given that total effects are not necessary to observe significant indirect effects (see Rucker, Preacher, Tormala, & Petty, 2011), we chose to examine possible indirect effects through the mediator of pessimism on these variables as well.

Accordingly, we repeated the above analyses, but included pessimism as a potential mediator of the effects to assess the indirect effect of our variables on the time perspective outcomes. Specifically, we used Hayes' (2013) PROCESS macro to conduct conditional process analyses, using Model 12 which examines the complete mediation of a three-way interaction. Specifically, we regressed each of the time perspective variables (Y) on MS (X), goal recall condition (W), and life satisfaction (Z) through the mediator of pessimism (M). When examining the present time perspectives (fatalism and hedonism), we controlled for the other present time perspective as we did in the direct effect analyses. In each case, we observed a significant three-way interaction of MS \times Goal Recall \times Life Satisfaction on the mediator of pessimism, $b = -.42$, $SE = .19$, $t(281) = 2.26$, $p = .024$ (see Figure 4), which is necessary for mediation to be observed. Consistent with our hypothesis, when present-fatalism was included as the Y variable, a significant indirect effect of MS was observed within the *failure* condition at low life satisfaction, $b = .132$ confidence interval (CI) [.025, .267]. This indirect effect shows that MS increased present-fatalism by virtue of increasing pessimism toward the future. By contrast, when present-hedonism was included as the Y variable, no significant indirect effects were observed. Finally, when future orientation was included as the Y variable, significant indirect effects of MS emerged within the *failure* condition both at low life satisfaction, $b = -.054$ CI [-.151, -.007] and at high life satisfaction, $b = .043$ CI [.003, .125] (see Table 1 for complete details). These results provide additional support for our hypotheses. Despite the fact that we did not observe direct effects of our independent variables on future orientation, this time perspective was affected indirectly through the mediator of pessimism.

The results of Study 3 support our theorizing regarding fatalistic withdrawal. Specifically, MS increased a present-

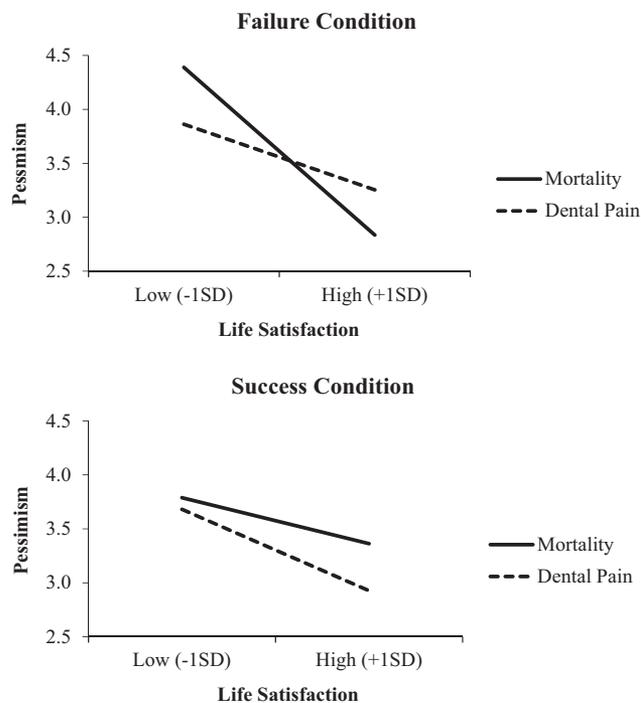


Figure 4. Interaction of mortality salience by failure by life satisfaction on pessimistic outlook toward the future in Study 3.

fatalistic time-perspective among participants with low life satisfaction who recalled a goal failure. These results suggest that the low delay of gratification effect observed in Study 2 is most likely a fatalistic withdrawal from future-oriented goal pursuit rather than a hedonistic approach toward concrete present-oriented experiences. When unable to engage palliative defenses following death-contemplation, participants with low life satisfaction did not become focused on seeking short-term pleasures, but rather withdrew from the future and resigned themselves to fate.

The indirect effects observed in Study 3 also support the idea that pessimism toward the future mediates the process leading to fatalistic withdrawal. Specifically, MS influenced participants' time perspectives by virtue of affecting their level of pessimism. Among participants with low life satisfaction who recalled a failure, MS increased pessimism which in turn increased present-fatalism and reduced future orientation. Consistent with the results of Study 2, the reverse effect was observed among participants with high life satisfaction who recalled a failure. For these people, MS reduced pessimism (i.e., increased optimism), which in turn increased their orientation toward the future. This pattern sheds additional light on the process through which MS increases long-term goal approach and the willingness to delay gratification. According to these results, thoughts about death appear only to increase future-oriented goal-striving for people with high life satisfaction, because these people are able to respond to adversity with an optimistic outlook toward the future (cf. Arndt, Routledge, & Goldenberg, 2006; McGregor et al., 2007, Study 3; Scheier & Carver, 1992).

Table 1
Indirect Effects of Mortality Salience on Time Perspective Variables Through the Mediator of Pessimism in Study 3

Recall condition	Life satisfaction	Effect	Boot SE	Boot LLCI	Boot ULCI
Present-hedonistic time perspective (Controlling for present-fatalism)					
Failure	Low (2.80)	-.063	.039	-.148	.005
Failure	High (5.83)	.054	.036	-.009	.133
Success	Low (2.80)	-.007	.046	-.127	.072
Success	High (5.83)	-.025	.035	-.122	.025
Present-fatalistic time perspective (Controlling for present-hedonism)					
Failure	Low (2.80)	.132	.062	.025	.267
Failure	High (5.83)	-.105	.053	-.222	.004
Success	Low (2.80)	.019	.072	-.113	.180
Success	High (5.83)	.087	.063	-.008	.236
Future time perspective					
Failure	Low (2.80)	-.054	.035	-.151	-.007
Failure	High (5.83)	.043	.029	.003	.125
Success	Low (2.80)	-.012	.048	-.132	.064
Success	High (5.83)	-.046	.042	-.163	.007

Note. SE = Standard Error; LLCI = Lower Level Confidence Interval; ULCI = Upper Level Confidence Interval. Confidence intervals represent 95% CIs, thus intervals that do not contain zero are significant at the $p < .05$ level.

Study 4

In our next study, we measured goal motivation more broadly by assessing behavioral activation system (BAS) sensitivity (Carver & White, 1994). From a goal regulation perspective, the BAS is the neural module that regulates all appetitive approach-related activity. Carver and White's (1994) BAS sensitivity scale assesses general drive for goal outcomes, responsiveness to rewards, and motivation to seek out pleasurable and fun experiences. According to our theoretical rationale regarding fatalistic withdrawal, death thoughts should reduce all of these aspects of BAS when palliative efforts are blocked and life satisfaction is low. Fatalistic withdrawal entails withdrawing from the superordinate goal of life and all subordinate goals that are directed toward that higher order goal. From the perspective of TMT, nearly all goal motivation is driven by the desire for continued life. Withdrawal from life should therefore instigate a widespread shutdown of the approach motivation system. Thus, we expected to find the same general decrements observed in Studies 1–3 on BAS sensitivity in Study 4.

Method

Participants and design. Participants were 185 MTurk workers residing in the United States who participated in exchange for \$0.50. Three participants were excluded from analyses for failing to complete all experimental materials, leaving 182 for the final data analysis (78 male, 104 female; $M_{age} = 36.75$, $SD_{age} = 12.17$). Participants were randomly assigned to one of four conditions in a 2 (MS vs. Dental Pain) \times 2 (Failure vs. Success) between-subjects factorial design.

Procedure. The procedure was identical to that of the previous studies, except that the dependent variable consisted of the BAS subscales (drive, reward responsiveness, and fun seeking) of Carver and White's (1994) BIS-BAS scale. To better capture situational variability on this measure (which was designed as a

trait scale), we used state wording of the items to reflect participants' current motivational state (rather than a general disposition; e.g., "I would go all-out to get something I wanted," "It would excite me to win a contest," "I crave excitement and new sensations"). Although Carver and White's (1994) BAS scale consists of three subscales (drive, reward responsiveness, and fun seeking), the pattern of results were highly consistent across these subscales so we combined them into one overall composite ($\alpha = .88$).

Results and Discussion

We began by computing a life satisfaction scores ($M = 4.41$, $SD = 1.56$, $\alpha = .92$), and then regressed the BAS scores on the main effects and interactions of MS, failure, and life satisfaction. This analysis revealed the expected three-way interaction, $b = .34$, $SE = .15$, $t(174) = 2.30$, $p = .023$ (see Figure 5). We probed the interaction in the same way as previous studies. Once again, a significant simple interaction of MS \times Life Satisfaction emerged within the failure condition, $b = .25$, $SE = .11$, $t(174) = 2.26$, $p = .025$, but not within the success condition, $b = -.09$, $SE = .10$, $t(174) = -.81$, $p = .362$. Simple effects tests within the failure condition revealed that MS decreased state BAS at low life satisfaction, $b = -.92$, $SE = .23$, $t(174) = -3.95$, $p < .001$, but not at high life satisfaction, $b = -.13$, $SE = .24$, $t(174) = -.55$, $p = .582$.

Results of Study 4 replicate the pattern observed in Studies 1–3, this time on a general measure of goal approach motivation. Specifically, mortality salience reduced BAS sensitivity among participants with low life satisfaction who recalled a goal failure. Thus, these participants evinced a general withdrawal from goal approach motivation consisting of reduced drive, less responsiveness to potential rewards, and less desire to seek out fun experiences. For these participants, the approach motivation system was significantly deactivated. By contrast, participants with high life satisfaction remained resilient to this effect, and retained approach

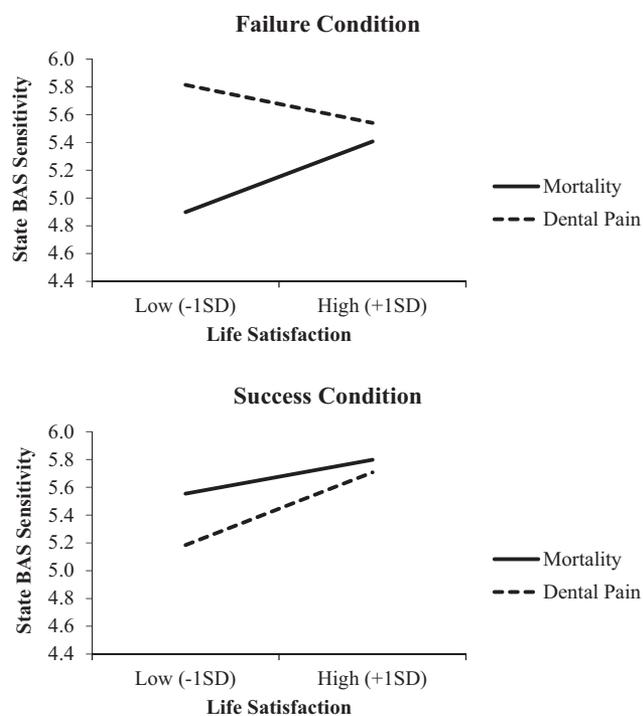


Figure 5. Interaction of mortality salience by failure by life satisfaction on state BAS in Study 4. Note: BAS = Behavioral Activation System.

motivation (i.e., BAS sensitivity) despite contemplating death and failure.

Study 5

Our final study aimed to address two lingering issues. First, we sought to broaden our examination of the individual-difference variables that moderates the effects of our independent variables on fatalistic withdrawal. According to our theoretical perspective, people who derive little enjoyment from life and who feel generally worthless and dissatisfied should be most prone to withdraw from life in the face of death and failure. Studies 1–4, however, maintained a fairly narrow operational definition of this individual difference variable by examining life satisfaction specifically. In Study 5 we added a measure of global self-esteem to supplement life satisfaction and provide a broader operationalization of this construct. Moreover, assessing self-esteem will enable a deeper integration of the current research with the extant literature on threat and defense (especially TMT), which has examined the moderating effects of trait self-esteem quite extensively (e.g., Harmon-Jones et al., 1997; McGregor et al., 2007; Routledge et al., 2010). Given that life satisfaction and self-esteem are conceptually similar (Diener, 1984) and highly correlated (Diener et al., 1985), we expected parallel results for both variables.

The second aim of Study 5 was to assess the affective character of fatalistic withdrawal. In addition to being generally informative, knowledge of the affective character of fatalistic withdrawal may also help to shed light on the theoretical mechanisms responsible for our effects. On the one hand, the reduced goal-approach motivation observed in the current studies may be indicative of

continued BIS processes involving inhibition of the BAS. If so, one might expect fatalistic withdrawal to be associated with anxious uncertainty (because anxiety is believed to stem from BIS activation; see Gray & McNaughton, 2000; Jonas et al., 2014; McGregor et al., 2010). On the other hand, however, withdrawing from a conflicted goal should theoretically deactivate the BIS. According to Gray and McNaughton (2000), the BIS functions to resolve motivational conflicts in which the organism is torn between competing and contradictory response tendencies (e.g., approach and withdrawal/avoidance). This function is accomplished by initiating processes that promote one response tendency above the other. Once this basic function of the BIS is accomplished, regardless of whether the outcome is unmitigated approach or withdrawal, the BIS and attendant anxiety should be reduced. However, although withdrawal processes may deactivate the BIS (and reduce anxious uncertainty), we suspect that withdrawal from life may replace anxiety with depression. According to Seligman (1975):

Anxiety and depression are related in the following way: when a man or animal is confronted with a threat or a loss, he responds initially with fear; if he learns that the threat is wholly controllable, fear disappears, having served its function; if he remains uncertain about controllability, fear remains; if he learns or is convinced that the threat is utterly uncontrollable, depression replaces fear (pp. 92–93).

Although Seligman appears to equate anxiety with fear in this quote—and there is good reason to believe that these emotions are separate and distinct (see Gray & McNaughton, 2000; Lambert et al., 2014)—we concur with the overall statement. When an important goal is threatened (i.e., continued life vis-à-vis thoughts of death), people become anxiously uncertain and take action to overcome the threat (i.e., strive for symbolic life-continuity, launch into goal-directed activity). If this action proves ineffective (i.e., due to failure), however, they may lose hope that the threat will ever be overcome, and will ultimately withdraw from the goal and feel depressed. Accordingly, rather than being characterized by anxious uncertainty, we expected fatalistic withdrawal to be characterized by depression.

To examine the affective character of fatalistic withdrawal, we assessed anxious uncertainty and depression following the same experimental procedure used in Studies 1–4. To assess anxious uncertainty, we used McGregor, Zanna, Holmes, and Spencer's (2001) felt uncertainty scale. This measure has been successfully used in past research examining anxious goal conflicts (e.g., McGregor et al., 2001; McGregor et al., 2013). Moreover, given that BIS-processes result from feeling uncertain regarding a course of action, and that the BIS is believed to be the source of anxiety, assessing uncertainty-related anxiety should be most effective in mapping onto the BIS-process that we are most interested in examining. To assess feelings of depression, we employed Spielberger, Ritterband, Reheiser, and Brunner's (2003) state depression inventory. We also measured desire for life in the same way as Study 1 in order to more fully explore the relationships among anxious uncertainty, depression, and fatalistic withdrawal. We expected participants who show reduced desire for life after contemplating death to report increased feelings of depression but reduced feelings of uncertainty.

Table 2
Comparison of Life Satisfaction vs. Self-Esteem as Moderators of Mortality Salience Effects in Study 5

Effect	Life Satisfaction		Self-Esteem		Overall composite	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Anxious uncertainty (Controlling for depression)						
3-way interaction	.36	2.32*	.42	2.39*	.45	2.46*
Simple effect of MS within:						
Failure condition at -1 SD	-.54	-2.27*	-.42	-1.94 [†]	-.46	-2.06*
Failure condition at +1 SD	.11	.53	.03	.17	.06	.29
Success condition at -1 SD	.48	2.20*	.58	2.74**	.58	2.74**
Success condition at +1 SD	.07	.29	.01	.03	.03	.11
Depression (Controlling for anxious uncertainty)						
3-way interaction	-.41	-2.42*	-.30	-1.49	-.42	-2.06*
Simple effect of MS within:						
Failure condition at -1 SD	.63	2.42*	.35	1.41	.48	1.91 [†]
Failure condition at +1 SD	-.37	-1.64	-.24	-.99	-.32	-1.41
Success condition at -1 SD	-.12	-.52	-.21	-.83	-.17	-.70
Success condition at +1 SD	.08	.29	-.05	-.20	.04	.15
Desire for life						
3-way interaction	3.92	1.50	7.22	2.41*	6.92	2.28*
Simple effect of MS within:						
Failure condition at -1 SD	-10.93	-2.71**	-10.78	-2.93**	-11.35	-3.01**
Failure condition at +1 SD	-.52	-.15	.19	.05	.24	.07
Success condition at -1 SD	-2.18	-.60	1.90	.52	.27	.94
Success condition at +1 SD	-3.31	-.79	-4.89	-1.30	-4.91	-1.27

Note. MS = Mortality Salience; SD = Standard Deviation.
[†] *p* < .10. * *p* < .05. ** *p* < .01.

Method

Participants and design. Participants were 249 MTurk workers residing in the United States who participated in exchange for \$0.50. Thirteen participants were excluded from analyses for failing to follow instructions, leaving 236 for the final data analysis (98 male, 136 female; two unspecified; *M*_{age} = 35.84, *SD*_{age} = 11.97). Participants were randomly assigned to one of four conditions in a 2 (MS vs. Dental Pain) × 2 (Failure vs. Success) between-subjects factorial design.

Procedure. The procedure was identical to that of the previous studies, except for (a) the inclusion of the Rosenberg (1965) Self-Esteem Scale at the outset of the study; and (b) the dependent variables. With regard to the dependent variables, which were assessed immediately following the goal-recall portion of the study, we administered McGregor et al.’s (2001) 19-item measure of felt uncertainty (e.g., “I feel uneasy,” “I feel conflicted;” *M* = 2.20, *SD* = 1.31, *α* = .97) followed by Spielberger et al.’s (2003) 10-item measure of state depression (e.g., “I feel sad,” “I feel miserable;” *M* = 2.00, *SD* = 1.49, *α* = .97).² Thereafter, participants indicated the age at which they expected and hoped to die (same as Study 1).

Results and Discussion

We first computed life satisfaction (*M* = 4.42, *SD* = 1.47, *α* = .91) and trait self-esteem (*M* = 4.84, *SD* = 1.23, *α* = .92) scores. We then conducted two separate sets of regression analyses on anxious uncertainty, state depression, and desire for life to assess the moderating effect of each of these personality variables. Across

all dependent variables, these personality traits exerted parallel effects (for a detailed comparison, see Table 2). Moreover, the variables were highly correlated (*r* = .68), and examining one variable while controlling for the other nearly always reduced the overall effects to the level of nonsignificance. These results suggest that both variables accounted for common variance in the dependent variables (i.e., multicollinearity), and are thus statistically indistinguishable. As a result, we decided to combine them into an overall composite that we termed *self-satisfaction* (*M* = 4.70, *SD* = 1.21, *α* = .93). We address the relationship between life satisfaction and self-esteem in more detail in the General Discussion section.

Affect. To examine the impact of our manipulations on affect, we regressed scores representing each emotion (anxious uncertainty and depression) on the main effects and interactions of MS, failure, and self-satisfaction while controlling for the alternative emotion. We reasoned that because anxiety and depression tend to be highly correlated (Spielberger et al., 2003), which was evident in our own sample (*r* = .75), statistically removing shared variance between them would provide the clearest distinction between anxious uncertainty and depression.

² We also included the 10 positively valenced items from Spielberger’s (2003) scale (e.g., “I feel enthusiastic,” “I feel alive;” *M* = 4.67, *SD* = 1.46, *α* = .94). However, these items loaded onto a separate factor in a principle components analysis, and a composite of these items was unaffected by our experimental manipulations. As such, our depression analyses are based solely on the negatively valenced scale-items.

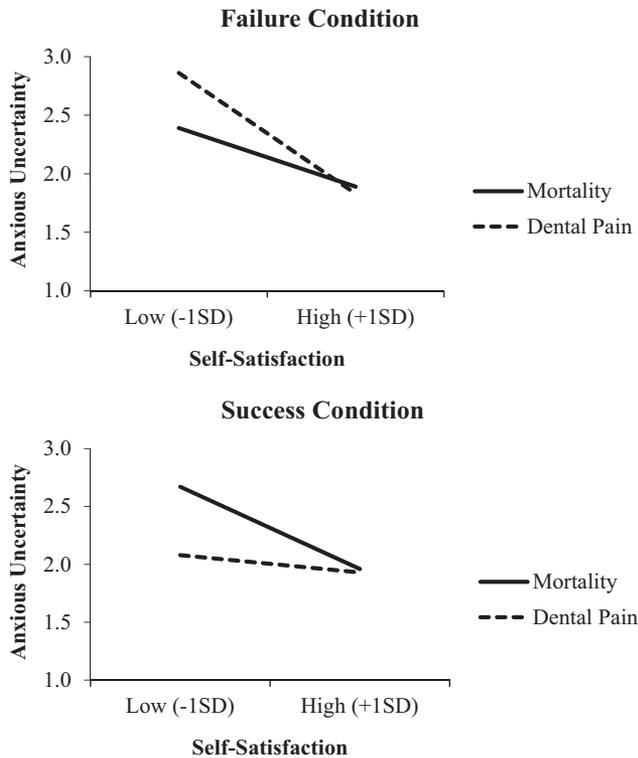


Figure 6. Interaction of mortality salience by failure by self-satisfaction on anxious uncertainty in Study 5.

Anxious uncertainty. We began by analyzing anxious uncertainty. As expected, depression was significantly related to anxious uncertainty, $b = .54$, $SE = .05$, $t(227) = 11.16$, $p < .001$, thus justifying our inclusion of the covariate in the analysis. Consistent with our hypothesis, the main analysis revealed the expected three-way interaction of MS \times Goal Recall \times Self-Satisfaction, $b = .45$, $SE = .18$, $t(227) = 2.46$, $p = .015$ (see Figure 6). We probed the interaction in the same way as previous studies. This strategy yielded marginally significant interactions of MS \times Self-Satisfaction in both the *failure* condition, $b = .22$, $SE = .13$, $t(227) = 1.68$, $p = .095$, and the *success* condition, $b = -.23$, $SE = .13$, $t(227) = -1.80$, $p = .074$. Consistent with our expectations, simple effects tests within the *failure* condition revealed that MS decreased anxious uncertainty at low self-satisfaction, $b = -.46$, $SE = .23$, $t(227) = -2.06$, $p = .040$, but had no effect at high self-satisfaction, $b = .06$, $SE = .21$, $t(227) = .29$, $p = .769$. By contrast, the opposite pattern emerged within the *success* condition. Specifically, MS increased anxious uncertainty at low self-satisfaction, $b = .58$, $SE = .22$, $t(227) = 2.74$, $p = .007$, but had no effect at high self-satisfaction, $b = .03$, $SE = .23$, $t(227) = .11$, $p = .910$.

Depression. When analyzing depression, the expected association between anxious uncertainty and depression was again apparent, $b = .66$, $SE = .06$, $t(227) = 11.16$, $p < .001$, justifying our inclusion of the covariate. The main analysis also revealed the predicted three-way interaction of MS \times Goal Recall \times Self-Satisfaction, $b = -.42$, $SE = .20$, $t(227) = 2.06$, $p = .040$ (see Figure 7). Similar to our previous studies, the interaction of MS \times

Self-Satisfaction was significant within the *failure* condition, $b = -.33$, $SE = .14$, $t(227) = -2.32$, $p = .021$, but not in the *success* condition, $b = .08$, $SE = .14$, $t(227) = .60$, $p = .552$. Simple effects tests within the *failure* condition revealed that MS increased depression at low self-satisfaction, $b = .48$, $SE = .25$, $t(227) = 1.91$, $p = .057$, but slightly decreased depression at high self-satisfaction, $b = -.32$, $SE = .23$, $t(227) = -1.41$, $p = .160$.

Desire for life. Next, we analyzed the results on desire for life. To remain consistent with Study 1, we again established 150 years as the upper-limit for this measure, and therefore recoded any values higher than this as 150. Once again, this procedure successfully reduced skewness (raw skewness = 7.93, transformed skewness = $-.68$). Consistent with the results of Study 1, the analyses revealed the predicted three-way interaction of MS \times Goal Recall \times Self-Satisfaction, $b = 6.92$, $SE = 3.04$, $t(228) = 2.28$, $p = .024$ (see Figure 8). Once again, the interaction of MS \times Self-Satisfaction was significant within the *failure* condition, $b = 4.78$, $SE = 2.16$, $t(228) = 2.22$, $p = .028$, but not in the *success* condition, $b = -2.14$, $SE = 2.14$, $t(228) = -1.00$, $p = .318$. Simple effects tests within the *failure* condition revealed that MS decreased the desire for life at low self-satisfaction, $b = -11.35$, $SE = 3.77$, $t(228) = -3.01$, $p = .003$, but not at high self-satisfaction, $b = .24$, $SE = 3.48$, $t(228) = .07$, $p = .945$.

Indirect effects. To more closely examine the affective character of withdrawal from life we examined the indirect effect of desire for life on depression and anxious uncertainty.³ Accordingly, we used Hayes' (2013) PROCESS Model 12, which examines the complete mediation of a three-way interaction. Consistent with our strategy in Study 3, we conducted two separate analyses regressing anxious uncertainty and depression (Ys) on MS (X), goal recall condition (W), and self-satisfaction (Z) through the mediator of desire for life (M). For each analysis, we controlled for the alternative affective variable (i.e., we controlled by depression when analyzing anxious uncertainty, and vice-versa), as we did in the above analyses. Consistent with our theorizing, these analyses

³ It should be noted that the mediator (desire for life) was measured after the outcome variables in these analyses, which is unorthodox for mediational analyses. To clarify, we suspect that fatalistic withdrawal and the affective states that accompany this process likely occur simultaneously. Given that the main focus of this study was to assess affect, we measured these variables first in the study procedure. Nevertheless, we also examined the reverse mediational pattern by including depression and uncertainty as potential mediators in the model, and including desire for life as the outcome variable. This analysis revealed indirect effects of MS on the desire for life through the mediator of uncertainty within the *success* condition at low self-satisfaction, $b = 1.81$ CI [.167, 4.770], and through the mediator of depression within the *failure* condition at high self-satisfaction, $b = .95$ CI [.122, 2.489]. In other words, this first indirect effect suggests that MS increased the desire for life among participants with low self-satisfaction who recalled a goal success by virtue of increasing felt uncertainty. The second indirect effect suggests that MS increased the desire for life among participants with high self-satisfaction who recalled a goal success by virtue of suppressing feelings of depression. Unlike the PROCESS analyses that we report in the results section of Study 5, both of these effects are related to *increases* in the desire for life and therefore provide little information regarding the affective state associated with fatalistic withdrawal (i.e., *reduced* desire for life). Thus, although we assessed desire for life after the affective variables in this study, examining affect through the mediator of desire for life is more consistent with our theoretical perspective, and yields results that shed light on the affective character of reduced desire for life.

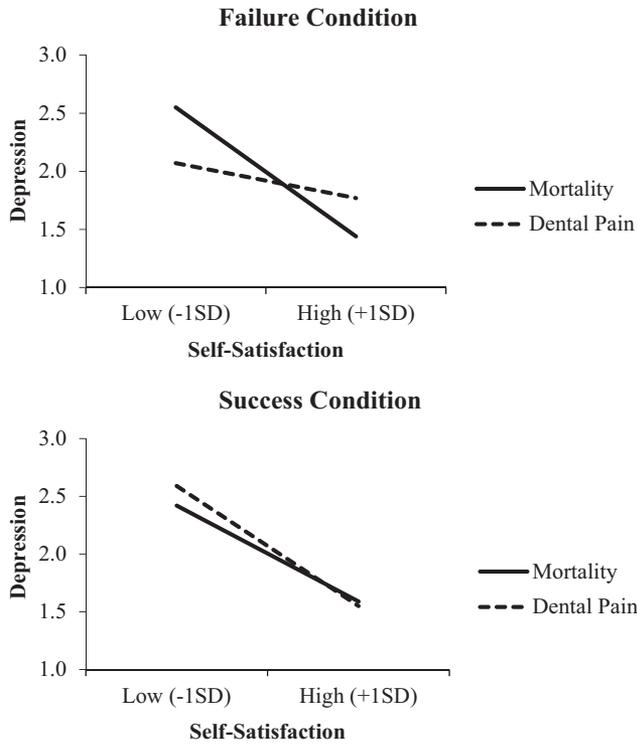


Figure 7. Interaction of mortality salience by failure by self-satisfaction on state depression in Study 5.

revealed that among participants with low self-satisfaction who contemplated failure, MS exerted indirect effects on both depression and anxious uncertainty through the mediator of desire for life. As expected, MS increased depression among these participants by virtue of reducing their desire for life, $b = .11$ CI [.016, .280], and reduced anxious uncertainty via the same means, $b = -.10$ CI [-.248, -.015] (see Table 3 for details). Indeed, the three-way interaction on each affective variable was found to be significantly mediated by the desire for life (depression, $b = -.07$ CI [-.185, -.007]; anxious uncertainty, $b = .06$ CI [.009, .160]).

The results of Study 5 show that the same conditions that produced fatalistic withdrawal in Studies 1–4 lead to increased feelings of depression and reduced feelings of anxious uncertainty. Most significantly, these results provide strong support for the notion that withdrawal from life represents a resolution to the goal conflict aroused by the awareness of death. The overall pattern of results on the anxious uncertainty measure show that MS alone (when not combined with the failure manipulation) increased anxious uncertainty among participants with low self-satisfaction. Similarly, relatively high levels of anxious uncertainty were observed among participants with low self-satisfaction who contemplated failure without MS. These results are consistent with the idea that psychological threats (such as death or failure) will arouse motivational conflict (Jonas et al., 2014; McGregor et al., 2010). Whereas motivational conflicts are characterized by BIS-related anxiety and uncertainty (Gray & McNaughton, 2000; Jonas et al., 2014), the results of Study 5 show that fatalistic withdrawal is not characterized by anxious uncertainty. Indeed, MS significantly *reduced* anxious uncertainty among participants with low

self-satisfaction who were prevented from engaging approach-oriented resolutions due to thoughts of failure. Moreover, the analysis of indirect effects shows that the reduction in anxious uncertainty under these circumstances occurred through the mediator of desire for life. In other words, those who responded to the motivational dilemma aroused by thoughts of death by withdrawing the desire for life evinced lower overall levels of anxious uncertainty. These data therefore support our hypothesis that withdrawal represents a resolution to motivation conflict, which mutes the BIS and thus regulates anxiety. This resolution, however, comes at the cost of increased depression. More specifically, Study 5 shows that MS led participants with low self-satisfaction who contemplated failure to withdraw from life, and this in turn increased feelings of depression. Thus, consistent with Seligman’s (1975) theorizing regarding the relationship between anxiety and depression, the results of Study 5 show that when an individual responds to an irresolvable conflict (i.e., death) by withdrawing, feelings of anxious uncertainty are replaced with depression.

General Discussion

The results of five studies support our hypothesis that death thoughts can trigger a withdrawal from life, a general reduction in goal approach motivation, and feelings of depression when opportunities for palliative goal pursuits are thwarted by failure. We have argued that in these circumstances, goal withdrawal may represent the only remaining option for muting death related anxiety and uncertainty. Consistent with our expectation, this

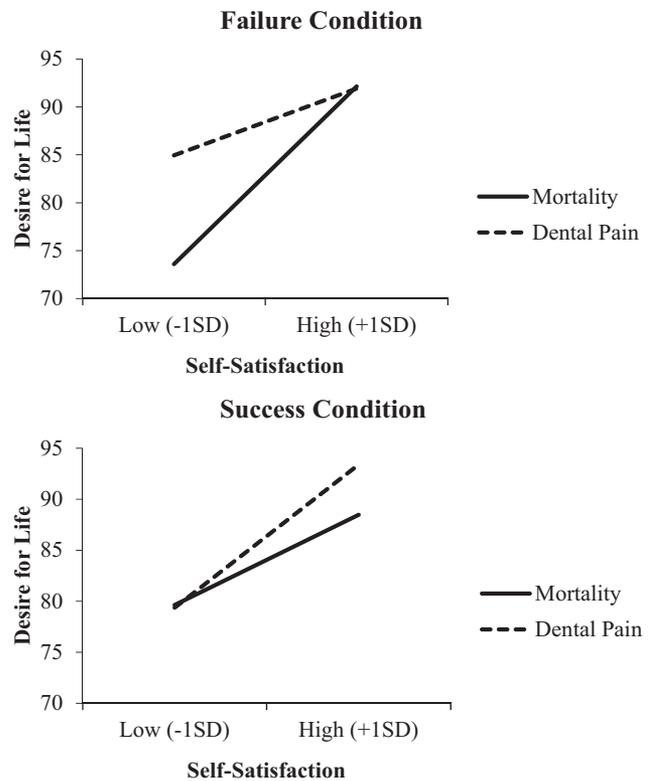


Figure 8. Interaction of mortality salience by failure by self-satisfaction on desire for life in Study 5.

Table 3
Indirect Effects of Mortality Salience on Depression and Uncertainty Through the Mediator of Desire for Life in Study 5

Recall condition	Self-satisfaction	Effect	Boot SE	Boot LLCI	Boot ULCI
Depression (Controlling for anxious uncertainty)					
Failure	Low (3.49)	.107	.062	.016	.280
Failure	High (5.91)	-.002	.036	-.085	.071
Success	Low (3.49)	-.003	.035	-.091	.056
Success	High (5.91)	.046	.039	-.005	.163
Anxious uncertainty (Controlling for depression)					
Failure	Low (3.49)	-.096	.055	-.248	-.015
Failure	High (5.91)	.002	.033	-.061	.076
Success	Low (3.49)	.002	.031	-.054	.080
Success	High (5.91)	-.042	.034	-.146	.002

Note. SE = Standard Error; LLCI = Lower Level Confidence Interval; ULCI = Upper Level Confidence Interval. Confidence intervals represent 95% CIs, thus intervals that do not contain zero are significant at the $p < .05$ level.

option was only entertained by people who are relatively dissatisfied with their current life situation (i.e., low life satisfaction/self-esteem).

In Studies 1 and 5, we found direct support for our main hypothesis that people will withdraw from life itself in the face of death. Specifically, mortality salience lead people with low life satisfaction whose palliative efforts were blocked by recalled goal failure to reduce their desire for continued life. In Studies 2–4, we observed concomitant reductions in general goal motivation under the same circumstances. According to our goal regulation perspective, withdrawal from the superordinate goal for life results in a general withdrawal from all subordinate goal pursuits that are ultimately subsumed under this goal. Much of the activities of everyday life are engaged in the service of life continuity (see Becker, 1973; Pyszczynski et al., 1990). Working to earn money, purchasing and preparing food, caring for one's children, and striving to create and maintain a valued identity are all activities that function to perpetuate literal or symbolic existence. These activities entail effortful self-regulation, planning for the future, and the motivational drive to spur on action and take initiative when opportunities arise. When a person begins to withdraw from life, the motivational impetus to pursue all of these activities also wanes. In support of this reasoning, the same conditions that led to a withdrawal from life in Study 1 also reduced the willingness to exert effortful self-regulation requiring the delay of gratification (Study 2), orientation toward the future (Study 3), and general motivational drive and engagement (Study 4). Furthermore, these conditions lead to a pessimistic outlook on life and the future, produced a fatalistic attitude toward life in general (Study 3), and resulted in feelings of depression (Study 5). In other words, when life satisfaction is low and efforts to mute death related anxiety by approaching important life goals are mired by failure, thoughts of death will produce a state of fatalistic withdrawal characterized by reduced motivation for all goal-directed activity and feelings of hopelessness and depression.

Implications for Theories of Threat and Defense

The current research has important theoretical implications for TMT (Greenberg, Solomon, & Pyszczynski, 1997) and goal-

regulation perspectives of threat and defense (Jonas et al., 2014; McGregor et al., 2010). With regard to TMT, the results support the TMT notion that death awareness threatens to hinder goal-directed activity. This is an important piece in the evolutionary logic of the theory that has not been fully examined. An organism that is unable (or unmotivated) to accomplish the mundane tasks necessary to ensure its continued survival is at a significant evolutionary disadvantage. It is precisely for this reason that TMT proposes the development of cultural worldviews that imbue human action with meaning, purpose, and a sense of significance (i.e., self-esteem). Cultural worldviews provide a context in which to pursue goals that transcend personal mortality, and are therefore not frustrated by the knowledge of inevitable death. This research shows that when these important goals are themselves frustrated and daily life is also not satisfying, people will begin to withdraw from life and give up on their goals.

Until now, TMT has relied upon the concept of "paralyzing terror," to explain how death awareness interferes with goal-directed action. Although we agree that in extreme cases death thoughts may lead a person to freeze and become paralyzed with terror, the current research suggests that death thoughts can also impede goal activity by virtue of precipitating a withdrawal from life. Moreover, fatalistic withdrawal may be a far more frequent cause of goal impedance in daily life than paralyzing terror. Although no research to date has identified when death thoughts will produce terror, the current research shows that a standard mortality salience manipulation can produce fatalistic withdrawal when life satisfaction is low and prospects for the future appear bleak. Thus, this research supports the TMT notion that death awareness can interfere with goal activity, and does so without the pitfalls associated with positing a state of paralyzing terror or the potential to experience such terror (see Greenberg et al., 2003; Muraven & Baumeister, 1997).

The current research also offers some implications regarding the moderating role of self-esteem in MS effects. Whereas traditional statements of TMT have maintained that self-esteem offers protection against death concern by virtue of implying that the individual qualifies for symbolic immortality, the current research suggests that self-esteem may also offer protection against the

impulse to withdraw from life by virtue of rendering life enjoyable. Indeed, in Studies 1–4 we found moderating effects of life satisfaction on our dependent variables. Moreover, in Study 5, it was the intersection of self-esteem and life satisfaction that appeared to be most predictive of our dependent variables; and when considering each variable separately, although both evinced the same overall pattern, life satisfaction was the stronger moderator on depression (see Table 2). Although it may be tempting to conclude the self-esteem and life satisfaction are merely synonymous constructs in this research, it may be equally interesting to consider possible differences in these variables. One possibility is that traditional TMT conceptions of self-esteem involving the subjective belief that one is meeting cultural standards of value and thus qualifies for death transcendence may represent a more extrinsic account of the way in which self-esteem mitigates death concerns. Life satisfaction, by contrast, may reflect a more intrinsic aspect of this effect (cf., Kernis, 2003). By analogy, an artist may persist in her work despite setbacks due to the belief that ultimately it will be positively appraised by others and preserved in a gallery (i.e., immortality), or simply because she enjoys it for its own sake and wishes to continue her work despite the certainty that it will never be seen by others, let alone positively appraised and preserved. By the same token, a person may persist in living due to a belief that they will achieve greatness and transcend death, or they may persist simply because they enjoy life. Thus, even if a person knows that they will not transcend death and that in the grand scheme of things their life is essentially meaningless, the impulse to withdraw from life may yet be blocked due to the sheer enjoyment of the journey. Thus, life satisfaction may convey existential benefits that are distinct from the personal significance and symbolic-immortality aspects of self-esteem emphasized by TMT, but are nevertheless captured in traditional measurements of trait self-esteem in empirical studies. Future research will be needed to further test whether life satisfaction plays a unique role within the context of TMT, or merely represents an aspect of self-esteem that is no different from extant conceptualizations of the theory.

Our use of a goal regulation perspective to examine how death frustrates the goal for continued life may also provide a new perspective on defensiveness in response to death thoughts. Much like traditional statements of TMT, we view death awareness to be at odds with the goal for continued life. In the face of inevitable death, the goal of continued life is doomed to fail, which triggers a motivational dilemma regarding whether or not to continue pursuing the doomed goal. TMT and other theories of threat and defense have invariably emphasized life-affirming solutions to this dilemma. Clinging to cultural belief-systems and striving for symbolic immortality are means of reinfusing life with meaning and purpose, and thus preserving or even invigorating the motivational impetus to continue living despite the fact of inevitable death. Similarly, RAM-related defenses entail increasing personal convictions and launching oneself into zealous goal approach in order to mute the anxious uncertainty aroused by death (McGregor et al., 2007). We maintain that such life-affirming defenses represent only one side of the possible solutions to the problem. As we have shown in the current research, another way of resolving the motivational conflict aroused by death awareness is to withdraw the desire for life, and to resign oneself to death. In a sense, this resolution may represent the precise opposite of defense. Rather than preserving the threatened goal, fatalistic withdrawal entails

giving it up—rejecting life instead of affirming it. Nevertheless, withdrawing from life does represent a resolution to the motivational dilemma aroused by thoughts of death. Much like life-affirming resolutions, withdrawing from life in the face of death was found to reduce anxious uncertainty (Study 5), suggesting that this response deactivated the BIS.

The differentiation between withdrawal and approach-oriented resolutions to motivational conflicts may also suggest additional avenues for research that distinguishes among different types of threat. To clarify, various perspectives on threat and defense have prioritized different goals, resources, or core needs in the production of defense; such as the need for control (e.g., Kay, Gaucher, Napier, Callan, & Laurin, 2008), meaning (Heine, Proulx, & Vohs, 2006), or death transcendence (Greenberg et al., 1986). In seeking to integrate these various perspectives, Jonas et al. (2014) recently developed a general model of threat, wherein threats to any of these goals/resources are argued to produce BIS-related anxiety that is then reduced by engaging approach-motivation. From this perspective, all threats are more or less equal to the extent that they all produce an initial anxiety response, which then motivates an approach-oriented defense. However, it remains possible that the consequences of failure to reengage approach-oriented activity may differ depending on the specific goal/resource under threat. Whereas the threat of death may precipitate a general withdrawal from the goal for continued life (as shown herein), threats to one's overall sense of control may potentiate withdrawal from the goal to perceive the world as orderly and under control. Similarly, meaning threats may potentiate withdrawal from the goal to make meaning of a given situation, or more extremely, to attempt to make sense of anything at all. In other words, withdrawal-related resolutions to motivational conflicts represent the counterpart of approach-related resolutions. Although approach-oriented responses may be interchangeable to the extent that they all invigorate approach, withdrawal-related resolutions may be inherently linked to the specific goal/resource under threat. Whereas these various theories have tended to emphasize approach-oriented resolutions that involve affirming the threatened goal/resource, an examination of withdrawal-oriented resolutions that involved abandoning the threatened goal/resource (which will likely ensue upon failure to engage approach resolutions) may yield additional theoretical distinctions among different types of threat. Future research should examine this possibility.

Applications to Understanding Depression

Although the current research suggests that withdrawing from life in the face of death may reduce feelings of anxious uncertainty, this response was also found to increase feelings of depression. To our knowledge, this is the first experimental research to identify when death thoughts will lead to depression. According to our goal-regulation perspective, death thoughts produce depression when they precipitate a withdrawal from the goal for continued life due to dissatisfaction with the present and a loss of hope for the future.

Many theories of depression have emphasized similar goal-regulation processes in the epidemiology of the disorder (e.g., Abramson et al., 1989; Klinger, 1975; Leventhal, 2008). According to Klinger (1975), depression is the result of withdrawal from a significant life goal (i.e., current concern) without having

achieved it. Similarly, Leventhal (2008) argues that depression stems from the loss of positive reinforcement that occurs when an important goal object is lost (cf., Skinner, 1953), and the loss is cemented when the individual responds to the situation with avoidance or withdrawal-related behaviors. Under these circumstances, the individual nearly ensures an inability to recoup the loss and regain positive emotions that normally accompany the achievement of rewards. Consistent with the RAM model, this perspective maintains that active goal approach is a natural antidepressant due in part to the association of approach-motivation and the attainment of rewards, and due to the ability of approach motivation to mute anxious distress (Nash, Inzlicht, & McGregor, 2012).

Similar perspectives emphasize the role of hopelessness and generalized pessimism toward the future in the development of depression. According to Beck (1967), depression stems from a cognitive triad of negative beliefs about the self, the world, and the future. Similarly, Abramson, Metalsky, and Alloy (1989) argue that at least some types of depression stem directly from a sense of hopelessness. And existential theorists concur that “depression is the inability to construct a future” (May, 1969, p. 243), and that “a man devoid of hope . . . has ceased to belong to the future” (Camus, 1942/1991, p. 31).

The current research brings new and important empirical insights to this previous theorizing by showing that reduced goal motivation, a loss of hope for the future, and feelings of depression can stem from the antagonistic effect of death awareness on the goal for continued life. When efforts to overcome the problem of death by striving toward goals that give life meaning and purpose are themselves met with failure, the goal for continued life will remain conflicted by death (cf., Hayes, Schimel, Faucher, & Williams, 2008). Under these circumstances, the individual may begin to doubt that they will ever be able to resolve the conflict, and may thus lose all hope for the future and ultimately withdraw the desire for life. Although withdrawal from any goal may lead to feelings of sadness (Klinger, 1975; Leventhal, 2008), withdrawal from life may be precisely what creates widespread depression, because the process initiated upon disengagement from this goal can be all-encompassing. Given that the goal for continued life is superordinate to nearly all of our daily activities (Pyszczynski et al., 1990), abandoning the goal for continued life can precipitate a general collapse in the goal system, leaving the individual without goals and thus completely unable to mount any approach motivation. This may explain why depression is often characterized by diminished interest in nearly all activities, and an overall lack of energy and motivational drive (American Psychiatric Association, 2013).

The observed interplay among withdrawal from life, anxious uncertainty, and depression in Study 5 may also offer insights into why depression is so often comorbid with anxiety (American Psychiatric Association, 2013). In our view, anxiety is experienced when a person is actively engaged in a goal that is under threat (Gray & McNaughton, 2000; Jonas et al., 2014), whereas depression is experienced when a person withdraws from a threatened goal (Klinger, 1975; Seligman, 1975). Thus, anxiety is associated with the struggle to continue goal activity despite threat, while depression is associated with giving up. One possibility that was not addressed in the current research is that withdrawal from life in response to the threat of death may only momentarily reduce BIS-related anxious uncertainty, because the goal to continue living can never be completely abandoned (except in cases of

suicide, which we discuss below). Goals that reside at the highest level of the goal hierarchy are often stubbornly difficult to completely abandon because there is no alternative goal that one can turn to as a replacement (Carver & Scheier, 1998). This fact may be most pronounced when considering the goal for continued life. Every individual is endowed with only a single life to live, and withdrawing from it does not provide an opportunity to live another. Thus, withdrawing from life may only represent a *partial* withdrawal (e.g., mental disengagement; see Carver & Scheier, 1998, p. 197), and although this response may offer relief from anxiety, this relief may only be short-lived. Eventually, life goals may creep back into focus or the person may actively attempt to climb out of depression by reengaging life. This process will revive the conflicted goal, and thus reinstate feelings of anxiety. If viable means of goal approach that circumvent the problem of death remain unavailable, the person may only be able to resolve the conflict again via withdrawal, thereby perpetuating a cycle of threat and withdrawal characterized by anxiety and depression, respectively (see Carver & Scheier, 1998, p. 187 for a graphic model of cyclical goal conflict). From this perspective, withdrawing from life may ultimately lead a person to vacillate between depression and anxiety, because the only way out of depression is to reengage the conflicted goal for life, but doing so produces anxiety. Successfully overcoming major depression may thus necessitate passing through a period of anxiety until a point where meaningful life goals that are capable of sustaining long-term goal-pursuit gain traction. Future research could investigate this possibility.

Finally, by positing “continued life” to be a goal that must be pursued on a continual basis, and that can produce depression when abandoned in the face of frustration, the current research provides a clear link between depression and suicide.

Applications to Understanding Suicide

There is but one truly serious philosophical problem, and that is suicide.

—Camus (1942/1991, p. 3).

Fatalistic withdrawal offers an intriguing perspective on the serious philosophical problem of suicide. By considering life to be a goal that is frustrated by the awareness of impending death, the current research suggests that the same basic processes involved in withdrawing from any goal may similarly be operative when people decide to give up on life and hasten their own death. According to our theoretical perspective, suicide is the extreme consequence of withdrawing from life. As shown herein, withdrawal from life is precipitated by thoughts of death when a person feels worthless and dissatisfied with life, and is unable to mute death-related anxiety due to failure to achieve important goals. Recent research by Chatard and Selimbegović (2011), however, suggests that thoughts related to suicide may begin to creep into consciousness at the mere thought of failure. Indeed, these researchers found increased accessibility of suicide-related thoughts among participants who contemplated a failure to live up to salient standards of value. Consistent with the current research, suicide-accessibility effects were most pronounced among people with escapist tendencies (i.e., a tendency to avoid or withdraw from conflicted goals) and high levels of self-consciousness. According to these researchers, failure to live up to salient standards triggers

a motivational impulse to escape from an aversive state of self-awareness (cf., escape theory; Baumeister, 1990). Indeed, Selimbegović and Chatard (2013) found similar effects when simply inducing a state of self-awareness alone (regardless of salient failure), presumably due to the fact that self-awareness instigates an automatic self-standard comparison which often highlights discrepancies between the self and ideals (Duval & Wicklund, 1972).

Despite the commonalities between Chatard and Selimbegović's effects and the current research, the precise relationship between suicide-thought accessibility and fatalistic withdrawal remains unclear. One possibility is that suicide-thoughts represent a cognitive component of the overall goal-withdrawal process that we outline in the current research. In other words, an inability to mount approach-oriented resolutions to the motivational conflict aroused by death (due to goal failure) among people with low life satisfaction produces a withdrawal from life characterized by reduced desire to continue living, reduced goal motivation, depression, and thoughts of suicide. Although Chatard and Selimbegović's suicide accessibility effects emerged in response to the mere thought of failure or mere self-awareness (without mortality salience or low life satisfaction), given that failure can also increase death thoughts more generally (Hayes et al., 2008) and self-awareness can increase thoughts related to life and death (Silvia, 2001; see Hayes, Schimel, Arndt, & Faucher, 2010 for a general review), it remains possible that suicide thoughts emerge under the same conditions as fatalistic withdrawal. However, another possibility, consistent with the theorizing of Chatard and Selimbegović, is that suicide-related thoughts creep into consciousness as an option to escape the painful awareness of failure, but such thoughts are blocked or quickly dismissed due to the ongoing desire for continued life. When life has lost its luster, however, and the person feels worthless and generally dissatisfied, thoughts of failure combined with the realization that death is inevitable may lead the person to take suicide-related thoughts more seriously. Rather than dismiss them due to a desire for continued life, a person who has withdrawn this desire may begin to entertain suicide as a realistic option. From this perspective, the current research may help to clarify when suicide thoughts will be most likely to lead to suicide attempts. Whereas failure alone may increase the accessibility of suicide-related thoughts, a person who is also fatalistically withdrawn (due to low life satisfaction, failure, and the salient awareness of impending death) may begin to act on these thoughts. Although both of the above-mentioned possibilities seem plausible, future research is needed to more fully examine the relationship between fatalistic withdrawal and suicide-thought accessibility.

The above issue notwithstanding, these converging lines of research suggest that the path toward suicide stems from failure in important life goals, and that the process likely entails a series of progressive steps that may build momentum as it unfolds. Although failure alone can instigate thoughts of suicide, the desire for life may block such thoughts from taking hold. When a person's situation deteriorates to the point of no longer enjoying life, they may begin to withdraw by first mentally giving up on life, passively disengaging from goal-directed activity, and resigning themselves to fate. Such withdrawal will likely only further consolidate failure in life goals, which will increase thoughts related to death and suicide and exacerbate the tendency to withdraw and escape from troubling self-awareness. Eventually, the person may

be left with absolutely no viable goals left to pursue, and stuck within a hopeless state of depression. As Carver and Scheier (1998) argue, the decision to withdraw or persist in important life goals may represent something of a watershed, wherein once the decision to withdraw is made it becomes increasingly difficult to return to full-fledged engagement in life. With no compelling goals remaining to give life meaning, the prospect of death may seem more appealing than continued depression and anxiety. When life is entirely unsatisfying and hope for the future has been completely eroded by failure, it is not difficult to see why people might choose to simply end it.

Finally, fatalistic withdrawal may also contribute to suicide terrorism, martyrdom attacks, and murderous rampages that have drawn so much attention in recent years. Carrying out mass destruction is, unfortunately, an easy way to gain notoriety and to transcend death by making one's mark on history. The actions of al-Qaeda terrorists who committed suicide against the World Trade Center in New York are forever etched in the memories of those who were alive to witness it. Accounts of the event may likely survive for the rest of human history. Similarly, the actions of gunmen who go on murderous rampages and kill many innocent civilians before ultimately taking their own life may also stem from fatalistic withdrawal. Although suicidal acts such as these can often leave people shaking their heads in wonder at how someone could be so callous with human life (including their own) to commit such atrocious actions, it may represent a relatively small step for someone who has already given up on life. Indeed, the prospect of symbolic immortality to be achieved by carrying out the actions may serve as precisely the lever for goal-directed activity needed to lift them out of their depressive withdrawal. Consider also that hatred toward people believed to be responsible for the inability to mount life-affirming defenses against the problem of death may also motivate vengefulness (cf., Twenge, Baumeister, Tice, & Stucke, 2001), and given that aggression and anger are approach-oriented (Carver & Harmon-Jones, 2009), acts of vengeance may also contribute toward palliation by engaging approach motivation. If one feels that an individual or a group is ultimately responsible for preventing or blocking one's important life goals, then it may seem as though they are responsible for one's inability to continue living. In such cases, committing murder may appear perfectly justified, even if it is ultimately self-defeating (cf., Twenge, Catanese, & Baumeister, 2002) by virtue of ending in one's own death or incarceration (see Hayes et al., 2015 for a more detailed discussion of this issue). Future research could investigate the potential role of withdrawal processes in both suicide and acts of murder and terrorism.

Concluding Comment

*Do not go gentle into that good night;
Rage, rage against the dying of the light.*

—Dylan Thomas (1953/2003, p. 122)

These famous lines warn against giving up on life and resigning oneself to death. The current research suggests that this warning may be especially warranted when life offers little satisfaction and little hope for the future. Under these circumstances, the inevitability of death can make the struggle for continued life seem

pointless. And rather than rage against life's finitude, it may seem easier to simply withdraw, abandon the desire for life, and go gentle into that good night.

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FATALISTIC WITHDRAWAL

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