

TERROR MANAGEMENT MOTIVATION AT THE CORE OF PERSONALITY

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Humans are faced with a unique existential dilemma: Their ability to contemplate their own nature sets them apart from all other life forms, yet this ability also lets them know that they are flesh-and-blood creatures destined to die. Through awareness of their vulnerability to annihilation, people are in constant danger of being incapacitated by mortality-related anxiety. People normally ameliorate this anxiety by organizing their lives around a personalized, but largely culturally derived, conception of the meaning and significance of their existence, a conception that affords them the opportunity to view their actions and legacy as continuing on in some fashion after their body dies. In this way, people's desire to deny their mortal fate exerts a pervasive influence on what they think and do in their daily lives.

The preceding summarizes the basic insights into human motivation gleaned from the merger of psychoanalytic theory and existential philosophy. This merger was articulated by cultural anthropologist Ernest Becker (1973) in works such as *The Denial of Death*. In the 1980s, social psychologists Jeff Greenberg, Tom Pyszczynski, and Sheldon Solomon (1986) developed *terror management theory* (TMT) to distill Becker's analysis down to a useful theory of human behavior that could be subjected to empirical testing. The broad goal of this chapter is to show that TMT provides a compelling framework for understanding the motivational underpinnings of personality. In particular, we hope to convince the reader that this theoretical approach has two major benefits:

1. TMT offers a provocative perspective on personality. In essence, it posits that the modes of thinking, feeling, and acting most characteristic of a person represent tactics for maintaining the perception that he or she is a valued member of a meaningful cultural reality who will continue on in some fashion after death. From this point of view, personality is at least in part an adaptive distortion of reality—a “vital lie,” in Becker's (1973) terms—that enables people to function with equanimity by denying the most indisputable truth about life, namely, that it ends. This implies that the so-called normal personality is fundamentally irrational, because people's characteristic means of imbuing life with meaning and significance typically do not reduce their vulnerability to death in any literal sense; what they do offer, according to TMT, is a symbolic defense against mortality concerns.
2. TMT is a broad theoretical framework that researchers can use to study personality at two levels of analysis. At a general level, TMT addresses characteristics that a person shares with all other human beings by explaining why mortality is a pressing psychological problem and how it is “solved” by all individuals along similar lines. At a more specific level, TMT addresses characteristics that make a given person similar to and different from other people. It proposes that individuals differ both in the strength of their psychological buffer against mortality-related anxiety and in the particular sources of self-esteem and meaning they cling to

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for security. By virtue of its breadth, TMT permits the derivation of a wide range of hypotheses concerning personality processes, many of which have received empirical support while others can be profitably explored in future research.

OVERVIEW OF TERROR MANAGEMENT THEORY AND RESEARCH

One aspect of humans' symbolic intelligence is self-awareness. Whereas a cucumber is alive but does not know it, the normal person *knows* that he or she is alive, and this sense of "self" enables the person to reflect on the past and ponder the future and, in so doing, function effectively in the present. Although knowing that one is alive can be highly adaptive, people perpetually are troubled by the concurrent realization that their death is always potentially imminent, likely to occur for reasons beyond their control, and ultimately inevitable. This knowledge conflicts with their biological predispositions to avoid threats to continued existence and in this way creates the potential to arouse anxiety.

The core proposition of TMT is that people need to "manage" mortality-related anxiety to exist in a state of psychological equanimity (Greenberg, Solomon, & Arndt, 2008). People normally accomplish this by investing in two constructs that operate in concert to deny that death obliterates the self. Together, these constructs constitute an "anxiety buffer" that is activated when thoughts of death approach consciousness. The first construct is a *cultural worldview*, a widely shared conception of reality that imbues life with structure, order, meaning, and the possibility of death transcendence for individuals who subscribe to that worldview and fulfill its requirements for being valuable. In most cultural worldviews, death-transcendence is offered through either literal or symbolic immortality. Literal immortality can be attained by believing in and qualifying for one of the various afterlives promised by almost all organized religions. Symbolic immortality can be obtained by perceiving oneself as part of a culture that endures beyond one's lifetime or through the hopeful belief that the things one creates and contributes to society, or even the things

one consumes, are of lasting worth and will assure one's eternal remembrance and hence an eternal identity in the minds of others.

The worldview not only provides a canopy under which life makes sense on a grand scale but also prescribes principles to live by and standards for appropriate behavior. The individual internalizes the worldview through an immersive socialization process that reinforces prevailing norms, values, and ideals through lifelong participation in collective ceremonies, rituals, and rites of passage and through constant engagement with cultural products that embody those ideologies. This immersion endows normally socialized individuals with a global picture of which lifestyles qualify them as significant contributors to the culture and which lifestyles have the opposite effect. In Becker's (1973) words, the worldview is "more than merely an outlook on life: it is an immortality formula" (p. 255).

The second construct making up the anxiety buffer is *self-esteem*, an evaluation of oneself as a significant contributor to a meaningful cultural drama. Self-esteem is earned and maintained by perceiving the self as meeting or exceeding individually internalized cultural standards of value and, consequently, qualifying for the routes to death transcendence promised by the worldview to which one subscribes. From the perspective of TMT, a person's lifestyle confers the sense that he or she is making a valued contribution to the world and, whether the person is consciously aware of it or not, this sense of lasting personal significance functions to maintain the anxiety-buffering conviction that one's self-identity will continue on after physical death. Thus, self-esteem is not for TMT an extra indulgence or a mere vanity—it is the key psychological construct that allows the person to navigate his or her world without anxiety despite the nagging awareness of mortality.

TMT does not claim that the anxiety buffer literally forestalls death; rather, it ameliorates anxiety stemming from awareness of the abstract fact that, no matter how one cuts it, death is inevitable and may represent the absolute end of one's existence. Maintaining the anxiety buffer is a complicated matter, however, because cultural worldviews and the sense of personal value they afford are fragile

symbolic constructs that resist conclusive verification, and they can be discredited by historical events, social encounters, and natural calamities. Therefore, people continually must orient themselves toward maintenance of the anxiety buffer—buttressing the validity of their cultural worldview and living up to culturally derived standards of value—to hold mortality concerns at bay.

Using TMT as a framework, researchers have devised empirical strategies for testing whether the defensive motivations related to death awareness indeed drive people's quest for meaning and self-esteem. The majority of this work tests variations of the *mortality salience* (MS) hypothesis: If cultural worldviews and self-esteem serve to ameliorate mortality concerns, then activating people's awareness of mortality (i.e., inducing MS) should increase their need for the psychological protection provided by these constructs, and therefore, should lead people to more vehemently bolster and defend sources of culturally derived meaning (i.e., worldview defense) and to more vigorously do (or at least perceive that they are doing) whatever provides them with a sense of personal value (i.e., self-esteem striving).

Terror Management Motivation in Universal Aspects of Personality

TMT posits that the characteristically human tendencies to strive for self-esteem and maintain meaningful conceptions of reality lie at the core of all people's personalities and serve the distal psychological function of buffering mortality concerns. Based on this claim, we hypothesize that, across cultures and individuals, MS will trigger similar defensive tendencies to uphold and defend aspects of one's cultural worldview and to bolster self-esteem. This hypothesis has been supported in hundreds of studies conducted by independent researchers in more than a dozen countries, thereby attesting to the universal significance of terror management processes in personality functioning (for more comprehensive reviews of this work, see Burke, Martens, & Faucher, 2010; Greenberg et al., 2008; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004).

Representative studies show that North American students who write a few sentences about their death (compared with another topic) are more

favorable toward people who validate aspects of their worldview (e.g., their nationality and religious beliefs) and are correspondingly more disparaging of people who violate or dispute those aspects of their worldview (Greenberg et al., 1990). Similar studies conducted across the globe show that MS increases the tendencies to identify with one's groups and to defend the value of the group against threats. To mention a few examples, following an MS induction, Hispanic individuals become more affiliated with their ethnic group than before (Castano & Dechesne, 2005); Dutch students are more favorable to and more optimistic about the performance of their local soccer team and university than they are when not reminded of mortality (Dechesne, Greenberg, Arndt, & Schimel, 2000); Spanish participants become more likely to view fellow Spaniards as constituting a real and enduring group (Sani, Herrera, & Bowe, 2009); Chinese participants show an increased bias in resource allocation to people from their native city and country (Tam, Chiu, & Lau, 2007); and Israelis show greater motivation to serve in the national military and endure hardships for the sake of their country (Ben-Ari & Findler, 2006).

Studies conducted in diverse cultural contexts show that MS instigates efforts to maintain and enhance self-esteem. For example, Dutch students, following MS, reported stronger belief in the validity of positive information about themselves, whether it came from horoscopes or personality tests (Dechesne et al., 2003). Similarly, Israeli students were more likely after MS to make self-serving attributions on an achievement-related task (e.g., attributing poor performance following failure to external causes; Mikulincer & Florian, 2002).

Two more specific defensive responses to MS have been documented cross-culturally. The first is a desire for one's identity to be symbolically immortalized after death (e.g., by identifying the self with enduring physical objects; Greenberg, Kosloff, Solomon, Cohen, & Landau, 2010). The second is heightened effort to establish and strengthen close interpersonal relationships, which are theorized to buffer mortality concerns by providing validation of one's meaningful conceptions of reality and positive self-evaluations (Mikulincer, Florian, & Hirschberger, 2003).

A large body of research supports the unique role of mortality concerns in MS effects (Pyszczynski, Greenberg, Solomon, & Maxfield, 2006). Although most studies induce MS by having participants write about their death, many studies show converging evidence utilizing other methods to increase the accessibility of death-related thoughts (e.g., subliminal death primes). Research also shows that the effects observed in TMT research are driven by concerns with death per se and not by concerns with what death represents (e.g., uncertainty, loss of social connectedness, expectancy violation, generally aversive outcomes). TMT posits that thoughts of death pose a unique psychological threat because death is the only certain future event, it can occur at any time, and it threatens to eliminate the possibility of meeting virtually all human desires or goals, whether for control, power, belonging, competence, or love.

Cultural Determinants of Defensive Style

A basic tenet of TMT is that different cultures provide different systems of symbolic meaning and standards for valued conduct. Individuals are socialized to learn what constitutes meaningful, valued modes of thought and behavior within their culture, and therefore they come to associate those modes with security against death thoughts. On the basis of this line of reasoning, we can hypothesize that individuals will respond to MS by endorsing their own culture's belief systems, but not those of other cultures. Supporting evidence shows, for example, that Australians respond to MS by becoming more individualistic in their behavior, whereas Japanese participants respond by becoming less individualistic (Kashima, Halloran, Yuki, & Kashima, 2004). This research is useful to scholars who are interested in characterizing how (and why) groups of individuals differ from one another in personality functioning.

A Model of the Processes Underlying Worldview Defense and Self-Esteem Striving

While some researchers were roaming the world, testing TMT in different cultural contexts, others "drilled down" to map the precise processes by which reminders of mortality activate worldview

defense and self-esteem striving. The fruit of these labors is a theoretical model of the sequence of cognitive processes instigated by reminders of mortality (depicted in Figure 10.1). The remainder of this section offers a selective review of empirical support for the processing sequence specified by the model (for more extended discussions, see Arndt, Cook, & Routledge, 2004; Hayes, Schimel, Arndt, & Faucher, 2010; Pyszczynski, Greenberg, & Solomon, 1999). The following section, Dispositional Determinants of Terror Management Processes, reviews evidence that individual difference variables intervene at various points in this sequence (as indicated in Figure 10.1) to determine how effectively, and in what manner, different individuals defend against mortality concerns.

This model builds on the proposition that thoughts of death are managed with two types of defenses, each corresponding to the perceptual system in which these thoughts are active. Thoughts of death that enter consciousness are managed via *proximal defenses* that are rational in nature and typically involve suppressing the thoughts through distraction, reducing self-focused attention, trivializing one's vulnerability to death in the near future, and taking proactive efforts to reduce vulnerability by engaging in healthy decisions (Goldenberg & Arndt, 2008).

Once these defenses remove thoughts of death from consciousness, death thoughts remain nonconsciously accessible. Alternatively, thoughts of death can become activated in the unconscious directly via subliminal perception. This increase in *death thought accessibility* (DTA) can be measured in various ways. In early research, Greenberg, Pyszczynski, Solomon, Simon, and Breus (1994) adapted methods from research on construct accessibility to have participants complete word fragments, some of which can be completed to form a death-related word or a non-death-related word (e.g., GRA _ _ [grave or grape]). The more fragments a participant completes with death-related words, the more accessible thoughts of death are inferred to be. In subsequent years, lexical decision tasks—in which speed of detecting whether a string of letters is or is not a word (with some of the words being death related)—have been developed to measure DTA.

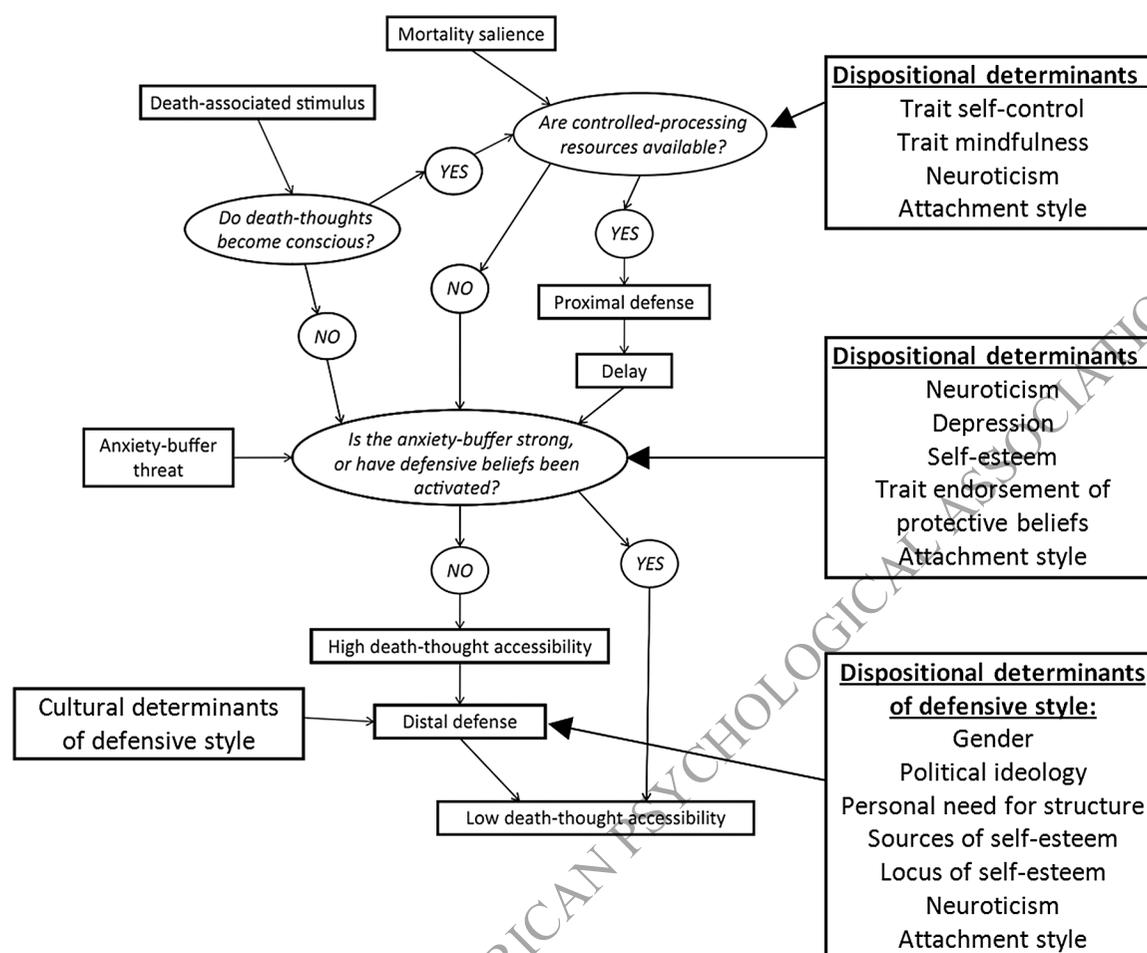


FIGURE 10.1. Theoretical model of the cognitive processes instigated by exposure to MS or death-related stimuli. The rightmost boxes list the individual-difference variables that have been studied in terror management research to date; the arrows indicate at which stage of the terror management process these variables intervene to moderate defensive responses to mortality-related ideation. Adapted from “A Theoretical and Empirical Review of the Death-Thought Accessibility Concept in Terror Management Research,” by J. Hayes, J. Schimel, J. Arndt, and E. H. Faucher, 2010, *Psychological Bulletin*, 136, p. 712. Copyright 2010 by the American Psychological Association.

When death thoughts are activated outside of conscious awareness (i.e., when DTA is high), these thoughts are managed through *distal defenses* that include efforts to shore up faith in the cultural worldview and attain self-esteem. Empirical assessments of this model show that

- Distal defenses (again, worldview defense and self-esteem striving) do not manifest immediately after an explicit MS induction when death-related thought is in focal awareness (and DTA is low). Rather, MS at first produces proximal defenses, but only to the extent that controlled-processing resources are available to initiate such

defenses. Only if a delay task is inserted between the MS induction and the measurement of distal defenses does evidence for these defenses appear (Greenberg et al., 1994). If controlled-processing resources are not available—for example, when cognitive load is high or participants are distracted from death-related thought—proximal defenses are circumvented, and no delay is needed before finding evidence of increased DTA and distal defense (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997). Studies also show that distal defense manifests immediately when participants are primed subliminally with death-related stimuli (e.g., the word *death*).

- When an explicit MS induction or implicitly primed death-associated stimulus is paired with experimental procedures that activate protective beliefs and fortify the anxiety buffer, both DTA and distal defense are attenuated or eliminated. These procedures include affirming important values (Schmeichel & Martens, 2005), taking the opportunity to affirm aspects of one's worldview (Arndt et al., 1997), receiving positive personality feedback (Mikulincer & Florian, 2002), reading an essay highlighting the uniqueness of humans relative to other animals (Goldenberg, Pyszczynski, McCoy, Greenberg, & Solomon, 1999), and calling to mind a parent (Cox et al., 2008). Conversely, when an explicit MS induction or implicitly primed death-associated stimulus is paired with experimental procedures that threaten protective beliefs and weaken the anxiety buffer (e.g., reading an essay highlighting the similarities between humans and other animals; Goldenberg et al., 1999), MS is especially likely to result in high levels of DTA and activate distal defense.
- Experimental procedures designed to weaken the anxiety buffer by threatening aspects of the cultural worldview and self-esteem increase the extent to which death-related cognitions are mentally accessible outside consciousness. For example, Hayes, Schimel, Faucher, and Williams (2008) showed that Canadian students responded to self-esteem threatening information with increased DTA. In many of these studies, threatening aspects of the worldview or self-esteem elevates the accessibility of death-related thought but not the accessibility of other negative cognitions, suggesting that investment in these constructs ameliorates concerns with mortality in particular.

DISPOSITIONAL DETERMINANTS OF TERROR MANAGEMENT PROCESSES

TMT initially was proposed to explain the role of mortality concerns in motivating the universal human pursuit of meaning and self-esteem. Yet, since its inception, the theory has acknowledged important individual differences in the degree and

direction of terror management defenses (e.g., Solomon, Greenberg, & Pyszczynski, 1991). This section reviews theory and research showing that certain individual-difference factors moderate people's defensive reactions to mortality awareness.

Our review of this work is organized around the model of terror management processes described in the previous section and graphically depicted in Figure 10.1. Specifically, we examine how the use of distal defense to guard against mortality concerns is determined by individual differences in the availability of controlled-processing resources, the strength of the anxiety buffer, and preferred sources of meaning and self-esteem. This organization does not preclude the possibility that a given individual-difference variable can intervene at multiple points in the processing sequence specified by the model. Indeed, research shows that at least three such variables—controlled-processing capacity, neuroticism, and attachment style—contribute to multiple stages of the terror management process. Later sections of this chapter address this issue in greater depth. This review is in no way meant to imply that individual-difference variables that currently are not under consideration therefore are irrelevant to terror management processes or personality functioning more generally.

Dispositional Determinants of Controlled-Processing Resources

As illustrated in Figure 10.1, explicit reminders of death do not typically activate immediate distal defense but are first processed in a more controlled manner and addressed with proximal defenses. MS first produces proximal defenses only to the extent that controlled-processing resources are available to suppress death-related thought and to initiate such defenses. If these resources are not available (e.g., cognitive load is high), proximal defenses are circumvented, and DTA and distal defenses are increased. Earlier in this chapter, we cited experimental evidence supporting this theorizing. Extrapolating from this work, we can hypothesize that individual differences in controlled-processing resources will predict a person's ability to control and process death-related cognitions, with repercussions for downstream outcomes. Accordingly,

Gailliot, Schmeichel, and Baumeister (2006) found that individuals high (vs. low) in trait self-control exhibited fewer death-related thoughts after exposure to an ambiguous death-related stimulus. They also found that individuals high (vs. low) in trait self-control responded to a death reminder with less worldview defense.

Converging evidence comes from studies examining the moderating role of trait mindfulness in reactions to MS. Trait mindfulness—the ability to attend to stimuli as they appear in the present moment without the intrusion of higher order appraisals and distractions (Brown, Ryan, & Creswell, 2007)—has been shown to ameliorate the link between MS and defensive reactions. Specifically, Niemiec et al. (2010) found that individuals high in trait mindfulness did not show increased worldview defense after reminders of mortality and that this effect was mediated partially by more effortful processing of death-related thought during MS inductions. Considered in conjunction with the research on trait self-control, these findings suggest that individual variation in both the ability to suppress death-related thoughts and to process such thoughts deeply should be considered when predicting terror management outcomes.

Indeed, these findings suggest that dispositional variation in controlled-processing resources can intervene at multiple stages in the typical MS process. High levels of self-regulatory ability can lead to more effective nonconscious suppression of death-related thoughts and circumvent the translation of DTA into worldview defense (Gailliot et al., 2006). On the other hand, high trait mindfulness may elicit more effortful conscious processing of death thoughts, leading to less proximal defense and thought suppression, and hence elimination of the potential for nonconscious DTA and distal defenses (Niemiec et al., 2010).

Dispositional Determinants of Anxiety-Buffer Strength

TMT claims that the fear of death is universal, but it allows for individual differences in the extent to which the awareness of mortality is linked to psychological defense mechanisms. Accordingly, research shows that theoretically specified

individual-difference variables moderate the link between death-related ideation and distal defense.

Neuroticism. From a TMT perspective, high levels of neuroticism represent a heightened potential to experience mortality-related anxiety and predispose an individual to pronounced rigidity in defenses against death fears. Consistent with this claim, individuals high (vs. low) in neuroticism report higher levels of death anxiety (Loo, 1984) and are more likely to ruminate about mortality (Abdel-Khalek, 1998).

More direct empirical support for TMT comes from studies showing that neuroticism predicts especially strong negative reactions to stimuli linked to mortality. For example, multiple studies conducted by Goldenberg and her colleagues show that neuroticism predicts negative reactions to aspects of the human body that imply animal nature (e.g., excrement, reproduction), because these stimuli remind people that they are mortal animals (Goldenberg, 2005). This work also shows that individuals high, but not low, in neuroticism respond to MS with decreased interest in the physical aspects of sex, inhibition of behaviors (e.g., exercise) that encourage bodily awareness, and avoidance of both pleasant and unpleasant physical (but not non-physical) stimulation. In fact, high levels of neuroticism predict reduced willingness to comply with health recommendations (e.g., to undergo a mammogram) when concerns about mortality are primed (Goldenberg, Routledge, & Arndt, 2009), suggesting that dispositional sensitivity to the threatening mortal implications of the physical body, ironically, can put the person at greater risk for lethal health conditions. More generally, these findings suggest that aversive reactions to stimuli linked to mortality, such as one's body, are not always universal and can be moderated by traits such as neuroticism. When dispositional buffering capabilities are weak, as predicted by high levels of trait neuroticism, death-associated stimuli will activate death thoughts nonconsciously, and this activation in turn will promote distal defense.

A hallmark of neuroticism is a propensity to experience negative affect and anxiety. Therefore, other dispositional factors associated with negative affectivity similarly should predict the extremity of

distal defense in response to MS. Accordingly, Simon, Greenberg, Harmon-Jones, Solomon, and Pyszczynski (1996) found that mildly depressed individuals, but not nondepressed individuals, exhibited exaggerated defense of their nation after MS. These findings provide converging evidence that individual-difference variables associated with susceptibility to negative affect and anxiety, such as high neuroticism and depression, are useful for predicting which individuals will respond to MS with especially strong distal defense.

Self-esteem level. TMT posits that self-esteem is the individual's primary psychological defense against the awareness of mortality. From this perspective, we can understand chronically high levels of self-esteem as indicating the presence of a strong psychological buffer against anxiety; conversely, low dispositional self-esteem indicates the relative absence of such a buffer. This perspective helps to explain why self-esteem and neuroticism are related reciprocally, for example, in Big Five personality theory and research (Costa, McCrae, & Dye, 1991; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001): Some people are able to keep thoughts of death at a safe distance because they have convinced themselves they are making a valued contribution to the world; other people's anxiety buffer may be less secure. In support of this hypothesis, Greenberg et al. (1992) found that dispositionally high levels of self-esteem enabled people to confront mortality reminders (e.g., elicited by watching a video depicting gruesome scenes of death) with less anxiety.

Earlier the chapter reviewed research showing that when MS is paired with experimental procedures that weaken the anxiety buffer, MS is especially likely to result in high levels of DTA and distal defense. Insofar as a low level of trait self-esteem is a marker of a dispositionally weak anxiety buffer, we would expect that low-self-esteem individuals will respond to MS with especially high levels of DTA and pronounced distal defense. Conversely, among high-self-esteem individuals, DTA and distal defense following MS will be significantly reduced (or eliminated). Accordingly, Harmon-Jones et al. (1997) showed that whereas participants with moderate to low levels of self-esteem

responded to MS with increased DTA and worldview defense, those with high self-esteem did not. Schmeichel et al. (2009) extended this effect to implicit self-evaluations, showing that individuals low, but not high, in implicit self-esteem responded to MS with increased worldview defense. These findings suggest that reminders of death trigger distal defense to reduce DTA, but only to the extent that anxiety-buffering capabilities are dispositionally weak, as indicated by low levels of self-esteem. High levels of self-esteem prevent death thoughts from becoming highly accessible and thus reduce the need for distal defense.

Based on TMT, we can hypothesize that the stronger people's anxiety buffer, the less likely they will be to see life as meaninglessness after a death reminder. Supporting this hypothesis, Routledge et al. (2010) found that trait self-esteem predicts vulnerability to the sense that life is meaningless in response to both chronically high and situationally elevated DTA. Specifically, high levels of dispositional DTA were associated with lower perceived meaning in life only if individuals also had low self-esteem, and MS decreased perceived meaning in life among those low, but not high, in self-esteem.

Trait endorsements of protective beliefs. TMT yields an additional hypothesis: The stronger a person's preexisting investment in security-providing elements of the cultural worldview, the less accessible death-related cognitions chronically will be, and the less likely he or she will be to respond to MS with distal defense. Supporting evidence shows that people high in religious fundamentalism exhibited lower levels of dispositional DTA (Friedman & Rholes, 2009) and that individuals high in intrinsic religiosity exhibited less worldview defense after MS, especially after being primed with religion and the security it provides (Jonas & Fischer, 2006). Related research shows that individuals high in dispositional proclivity to engage in nostalgia show reduced DTA and worldview defense in response to MS (Routledge, Arndt, Sedikides, & Wildschut, 2008). Nostalgia provides a means of situating one's self-concept in a coherent and progressive life narrative; hence, people who by disposition are prone to

activate protective nostalgic beliefs are better able to buffer death thoughts.

Dispositional Determinants of Defensive Style

According to TMT, each individual derives from the dominant cultural worldview an *individual worldview*. In other words, the dominant worldview typically offers a broad set of possibilities for what to believe and what to personally strive for, and each individual selects from this buffet the sources of meaning and self-esteem that he or she prefers to use as a protective buffer against mortality concerns. This analysis leads us to expect that individuals within the same cultural milieu will share many aspects of the dominant worldview but also will allay mortality concerns by adhering to diverging subsystems of beliefs, preferences, standards of personal value, and behaviors. Research inspired by this analysis shows that various individual-difference variables are useful for predicting which sources of meaning and self-esteem people will cling to in response to MS. To organize our review of this work, we first describe studies of individual differences in a preferred meaning source and then turn to studies of differences in a preferred self-esteem source.

First, however, we should clarify that this organization is not meant to imply that sources of meaning and self-esteem are psychologically independent. Quite the contrary, they are likely intertwined in the sense that people derive meaning from their self-esteem striving (e.g., the purpose of my life is to achieve) and a sense of personal value from their investment in or association with preferred sources of meaning (I'm proud to be an American). Nevertheless, it is useful to review these lines of research separately because, thus far, they have utilized distinct methodologies. Studies of preferred self-esteem source have assessed individuals' *striving* for personal value, which so far has involved measuring the extent to which they display self-serving biases in self-perception or engage in (or perceive themselves as engaging in) activities from which they derive personal value. In contrast, studies of preferred meaning source have not measured individuals' self-evaluations or esteem-relevant performances.

Put simply, they do not assess people's *striving* to achieve a goal; rather, these studies typically assess the extent to which people bolster particular cultural structures in response to MS, independent of their efforts to exaggerate their own positive attributes or their real or perceived ability to meet certain performance standards.

Gender and preferred meaning source. On the basis of TMT, we would expect that over the course of enculturation, individuals come to associate threatening death thoughts with certain reassuring constructs taken from their worldview, but we also would expect the content of these constructs to differ as a function of individual differences. In one set of studies assessing this possibility, Arndt, Greenberg, and Cook (2002) examined the effect of increased death awareness on the accessibility of different meaning-conferring elements for men and women. They found **that that** in death thoughts were activated outside of consciousness, men exhibited increased accessibility of nationalistic constructs, whereas women exhibited increased accessibility of relationship constructs. Thus, MS spontaneously activates constructs that an individual is socialized to value.

Political ideology. Political ideologies are broad, culturally transmitted systems of belief that sanction the value of specific social roles, statuses, and group affiliations and often denigrate alternative belief systems. Political ideologies thereby provide individuals with the perception that the world is a structured place in which they confidently can establish the enduring significance of their lives. Supporting this claim, many studies show that MS causes individuals to display intensified adherence to their preexisting political ideology, whether it is liberal or conservative, and to uphold that ideology in the face of potential threats to its validity.

An illustrative study by McGregor et al. (1998) showed that MS led participants to derogate and even physically aggress against targets who opposed their political ideologies. Specifically, following MS, liberals allocated more of a vile hot sauce to be ingested by a person who expressed antiliberal sentiments, whereas conservatives allocated larger amounts of the sauce to individuals who expressed

anticonservative views. Although some studies show that MS leads both liberal and conservative individuals to endorse more conservative political attitudes (Jost, Glaser, Kruglanski, & Sulloway, 2003), other studies show that MS leads liberal individuals to bolster and defend aspects of liberal ideology (e.g., the values of tolerance and compassion; Burke, Kosloff, & Landau, in press).

Personal need for structure. The most widely researched individual-difference variable in the TMT literature is personal need for structure (PNS; Thompson, Naccarato, Parker, & Moskowitz, 2001)—a dispositional preference for clear, coherent knowledge and a corresponding aversion to ambiguity and disorder. From a TMT perspective, to manage mortality concerns, all people need to sustain the perception that they live in an ordered world in which people and nature can be engaged with confidence, and in which they reliably can establish a sense of lasting personal significance. Individuals with a stronger dispositional preference for structured knowledge may be especially likely to invest in well-structured (i.e., clearly defined, consistent, stable) conceptions of their environment and experiences as a characteristic means of managing mortality concerns, whereas low-structure-seeking individuals may be more tolerant of ambiguity and novelty in cognizing the world and themselves. Accordingly, many studies show that MS increases high-PNS participants' tendencies to seek out and defend well-structured interpretations of other people, interpersonal relations, and social events, whereas MS does not prompt these structuring tendencies among low-PNS individuals.

A representative study examined whether people's need to believe in a just world—to believe that people predictably receive the outcomes they deserve—facilitates terror management, particularly for high-PNS individuals (Landau et al., 2004). This study built on prior work showing that when people are faced with a misfortune that implies that the world is unfair, one strategy they use to restore perceived justice is to view victims of the misfortune as somehow deserving their fate (Lerner, 1980). Participants read about a senseless tragedy in which a college student was disfigured in an unprovoked attack.

They then were asked to select which pieces of additional information about the tragedy they would like to read. Some pieces of information cast the victim in a positive light, others in a negative light. As predicted, MS increased preference for negative over positive information about the victim among high, but not low, PNS participants (an effect replicated by Hirschberger, 2006).

In a follow-up study, Landau et al. (2004) hypothesized that directly threatening high-PNS participants' belief in a just world by presenting them with positive information about tragedy victims would threaten their perception of the world as orderly and predictable and thereby would increase the salience of death-related thought. As predicted, high-PNS participants who read positive (but not negative) information about a tragedy victim responded with increased DTA, whereas low-PNS participants did not. Taken together, these findings suggest that high-PNS individuals are especially likely to derive terror-assuaging meaning from the belief that events are governed by a benevolent order.

Related studies show that high levels of PNS predict a tendency to rely on well-structured conceptions of one's own experiences over time as a source of terror-assuaging meaning. Theorists (e.g., McAdams, 2001) have noted that people maintain coherent conceptions of their experiences by thematically integrating memories of past events with their current self-concept. To test whether this tendency facilitates terror management, Landau, Greenberg, Sullivan, Routledge, and Arndt (2009) had participants generate separate autobiographical memories from various times in their life and then, following an MS manipulation, indicate which of those remembered experiences significantly influenced how they currently viewed themselves. As predicted, MS led participants high, but not low, in PNS to draw more meaningful connections between past events and their current self-concept.

Because these and other studies show that MS effects are observed only among individuals high in PNS, one might conclude that these individuals are simply more defensive overall than their low-PNS counterparts. Vess, Routledge, Landau, and Arndt (2009) tested this possibility, however, and found

that low-PNS individuals are no less defensive; rather, they derive protective meaning from exploratory engagement with novel information rather than from unambiguous structure. For example, MS increased low-PNS participants' reported interest in documentaries presenting novel perspectives on culturally relevant topics. In addition, after contemplating death, low-PNS individuals who imagined exploring an unfamiliar topic reported higher levels of meaning in life than those who imagined exploring a familiar topic. These effects were not found among high-PNS individuals. Related research by Usta, Williams, Haubl, and Schimel (2010) has shown that, following MS, whereas high-PNS participants sought familiarity in their consumer choices, low-PNS participants were more inclined toward novelty in their choices. Thus, individual differences in PNS do not reflect differences in the relative strength of the anxiety buffer; rather, they reflect the different sources of meaning that people within the same culture rely on to assuage mortality concerns.

Sources of self-esteem. TMT posits that the core driving force behind the personality of all adults is the motive to ameliorate mortality concerns by viewing the self as an object of primary value—a heroic contributor to the world. This is not meant to imply, however, that all people derive self-esteem from the same source. Indeed, as mentioned earlier, TMT posits that each person derives self-esteem from adhering to an individual worldview reflecting his or her internalized conceptions of the standards of value that are prescribed by the surrounding culture. Supporting this claim are studies showing that the effects of MS on increasing efforts to fulfill standards of value in various achievement domains are moderated by individual differences in the extent to which people stake their self-esteem on performance in those domains (Pyszczynski et al., 2004). For example, MS increases displays of physical strength, charitable action and compassion toward others, and identification with one's body only among individuals who value those domains as sources of self-esteem.

In addition to individual differences in investment in specific domains, some broad characteristics are useful for predicting the direction of people's

self-esteem strivings when mortality is salient. Consider gender. Often women are evaluated on their appearance more than men. We therefore would expect that women, but not men, would respond to MS by striving to attain cultural standards of bodily appearance. Indeed, mortality-primed women expressed greater intentions to tan their skin, especially after being primed to associate tanned skin with attractiveness (Routledge, Arndt, & Goldenberg, 2004). Furthermore, after MS, women who are relatively higher in body weight viewed their figures as more discrepant from what they perceived to be a culturally ideal thinness, and this perceived discrepancy mediated the tendency to restrict food consumption (Goldenberg, Arndt, Hart, & Brown, 2005). Men did not show these responses to MS.

These findings suggest that thinking about death sometimes can lead people to engage in activities that pose lethal health risks, such as baking themselves in the sun's harmful rays. Although this may seem counterintuitive, it is consistent with TMT's claim that self-esteem striving is a distal defense that is not logically or directly related to the problem of death. Indeed, other research shows that, across cultures, MS leads people to engage in dangerous activities if it makes them feel valuable. For example, MS increased risky driving behavior (both self-reported and on a driving simulator) among Israeli soldiers who valued their driving ability as a source of self-esteem (Ben-Ari, Florian, & Mikulincer, 1999), and exposure to graphic cigarette pack warnings increased DTA and thereby increased smoking intentions among Americans who derive self-esteem from smoking (Hansen, Winzeler, & Topolinski, 2010). Thus, to the extent that an individual derives self-esteem from risky behaviors, stimuli that activate thoughts of death, ironically, may increase the very behavior that they are designed to warn against.

This is not always the case, however. Self-esteem striving is a distal defense against mortality awareness that is observed when death-related thoughts are active outside of focal conscious awareness (either because they have had time to recede from awareness after an explicit mortality prime or they were primed subliminally). Thus, we would expect MS to elicit self-esteem striving in preferred domains when thoughts of death are active but outside of

conscious awareness. Accordingly, when Arndt, Schimel, and Goldenberg (2003) reminded participants of mortality and then immediately thereafter assessed their exercise intentions, participants reported increased exercise intentions regardless of the relevance of fitness to their self-esteem, presumably reflecting their belief that exercising regularly can lower their risk of health problems. But when, after a delay, death concerns had faded from conscious attention, only among participants for whom fitness was relevant to their self-esteem did MS increase exercise intentions, presumably reflecting an orientation not to health per se, but to self-esteem striving.

In fact, MS can engender bidirectional effects as a function of the explicit or implicit goals it activates. Routledge et al. (2004) showed that, immediately after being explicitly reminded of their mortality, participants indicated a stronger intention to purchase sun-protection products, presumably reflecting a proximal, rational concern with extending their longevity. When sun-screen preferences were assessed after a delay, however, mortality-primed participants actually increased their health risk by decreasing their intention to purchase such products if they derived self-esteem from achieving a radiant, head-turning tan.

Locus of self-esteem. It is important to consider not only differences in the particular culturally valued sources from which individuals derive their self-esteem, but also the more global contingencies of people's self-worth. One particular dimension that has been examined in the literature is intrinsic versus extrinsic contingencies of worth. This dichotomy refers to whether an individual's sense of self-worth is primarily contingent on the acceptance of others, or whether he or she feels a more intrinsic conviction of personal self-approval. Importantly, the extrinsic-intrinsic dimension can be independent of the particular domain in which an individual has staked his or her self-worth. For example, a person may paint pictures to gain the adoration of gallery-goers or to fulfill a personal longing for creative self-expression. TMT research suggests that whether individuals are dispositionally more invested in extrinsic or intrinsic sources of self-esteem will affect their behavioral intentions

after MS. For example, Arndt et al. (2009) found that MS led individuals who smoke for extrinsic reasons to be more persuaded by an antismoking commercial highlighting the negative interpersonal effects of smoking.

Individual Differences With Multiple Effects on Terror Management Processes

The preceding review categorized individual-difference variables based on whether they primarily intervene in the terror management process as controlled-processing resources, factors influencing anxiety-buffer strength, or determinants of defensive style. This classificatory system has heuristic advantages for systematizing the large body of research on individual differences in terror management. It is important to recognize, however, that certain individual-difference variables may influence reactions to MS and other relevant processes at multiple points in the cognitive sequence mapped in Figure 10.1.

As a case in point, consider neuroticism. Although we discussed this personality variable as it relates to the strength of the anxiety buffer, it clearly has the capacity to intervene at multiple stages of the cognitive process after exposure to MS or death-related stimuli. For example, at the level of controlled processing, individuals high in neuroticism generate more death-related thoughts after exposure to stimuli that could be linked to mortality, such as sexual images (Goldenberg et al., 1999). Although the connection between sex and death initially may seem remote, biological reproduction links humans directly to other animals, a link that likewise extends to our knowledge that we ultimately will die like any other animal. Individuals high in neuroticism seem to have a lower cognitive threshold for triggering DTA and are more likely to translate ambiguously death-related stimuli into full-blown MS (in the initial cognitive phase represented at the top of Figure 10.1). This analysis linking neuroticism to the controlled-processing stage dovetails with the observed importance of trait self-regulatory ability in processing MS (Gailliot et al., 2006), given that a considerable body of research (e.g., Robinson, Moeller, & Fetterman, 2010) has connected neuroticism to failures in self-regulation.

At the same time, however, as discussed earlier, neuroticism clearly also can play a role at the middle stage in the cognitive process, when the potential for thoughts of death to become active outside of consciousness has been activated, and the anxiety buffer is brought online. Individuals high in neuroticism seem to have a comparatively weak anxiety buffer that often fails to stifle DTA when the potential for nonconscious anxiety has been aroused. Evidence for this contention comes from work showing that bolstering the anxiety buffer (e.g., by reframing threatening stimuli in nonthreatening, worldview-consistent terms) decreases defensive responding among individuals high in neuroticism (Goldenberg et al., 1999; Study 3). Conversely, weakening the anxiety buffer (e.g., by priming ideological threats to the cultural worldview) causes individuals low in neuroticism to display the same level of defensiveness typically observed in those high in neuroticism (Arndt & Solomon, 2003; Study 2).

Although neuroticism clearly can affect both the controlled-processing and anxiety buffer levels of MS response, suggestive evidence implies that it further has an influence on defensive style once DTA is increased. Indeed, Strachan, Pyszczynski, Greenberg, and Solomon (2001) proposed that neurotic individuals sometimes attempt to focalize their death fear by displacing it onto objects that are relatively easier to cope with (phobias) or by engaging in ritualistic behaviors as a means of obtaining tangible meaning and control in the world (obsessive-compulsive behavior). Supporting this idea, MS increases phobic reactions to spiders and obsessive handwashing in individuals predisposed to such behaviors (Strachan et al., 2007). These observations suggest that neuroticism may predispose individuals to defend against DTA in relatively maladaptive ways, while simultaneously predisposing them to eschew more positive forms of defense, such as MS-induced creativity (Xu & Brucks, 2011).

In sum, although a survey of the relationship between MS responses and a broad swath of individual differences is facilitated by the preceding classificatory scheme, a detailed investigation of any single trait or individual difference may reveal that it intervenes at multiple stages of the terror management process. In this example, high neuroticism (a)

intervenes at the controlled-processing level by predisposing individuals to translate potentially death-related stimuli into MS, (b) intervenes at the anxiety buffer level by undermining individuals' ability to marshal protective cultural or self-esteem-related resources, and (c) intervenes at the level of defensive style by orienting individuals toward unique (and potentially maladaptive) patterns of MS response. Future research on the role of individual differences in terror management should consider carefully (and conceptually clarify) whether a particular variable influences the MS response process primarily at one of the stages presented in Figure 10.1, or at all three, and exactly how. The next section considers additional questions for future research in this domain.

QUESTIONS FOR FUTURE RESEARCH

This section raises questions that deserve further empirical study. First, we consider the etiology of individual differences in terror management, incorporating theoretical insights and research from attachment theory. We then consider the implications of our analysis for understanding the personality of the unique individual. Finally, we discuss how terror management motivation interacts with growth motivation to shape personality functioning.

Toward a Developmental Perspective on Individual Differences in Terror Management

One area that is underresearched in the TMT literature is the intraindividual development of terror management processes, both at the general level shared by all persons and in terms of the idiosyncratic elements unique to particular persons or groups sharing a common trait. Individual differences are highly relevant here. Given that death-, self-, and worldview-related cognitions all vary developmentally as a function of age, we would expect age differences to play a pivotal role in terror management. Additionally, questions remain as to how the motive to deny death (and to buffer anxiety in general) influences the etiology of individual differences. Some suggestive findings are relevant to these issues, and a good deal of suggestive theory

(e.g., Pyszczynski, Greenberg, & Goldenberg, 2003), but these findings typically are not integrated into a holistic view of the TMT perspective on development. This section will sketch such a view, with an aim to inspire more comprehensive empirical investigations (including, critically, longitudinal studies) into this important area, at the point at which the intersection between terror management and personality is brought into sharp relief. 

The development of the anxiety buffer. Given that the majority of TMT research has been conducted with adults, it often is assumed (as in the schematic presentation in Figure 10.1) that death-associated stimuli always have the potential to trigger MS—in the sense of full awareness of the implications of one's own inevitable mortality—and that MS potentially then will activate a chain of enculturated defensive reactions. A developmental perspective on terror management, however, reveals that both the individual's understanding of the implications of mortality, and his or her tendency to link the anxiety connected with this understanding to culturally sanctioned defenses, are not present from birth. Rather, these tendencies typically emerge in the first decade of life as a function of the complex interplay between cultural and cognitive developmental processes.

Like many abstract concepts, people's understanding of mortality develops and changes over the life course. Studies suggest that by age 4 years most children possess at least a basic understanding of certain implications of death, such as the cessation of agency in a dead entity (Barrett & Behne, 2005). Developmental researchers, however, have argued that most children do not fully understand the unavoidability of their own demise until age 9 or 10 years (e.g., Speece & Brent, 1992). On the basis of this research, Florian and Mikulincer (1998b) investigated the effects of a death reminder on two groups of children: a 7-year-old group too young to fully understand personal mortality and an 11-year-old group past the normal age of acquiring mature death awareness. They found that only the 11-year-olds demonstrated worldview defense (in the form of an in-group bias and out-group rejection) after MS. This suggests that death concerns may be linked

psychologically to culturally sanctioned defenses only after the individual has attained maturity in his or her conceptualization of death.

The significance of attachment style. As cognitive changes in the first decade of life provide the psychic scaffold for an anxiety buffer, environmental and caregiver influences also shape the particular form the anxiety buffer eventually will take for each individual. As a means of understanding this process, researchers (e.g., Mikulincer & Florian, 2000) have integrated TMT and attachment theory, two perspectives grounded in a common evolutionary–psychodynamic view that highlights the importance of anxiety defense in interpersonal dynamics.

According to this integrated perspective, children learn that meeting parental standards of value leads to feelings of significance and security and that failing to do so leads to feelings of inferiority, insecurity, and anxiety. Parents express approval when the child acts in ways they value, and parental standards ultimately reflect the parents' internalized version of the prevailing cultural worldview. In this way, through repetition, the child's sense of positive self-regard when he or she behaves in normative ways becomes an anxiety buffer. As suggested earlier, a new stage is reached when the developing individual becomes aware of the inevitability of death, as well as of the parents' limited ability to provide protection from this ultimate threat. At this time, the primary basis of security shifts from the parents to the culture at large as the person constructs an individual version of the worldview from the various cultural elements (e.g., values, ideals) to which he or she is exposed. This TMT–attachment account of personality development exemplifies Allport's (1937) notion of the functional autonomy of motives. Although children originally behave in culturally valued ways to obtain parental affection and thus the continued satisfaction of biological needs, the primary motive for this behavior eventually shifts to the much more abstract concern of allaying death anxiety.

At various stages in this sequence, the parental and environmental factors associated with the development of attachment style influence how the individual learns to characteristically respond to

anxiety-evoking input (including, eventually, awareness of personal mortality). Early in childhood, the attachment system directs people to respond to stressful events with efforts to maintain or restore proximity to significant others who can provide support in managing distress. In later years, research suggests that adult attachment style continues to intervene at multiple stages in the cognitive sequence of MS response.

Attachment style and the etiology of individual differences in controlled-processing resources. Research suggests that differences in adult attachment style partly reflect the development of different patterns for cognitively processing negative self-relevant information, such as knowledge of mortality. When resting levels of anxiety and defensiveness are measured, securely attached persons show moderate defensiveness and low anxiety, whereas avoidant persons show high defensiveness and anxious-ambivalent persons show high anxiety (Mikulincer & Orbach, 1995). In addition, when asked to recall painful personal memories, avoidant persons appear to inhibit such recollections, whereas anxious-ambivalent persons display heightened accessibility of painful memories and are unable to prevent the spreading of negative emotional responses to them (Mikulincer & Orbach, 1995). Viewed through a terror management lens, these findings suggest that although anxious-ambivalent people have little cognitive capacity to effectively process death-related cognitions (as found by Mikulincer & Florian, 2000), avoidant people may have learned early in development to suppress them entirely. The suppressive tendencies of avoidant persons in response to MS may manifest in heightened needs for worldview defense, as suggested by the findings of Mikulincer and Florian (2000).

Attachment style and the etiology of individual differences in anxiety-buffer strength. The development of attachment style in childhood is an important factor in predicting differences in the capacity to defend against death thoughts. Children first look to their parents (and later other powerful social figures) as models of proper routes to pursuing worth and meaning and also for validation that they (the children) are valuable. This allows securely

attached individuals to develop a symbolic shield against death fears, whereas insecurely attached individuals may have difficulty establishing an effective anxiety buffer in this formative stage, making it more difficult to repress mortality concerns later in life. Accordingly, Florian and Mikulincer (1998a) found that self-perceived symbolic immortality (i.e., likelihood of leaving behind a lasting personal legacy after death) correlated negatively with self-reported death fear only among securely attached individuals, implying that a secure attachment style is the psychological foundation for the construction of a functional anxiety buffer.

Attachment style and the etiology of individual differences in defensive style. Individual differences in attachment style not only predict differences in degree of worldview security, but they also moderate which protective sources of meaning individuals draw on when mortality is salient. For example, Cox et al. (2008) found that, after MS, people with a secure attachment style were more likely to turn to relationships for support, whereas those with an insecure attachment style preferred to defend their cultural worldview (see also Mikulincer & Florian, 2000). Related research shows that attachment style can moderate political preferences. On the basis of Lakoff's (2002) analysis of moral politics, Weise et al. (2008) proposed that secure adult attachment is associated with progressive political ideology, whereas insecure adult attachment is associated with conservative political ideology. Accordingly, MS led those low in attachment security to show increased support for conservative candidate George W. Bush in the weeks leading up to the 2004 U.S. presidential election, whereas MS led those high on attachment security to show increased support for the liberal candidate John Kerry.

Expanding beyond the realm of attachment theory, the developmental analysis drawn from TMT suggests that as young adults fashion a cultural identity from among the culture's ideological and occupational offerings, they will gravitate toward a cultural niche that allows them to gain social value from exhibiting the same behaviors that allowed them to secure their parents' affection during childhood. For example, a child raised in an environment

in which being funny garnered affection (and thus security) might be predisposed, as an adult, to assuage mortality fears by being gregarious; whereas if during childhood an individual learned that “cute = good = safe,” then he or she might be likely to invest in physical appearance as a preferred terror management strategy in adulthood.

Future researchers could study profitably whether variations in a person’s ability to engage with cultural routes to meaning and value that are analogous to their childhood basis of security predict socially relevant outcomes (e.g., ideological rigidity) and outcomes associated with mental health and positive psychological functioning. For example, such work might inform our understanding of individual differences in susceptibility to anxiety and depression. If over the course of development a person comes to view one domain as central for garnering death-denying self-worth, but she is not particularly competent in that area compared with others outside the family circle, she may be unable to live up to the culture’s standards of value and consequently may lack a secure psychological buffer against nagging doubts about the ultimate meaning and significance of her life.

Defensive style in later stages of the life span. Just as death reminders have different effects on children, they also might be expected to influence older adults in a unique way. Maxfield et al. (2007) in fact found that older adults (in their studies, between the ages of 57 and 92 years) did not show worldview defense (in the form of endorsing harsher punishment of moral transgressors) after a death reminder, while a comparison group of young adults did show this effect. Indeed, older adults responded to a nonconscious death reminder by becoming significantly more *lenient* toward transgressors. The authors interpreted these findings as evidence that older adults—who are both more commonly exposed to reminders of their impending mortality and more estranged from the mainstream cultural worldview and sources of self-esteem that protect against death awareness—shift toward alternate, typically more flexible strategies for coping with their mortality.

Generally, several suggestive findings from the literature provide the pieces of a TMT account of

personality development across the life span. Cognitive and social changes in death awareness and integration in the broader cultural worldview seem to play a significant role, as does the emergence of a specific attachment style. A great deal of future research is required, however, to integrate the various strands of this account. Preferably, of course, some of this research will be longitudinal in nature.

How Does TMT Illuminate the Unique Individual?

This chapter has tried to show how TMT deepens our understanding of the person at the level of human universals and individual differences. But how might the theory help us understand a person’s distinctive configuration of motives, traits, interests, values, and so on that set him or her apart from all other persons? TMT was developed for the nomothetic study of human behavior and, as such, does not offer many concepts or research methods that might be useful for the idiographic study of the individual. We side with Adler (1930) and others who have proposed that individual uniqueness can be accounted for in terms of differences in the patterning of the same underlying processes. That is, uniqueness inheres in each person’s distinctive means of satisfying the same universal goals.

Insights into the individual-level expressions of terror management motivation may be gained by examining an individual’s *life story*. According to McAdams (2001), individuals continually construct autobiographical narratives that explain, to themselves and others, who they were in the past, who they have become, and who they are becoming in time. TMT suggests that the elements of a given person’s life story—his or her goals, fears, ideological commitments, and so on—are given overarching meaning partly because they connect with an individualized but largely culturally derived conception of how to lead a life that will transcend death. That is, while the motivation to deny death is universal, each individual constructs a unique story that explains how he or she has, or eventually will, make a lasting mark on the world. Research has begun to examine the terror management function of this narrative tendency (Landau et al., 2009), but future research could explore its idiosyncratic expressions.

How Does Terror Management Motivation Interact With Growth Motivation?

When considered in conceptual isolation, TMT provides an incomplete picture of personality. It paints an image of the human condition in which people create a prison for themselves, organizing their lifestyle around cultural programming to gain the assurance that they are heroic. Thus, it is unable to explain the creative, growth-oriented, and self-expansive aspects of personality. Rather than emphasizing a person's defensive efforts to hide from his or her deepest fears, the humanistic perspective epitomized by Carl Rogers and Abraham Maslow, as well as the more contemporary self-determination theory (Deci & Ryan, 1995), emphasizes each person's potential to grow and change. These theorists view the person as inherently motivated to cultivate inner potentialities, seek out optimal challenges, and master and integrate new experiences. We believe a well-rounded understanding of the whole person ultimately must model the dynamic interplay between defensive terror management motivation and self-expansive growth motivation.

Greenberg, Pyszczynski, and Solomon (1995) and Pyszczynski et al. (2003) have attempted such a synthesis. They posited that throughout life there is a dialectical interplay between the motive for unique self-actualization and the desire to "fit in" with a familiar, security-providing worldview. Starting from childhood, the individual is driven to gain a heightened sense of autonomy and incorporate new experiences into his or her sense of self (Deci & Ryan, 1995). However, creatively reinventing oneself in pursuit of greater autonomy (e.g., by befriending people with unfamiliar religious beliefs) means stepping outside of familiar systems of cultural beliefs that provide protection from existential fears. This can trigger aversive feelings of uncertainty, impelling a person to return to the security of a familiar cultural worldview, even if it means inhibiting one's growth.

This analysis suggests that if a person has a weak buffer against mortality concerns, he or she will be inhibited from pursuing intrinsically motivated activities. For example, we would expect low-self-esteem individuals to respond to MS by avoiding

risky opportunities for creative self-expression that might expose their shortcomings, whereas high-self-esteem individuals, who possess a stronger dispositional buffer against mortality concerns, should not hesitate to engage in creative pursuits. Accordingly, Landau and Greenberg (2006) found that low-self-esteem participants responded to MS by opting to complete a relatively prescribed version of a creative task that offered little opportunity to show off their creativity (or lack thereof). High-self-esteem participants, however, did not show this cautious response. These results suggest that people avoid creative self-expression because it risks exposing their limitations and thus arousing anxiety, and that self-esteem can provide individuals with the security they need to take risky creative ventures even when mortality is salient. Additional research should determine whether, in addition to self-esteem, other individual differences in susceptibility to death-related concern and defensive capacity predict a person's balance between defensive terror management motives and intrinsically motivated tendencies for growth and self-expansion.

Another fruitful point of contact between TMT and the humanistic approach to personality lies in examining the ramifications of different styles of contemplating death for people's characteristic patterns of thought and behavior. TMT explains how the awareness of death leads people to seek refuge in prescribed routes to meaning and value and, thus, how they stifle their urge to freely move forward, exercise their assimilative powers, open themselves up to new experiences, and express their inner selves. By contrast, a long tradition of thought reaching back to the Stoic tradition of ancient Greece and Rome argues that confronting one's existential limitations, particularly the inevitability of death, allows a person to achieve fuller independence, imagine a wide range of possibilities within him- or herself, and choose the most satisfying course of action. A reconciliation of these views comes from research showing that temporary, superficial reminders of mortality lead to defensive reactions, whereas sustained contemplation of death can serve as a catalyst for authenticity and growth. Interested readers are referred to work on trauma survivors (Janoff-Bulman & Yopyk, 2004) and the

forementioned work on trait mindfulness (Niemiec et al., 2010).

Theoretical Implications

Adopting a TMT perspective adds new dimensions to influential approaches within personality psychology. To take one illustrative example, TMT shares with many contemporary perspectives (e.g., Hogan & Bond, 2009) the view that culture plays a major role in shaping personality because people are motivated internally to bring their thought and conduct into conformity with their cultural worldview. Whereas most perspectives adopt a baseline assumption that people assimilate to their cultures out of an inherent need to see the world as meaningful and to obtain some form of positive self-regard (Koltko-Rivera, 2004), TMT goes further by positing the need to deny death as the distal motive behind the universal quest for meaning and esteem. That is, people are motivated to acculturate not only to gain an understanding of the world and their place within it, but also because such an understanding shrouds their mortal nature.

TMT also goes beyond many extant personality theories by turning the notion of *neurosis* on its head. Many approaches to personality have addressed this psychoanalytic concept (e.g., Horney, 1950; Tyrer, Seivewright, & Johnson, 2003). Although they differ in important respects, they usually are based on the idea that people have an inborn nature that is basically adaptive and unburdened by anxiety, and neurosis is a maladaptive corruption of that essential nature and therefore is a form of pathology confined to a subgroup of individuals. TMT inverts these ideas. First, it views people as inherently anxious owing to the knowledge (normally implicit) that they are mortal pieces of meat. Neurosis is a self-imposed obliviousness and shutting off of experience created by a desperate clinging to a narrow, inflexible range of perception and action. It is not a failure of adjustment, however, but just the opposite: It is a normal and necessary adjustment to one's situation—a refusal to face up fully to the type of creature that we are—that enables a person to function with at least a minimum of equanimity.

From this perspective, all people are neurotic (to varying degrees) in the sense that they filter their

perception of the world through the lens of their cultural worldview, and they organize their lifestyle around a limited range of culturally prescribed roles so that they can perform as valued contributors to a meaningful cultural drama. Neurosis can impair people's optimal functioning, preventing their own free and independent choice and leading them to turn away from newness and broader perceptions of experience. Nevertheless, TMT insists that, at a basic level, neurosis broadly defined facilitates action by repressing death anxiety.

CONCLUSION

This chapter used TMT to propose that a person's personality—the characteristic ways in which he or she makes meaningful sense of the world and strives for a sense of lasting personal value—is given motivational force from an underlying need to shield oneself from the awareness of one's own mortality. We reviewed multiple lines of research showing that individual differences at various levels of analysis predict the strength of people's defensive responses and direct which sources of meaning and self-esteem people cling to when mortality is salient.

We believe that this research, and future research along these lines, mutually benefits TMT and personality psychology. Although TMT was first proposed primarily as a social psychological approach to human motivation, the incorporation of individual differences into the theory has broadened its scope and provided a more detailed picture of the interplay of dispositions and situations in the common human struggle with mortality. At the same time, personality psychologists can, by situating the study of individual differences within a TMT framework, gain a deeper understanding of the motivational underpinnings of the various traits that constitute a person.

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