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Self-Esteem: A Human Solution to the Problem of Death

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Abstract

Terror management theory (TMT) posits that the need for self-esteem develops out of the socialization process in which children learn to abide by parental and, eventually, societal standards of 'goodness' to feel securely embedded in a cultural belief system. According to TMT, feeling safely immersed in a meaningful conception of reality (i.e., the cultural worldview) ultimately functions to protect people from anxiety due to the uniquely human capacity to be cognizant of their eventual death. After presenting the basic tenets of this perspective, we review several lines of research supporting it and then address some common questions and criticisms of the theory such as how is a TMT view of anxiety consistent with evolutionary principles, why do people commit suicide, and how is self-esteem pursued in non-Western, self-effacing cultures? Finally, we discuss some implications of TMT for understanding social problems and for pursuing meaning and self-esteem in healthier, more socially productive ways.

In this article, we advance the central proposition of terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986) that self-esteem functions to buffer people from anxiety resulting from an awareness of human mortality. This notion was originally formulated by the cultural anthropologist Ernest Becker, whose all-consuming passion was to answer the broad question, 'Why do people behave the way they do?' Becker felt that the only way to answer this question was to piece together the most basic insights about the human condition gleaned from the biological and social sciences. Through his search, Becker (1971, 1973, 1975) ultimately came to the conclusion that the self-esteem motive evolved to mitigate existential fear engendered by the uniquely human capacity for self-awareness. We begin this article by summarizing Becker's provocative analysis, which forms the basic propositions of TMT. We then review some of the research efforts that stand in support of TMT and address some common critiques of the theory. In closing, we discuss how the theory provides insight into social problems and points to avenues for

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managing existential fear that promote the growth and functioning of individuals and cultures.

A Terror Management Analysis of the Need for Self-Esteem

Our starting point is the basic observation that human beings possess incredible cognitive abilities that, as far as we know, are unparalleled by any other species. Indeed, humans have the capacity to ponder past and future events, reason symbolically, communicate using language, and reflect on their own thoughts and behaviors. These intellectual proclivities have conferred an enormous survival advantage for modern humans. The benefits of having these abilities, however, came with a few consequences.

Two important consequences of uniquely human intelligence

The first consequence of being intelligent is that humans are born into a state of extreme helplessness and dependence. Indeed, the human infant is so immature at birth it cannot lift its head, or roll over. Not only are human beings physically weak in the early stages of life, but they are also mentally immature because the brain continues to develop for an extended time after birth. In fact, if we compare the human infant's brain with that of chimpanzees, we would observe that whereas the chimp's brain is born with about 70% of its cranial capacity already in place, it takes roughly 3 years after birth for the human brain to reach the same capacity. This slow progress toward mental maturity allows the infant's brain to develop in the context of the stimulus environment, which leads to greater adaptation through learning experiences (as opposed to hard-wired instincts) and a higher degree of behavioral flexibility. However, this means that for many years after birth, the human child must grapple with the development of its mental capabilities while being totally helpless, dependent, and vulnerable.

A second consequence of human intelligence is self-consciousness, the awareness that one is a living being in the world. The development of self-awareness was a tremendous intellectual advance that endowed human beings with unparalleled flexibility in responding to the environment. Self-awareness allows people to step back from a novel stimulus and delay behaviors long enough to ponder past experiences, anticipate future consequences, and plan accordingly, a phenomenon called self-regulation (Duval & Wicklund, 1972). The ability to regulate one's behavior, when combined with other cognitive abilities such as symbolic reasoning, makes it possible for humans to conceive of that which does not yet exist and then transform the products of their imagination into reality. In this sense, human beings are truly creative; whereas other animals adapt to the natural world as it is encountered, humans can change the natural world to suite their particular needs and desires (Rank, 1932). Clearly,

self-awareness, which makes possible complex goal-directed behavior, has enabled humans to invent the means to survive in a wide range of uncertain environments.

Despite the adaptive benefits of being able to ponder our existence, being self-aware, when combined with the ability to anticipate future events, is also highly problematic because it makes us aware that we are, at base, flesh-and-blood animals that will eventually decay and die. Most animals experience fear when they are faced with an imminent threat. However, because humans can anticipate all kinds of future threats, self-awareness creates the potential for ever-present anxiety. From the perspective of TMT, this existentially based fear, if experienced unchecked, would undermine many of the adaptive benefits of self-awareness (e.g., behavioral flexibility and self-regulation). In other words, humans would be so encumbered by anxiety that they would be unable to engage in many goal-directed activities. Thus, in order to preserve a viable, unencumbered form of consciousness, humans evolved a propensity to construct cultural belief systems that give people ways of earning self-esteem (Solomon, Greenberg, Schimel, Arndt, & Pyszczynski, 2004). We now turn to a discussion of how the self-esteem system developed to become a device for mitigating existential fear.

Socialization and the development of the self-esteem motive

Recall that the human infant is born into a state of complete helplessness and vulnerability but, at the same time, must go about the business of learning and exploring the environment so that the brain can slowly develop into a complex organ. The problem is that exploration and learning opportunities take the already vulnerable infant away from its caregivers, who are its sole source of protection and support. Thus, the infant has a dilemma. On one hand, it is vulnerable and needs to feel safe and secure, but on the other hand, the infant is compelled to explore and adapt to its stimulus environment, which takes it away from safe proximity to caregivers. John Bowlby (1969) observed that among mammalian species and primates in particular, a mechanism evolved to provide a balance between these two opposing needs: survival and exploration. He termed this mechanism 'attachment'. According to Bowlby, when the infant gets too far away from an attachment figure (e.g., the mother), it experiences an influx of anxiety, which motivates the infant to seek close soothing contact with the mother in order to reduce anxiety. Although the exact source of this separation anxiety is unclear, it seems to be a universal, innate response of the organism to danger – and what would be more dangerous for the already helpless infant than to be left alone to fend for its survival. Indeed, the infant has no way of knowing that it will not be abandoned to the pain of this anxiety except through continual contact and relief of that pain (cf., Becker, 1971).

As the child gets older, it realizes that the mere expression of bodily urges and intrinsic desires no longer bring the cooing support of caregivers. For some strange reason, Mom and Dad do not share in the child's delight over a bowel movement on the coffee table, or finger-painting with ketchup and mustard. Instead, they express disapproval, withdraw signs of affection, and perhaps even dispense punishment. Similarly, when the child is successful in curbing its behavior to be in line with parental standards, he or she receives praise and affection, which attenuates feelings of anxiety. Such events mark the beginnings of the socialization of self-esteem, in which the child must now *earn* the love and support of the parents by acting in certain ways. The child is essentially powerless in this situation and must therefore abandon the idea of pure pleasure and uninterrupted excitement if it wants to perpetuate a continual background of parental support. The end result of this process is that the child, in large part, is forced to give up its own physical reality (the expression of bodily desires coupled with automatic parental support), in exchange for a new social reality, in which the child must abide by arbitrary parental standards to receive love and support. Ernest Becker (1971) elegantly summarized this process:

> The entire early training period of the child is one in which he learns to switch modes of maintaining self-esteem. The child learns painfully that he cannot earn parental approval, or self-esteem, by continuing to express himself with his body. He finds that he has to conduct himself according to symbolic codes of behavior in order to be accepted and supported. In other words, his vital sentiment of self-value no longer derives from the mother's milk, but from the mother's mouth (p. 67).

Through this process, children learn that being 'good' and meeting social standards leads to safety, protection, and the abatement of anxiety, whereas being bad and breaking these standards leads to vulnerability and the elevation of anxiety. This progression from attachment to socialization, in which the child internalizes the standards of value that he or she pursues to maintain parental love, denotes the emergence of self-esteem as a standard-based psychological structure that functions to control the child's basic fears and anxieties. There is, however, an additional source of anxiety brewing.

Self-consciousness and the quest for life-continuity

Later in development, with increasing cognitive complexity, the child eventually becomes self-aware. With the emergence of self-awareness, the physically weak and defenseless child has a mature understanding of the concept of death as biological, universal, and inevitable (Lonetto, 1980; Speece & Brent, 1996). The child now has the capacity to imagine potential threats around every corner and lethal threats that have yet to

happen. Moreover, the child may also recognize that the parents (like the child) are made of flesh and blood, are imperfect, and are therefore incapable of protecting the child from the many dangers in the world. This new source of fear prompts questions about the meaning of life, such as, 'where do babies come from', or more directly, 'where did I come from', and 'what happens to people when they die?' (Webb, 2002). From Becker's (1971) perspective, these types of questions reflect a budding awareness of human mortality made possible by the child's cognitive capacity for self-awareness, which marks the 'birth of meaning', the point at which a broader, more enduring source of protection, beyond what could be provided by the parents or any other mortal being could provide. This point denotes a shift from an exclusive concern with connections with others to a motive to be a valuable contributor to a meaningful universe. Children's dawning awareness of mortality therefore propels them to broaden their security base from adherence to the standards of their parents, to the standards and values of the greater cultural system of ideas, which provides answers to existential questions – and also provides the means for achieving immortality – the ultimate solution to the problem of death.

For example, in many cultures throughout the world, people are taught that an all-powerful god created the universe and human beings, and this belief has implications for what people should be doing with their lives. If God is *The Creator*, then devotees should be following His (or Her) plan for human beings as laid out in the Bible, the Qur'an, or whichever text one believes is correct. And if believers follow this divine plan, there is the ultimate death-transcending reward of an afterlife. However, even if one is not particularly religious, there are answers to these basic existential questions in Western, secular culture too. For example, many non-religious people believe that the universe was the result of a big explosion billions of years ago (i.e., the Big Bang) that sent debris hurtling through space. Some of this matter clumped together to form stars, planets, and moons. It just so happened that on at least one tiny planet called Earth, the conditions were just right for life to spring forth from a chemical reaction, from which humans and other animals evolved to their current forms over the course of billions of years. If you believe that science has the answers to life's questions, you might therefore dedicate yourself to a particular domain of scientific inquiry. Within any such domain, there exists a stage on which members of the community can exhibit their contributions to the field – and if one can document some important discoveries, there is at least some sense that these achievements will live on in the scientific community after one dies. In addition to the scientific community, there are numerous other cultural domains through which people can exhibit their contributions and obtain a sense of symbolic immortality. For example, in the field of entertainment, there is the hope that one will be remembered for their role in an award-winning film,

television show, or Broadway play. Similarly, painters and musicians may hope to be remembered for their works of art, entrepreneurs may have visions of growing a corporation that spans generations, and athletes may wish to be immortalized by being inducted into the Hall of Fame. And of course, many people can achieve a sense of life-continuity through the production of offspring, who not only pass on their genetic material, but also remember them and carry on their legacy (Mikulincer, Florian, & Hirschberger, 2003). Thus, even if the person's cultural beliefs do not include the possibility of literal immortality, all cultural belief systems make it possible for one to create symbols of the self that live on in the culture after death (Becker, 1973; Lifton, 1979).

But how do people obtain the gift of immortality offered by culture? The answer is by meeting whatever standards of 'goodness' one's cultural meaning system prescribes. In so doing, people earn self-esteem, the belief that they are valuable contributors to an ongoing cultural drama. In a way then, self-esteem is the currency by which people purchase death transcendence. The sense of purpose and value attained by living up to cultural ideals provides individuals with some assurance that they are on a path to life-continuity, which functions to allay deeply rooted existential fear.

Research Supporting a TMT View of Self-Esteem

Based on the foregoing analysis of how the need for self-esteem develops, a central proposition of TMT is that self-esteem functions as a general-purpose anxiety buffer. If this proposition is correct, then higher levels of self-esteem should be associated with lower levels of anxiety. In support of this idea, a large correlational literature shows that self-esteem is negatively correlated with anxiety, anxiety-related problems, and insecure attachment and positively correlated with successful coping with stress, measures of mental and physical well-being, and secure attachment (e.g., Feeney & Noller, 1990; see Solomon, Greenberg, & Pyszczynski, 1991 for a review). The most direct empirical support for this hypothesis has shown that when self-esteem is experimentally bolstered through positive social feedback, participants report lower levels of anxiety in response to graphic death scenes and lower physiological arousal in anticipation of receiving an electric shock (Greenberg et al., 1992; see Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004 for a full review).

Another proposition of TMT is the mortality salience hypothesis, which states that if the cultural worldview and self-esteem function to protect people from concerns about death, then reminding people of death should temporarily increase their need to live up to the standards of the cultural worldview and to defend the worldview against threats. Studies supporting this hypothesis have shown that subtle reminders of death (even subliminal death primes and briefly catching sight of a

mortuary or graveyard) lead individuals to praise people and symbols that support their cultural worldview and to respond unfavorably to people and ideas that oppose it (for a review, see Greenberg, Solomon, & Pyszczynski, 1997). Numerous studies have also shown that death reminders promote attitudes and behaviors associated with self-esteem striving. For example, reminding people of death has led to increases in fast, reckless driving for those invested in driving ability, strength output in people whose self-worth is predicated on being physically strong, and higher evaluations of their body for those concerned with their physical appearance (for a review, see Pyszczynski et al., 2004). Other research has shown that when social identifications, such as one's sports team affiliation and ethnic identity, have the potential to reflect negatively on people's self-esteem, reminders of death decrease their investment in those identifications (Arndt, Greenberg, Schimel, Pyszczynski, & Solomon, 2002; Dechesne, Greenberg, Arndt, & Schimel, 2000). What is striking about this research is that reminders of death, which have no obvious semantic connection to self-esteem or cultural worldviews, increase people's need to uphold these psychological constructs.

A third hypothesis generated by TMT is the death-thought accessibility (DTA) hypothesis, which states that if a psychological structure provides protection from concerns about mortality, then threatening that structure should bring thoughts of death closer to consciousness. Research in support of this hypothesis has shown that potent threats to people's cultural meaning system, such as their national identity, religion, and belief in a just world, have led to increased levels of DTA (Hayes, Schimel, & Williams, forthcoming; Hirschberger, 2006; Landau et al., 2004; Schimel, Hayes, Williams, & Jahrig, 2007). Recent research has also documented that threats to people's bases of self-worth such as failure on an IQ test, feedback suggesting that one is ill-suited to pursue a desired career path, thoughts of undesirable aspects of self, and having to perform in a highly evaluative public situation, led to higher levels of DTA (Hayes, Schimel, Faucher, & Williams, forthcoming; Ogilvie, Cohen, & Solomon, forthcoming).

Criticisms of a TMT View of Self-Esteem

Although TMT has generated a number of novel research directions and empirical support, the theory has also generated a fair amount of questions and skepticism concerning its primary assumptions. We therefore turn to a discussion of some common criticisms that have emerged over the years.

Is TMT compatible with modern evolutionary theory?

We believe that TMT, like any viable psychological theory, is consistent with our current knowledge of how evolution works and the evolutionary history of our species. Others (e.g., Buss, 1997; Navarrete & Fessler, 2005)

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have disagreed, however; thus, in this section, we briefly address a few evolutionary critiques of TMT (for a more complete discussion, see Landau, Solomon, Pyszczynski, & Greenberg, 2007; Pyszczynski, Greenberg, Solomon, & Maxfield, 2006).

Anxiety is good for you. Some critics have claimed that because fear is generally adaptive for avoiding danger, it is implausible that humans would have created and adopted beliefs about reality to reduce fear. We agree that fear in response to impending dangers (e.g., lurking predators), and even anxiety about distant eventualities, may prompt survival and reproduction-enhancing behaviors, and suppressing these reactions may indeed be maladaptive. However, anxiety that results from the awareness of the inevitability of death is uniquely *non*-adaptive because it refers to an existential condition that cannot be altered by any practical means. TMT does not predict that people will cling to their cultural beliefs when faced with an imminent threat. Indeed, participants in TMT studies are not faced with clear and present dangers; rather, they are reminded of the abstract idea that death is inevitable, a problem that cannot be solved by running out of the test cubicle or throwing a rock at the computer screen. Thus, when reminded of their unavoidable death, research participants work to suppress this fact by fortifying the symbolic meaning system from which they derive a sense of personal value.

Anxiety is bad for you. A second critique asks: If humans' proclivity for self-awareness led to the ever-present potential to experience debilitating dread, wouldn't this intellectual capacity have been de-selected over time? Natural selection does not operate in a top-down fashion to engineer organisms whose various systems work in perfect harmony; rather, it operates through a series of trade-offs between systems and characteristics that have tended to promote gene perpetuation over evolutionary time. For example, natural selection favored upright bipedalism in our species despite the attendant woes of slipped discs and intense labor pains. It is in this sense that the uniquely human awareness of mortality was an unfortunate by-product of self-consciousness, which otherwise provides human beings with remarkable adaptive advantages.

Why do people commit suicide?

The cornerstone assumption of TMT is that people fear death. However, one behavior that seems to fly in the face of this basic assumption is suicide. If people don't want their life story to come to an end, then why do some people rush to the end of their own novel? Although a complete discussion of all forms of suicide would take us beyond the limits of this article, there are at least two main instances of suicide, and we believe both can be understood from a TMT perspective.

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The first instance of suicide is individuals who take their life because of their devotion to a cause or ideal. Prototypical examples of this behavior would be suicide bombings or cult groups who commit mass suicide (e.g., the People's Temple, the Branch Davidians, and Heaven's Gate). These forms of suicide fit well within a TMT framework because the suicide itself is an act of meaning, and one that is associated with both literal and symbolic forms of immortality. Indeed, martyrs who die for their religious or political ideologies are not only given a special place in the afterlife but are also remembered and deemed heroic within their culture, which emboldens other members of the culture to do the same. Another point to keep in mind, however, is that even when individuals decide to give their life for a higher cause, they rarely if ever, do so without great anxiety. The decision to commit suicide is not one that is made without immense anguish, trepidation, and extensive socialization and affirmation of one's religious beliefs.

The second, more puzzling case of suicide is the person who decides that life is too painful and not worth living. To understand this behavior from a TMT perspective, we must return to our discussion of socialization. Remember that socialization essentially forces the developing child to give up its own physical reality to exist in a world of arbitrary symbols and meanings set forth by the parents and later by culture. The result of this process is that the person now exists in large part as a linguistic contrivance. Within this new social reality, one's sense of meaning and self-worth comes to be predicated on particular self-definitions: 'I am a provider for my family', 'I am the consummate pianist', or 'My son is a wealthy investor'. When individuals are rigidly devoted to these important symbols of their value and these symbols are destroyed or are no longer sustainable, the death of the physical person is not such a far leap. For example, consider the financiers who, during the great depression of 1929, hurled themselves from their office windows when the numbers in their bank books fell to zero; once their symbolic worth went to zero, it was as if they were already dead (cf., Becker, 1971). When looked at from this perspective, the act of suicide is a natural consequence of the death of the social/symbolic self. As suggested in the following quote from the film, *The Matrix*, when you die in the Matrix, you die in the real world.

> *Neo: I thought it wasn't real.*
> *Morpheus: Your mind makes it real.*
> *Neo: If you're killed in the Matrix you die here?*
> *Morpheus: The body cannot live without the mind.*

TMT only explains the self-esteem motive in Western cultures?

Other TMT detractors have criticized the theory on the basis of ethnocentrism. More specifically, it has been argued that TMT, like other

theories positing a need for self-enhancement, depicts self-esteem as a Western phenomenon resulting from individualist values that are not present in Eastern parts of the world. If the self-esteem motive is only found in the West, then how can TMT be a universal theory of the human condition? Although we acknowledge that self-esteem in the very narrow sense of overt self-enhancement may be a phenomenon that exists primarily in the West, this does not mean that people in the East have no self-esteem motive. Eastern individuals gain self-esteem in the same way as Westerners, by living up to the values of their culture. For example, Japanese culture promotes values such as humility, honor, and group harmony. Thus, if you want to be considered a 'good' person in Japanese culture, you would play down your accomplishments and instead attribute success to those in your group. Likewise, if you were to approach a Japanese urbanite and imply that his or her behavior brought shame to the group, you would be threatening that person's self-esteem. A TMT analysis of self-esteem is therefore applicable across all cultures because it is attained by adhering to whatever values, standards, norms, roles, and codes for good behavior that are prescribed by the culture, even if such standards involve drawing attention away from the self. In fact, recent research has shown that after being reminded of their own death, Japanese students at the University of Tokyo were more likely to derogate an essay writer who disparaged Japanese collectivist values of group solidarity, and to boost their personal value by indicating a greater desire to possess high (vs. low) status products (Heine, Harihara, & Niiya, 2002). These initial studies suggest that Easterners do indeed possess a self-esteem motive, which is enhanced when concerns about human mortality are salient.

Some Implications of Self-Esteem as Anxiety Buffer

Self-esteem threats and aggression toward others

According to TMT, individuals assuage mortality concerns by acquiring self-esteem, the belief that they are living up to the standards and values of their cultural conception of reality. However, because many of the beliefs and values that comprise cultural meaning systems (e.g., spiritual beliefs) are essentially fragile social constructions rather than objective truths, exposure to others who view the world or oneself differently undermine these structures and their effectiveness as anxiety buffers. The disturbing implication of this analysis is that the motivation to minimize threats to one's death-denying ideologies lies behind the 'darker' side of human nature. One common line of defense is to dismiss those who challenge or do not share one's beliefs as sub-human, insane, or somehow lacking in decency and good sense. Or, more proactively, people may attempt to assimilate different others into the fold, persuading them to abandon their seemingly bizarre beliefs and see the 'true way'. Of course,

the ultimate solution to the threat of different others, favored by world leaders and terrorists alike, is to simply annihilate those who represent alternative ideologies. Empirical support for this idea is provided in part by the aforementioned findings that reminders of death lead to polarized attitudes toward others who either threaten or support the worldview. What is more disturbing is that recent research focused on attitudes toward military aggression shows that American students primed with death are more likely to advocate the use of nuclear weapons in conflict with the Middle East, and Iranian students primed with death view suicidal martyrdom more favorably (Pyszczynski et al., 2006).

In addition to bolstering faith in the cultural worldview, social consensus provides the foundation for the individual's faith in the significance of the self (e.g., Sullivan, 1953). Deprived of social validation of one's claims to culturally valued identities and achievements, individuals would have great difficulty maintaining the belief that their lives have enduring value and would face the disturbing realization that they are destined, like any zebra or zucchini, to wither into nothingness. However, confidence in the self's value can be compromised in other ways. Because each person invests in an individualized version of the cultural worldview, we are likely to encounter people either outside or inside the culture who subscribe to very different standards of personal worth. For example, an American woman discovering that her prized pencil-like physique would be met with derision in other parts of the world is made aware that her mode of securing death-transcending value is not universally acknowledged. This suggests that much of the conflict that permeates everyday social relations stems from failures – both deliberate and inadvertent – to validate each other's claims to culturally esteemed achievements, affiliations, and roles.

Even if we are not faced with direct threats to our self-worth, however, we must contend with the vague and unreliable nature of others' validation of our self-worth. We turn to others for evidence that we are worthy individuals, but we cannot get inside their minds to know for sure, nor can they step inside ours. Our valued status in their eyes can never be proven in any objective sense and rests purely on faith. Becker (1969) describes how in some cases the uncertain task of managing other's private attitudes and upholding a favorable impression in their minds can feel overwhelming. To cope with this insecurity, the person may give up on securing value in the symbolic realm of social relations and resort to physically overpowering others through torture and physical aggression. By acting sadistically, the individual cuts the world down to size, so to speak, asserting his or her power and status in a more tangible, objective fashion, thereby avoiding the possibility that others may not validate his or her claims to unique personal value: '*All indwelling values, all cultivated sensitivity, all the graceful forms of thought and talent, all that man earns and learns as a cultural animal are reduced whimperingly and totally to the terms of the tortured flesh*' (Becker, 1969, p. 29).

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What now? TMT and the healthy pursuit of self-esteem

According to TMT, the cultural worldview and a sense of personal significance gained from adhering to the standards and ideals of the worldview provide people with the fortitude to go on living despite deeply rooted existential fear. As pointed out in the previous section, the unsettling implication of this analysis is that many unsavory and self-destructive forms of human behavior such as prejudice and aggression toward those who are different may result from people's need to defend their worldview and self-esteem from threats. This implication raises an important question: is it possible for people to pursue self-esteem in ways that are constructive for the individual and society? A considerable body of recent research on self-esteem processes provides an encouraging answer to this question.

Building on the work of humanistic and clinically oriented theorists (e.g., Rogers, 1959; Sullivan, 1953), contemporary research and theorizing suggests that self-esteem derived from some sources is more stable and secure than self-esteem derived from other sources (e.g., Deci & Ryan, 1995; Kernis, 2003). For example, Schimel, Arndt, Pyszczynski, and Greenberg (2001) have advanced the hypothesis that people derive self-esteem from meeting extrinsic vs. intrinsic contingencies. Extrinsic contingencies are perceived as coming from outside the self such as gaining social approval and having to meet externally imposed standards. In contrast, intrinsic contingencies are perceived as originating from within the self such as interpersonal acceptance for who one is and striving to meet self-determined standards. When self-esteem is derived from meeting intrinsic (vs. extrinsic) contingencies, it is more durable and secure because it is more firmly under one's control. In support of this idea, experimental research has shown that affirming people's intrinsic (vs. extrinsic) bases of worth reduces defensive behaviors such as downward social comparison, self-handicapping and conformity (Arndt, Schimel, Greenberg, & Pyszczynski, 2002; Schimel, Arndt, Banko, & Cook, 2004; Schimel et al., 2001).

If self-esteem derived from intrinsic sources is more secure and unshakable in response to threats, then individuals with intrinsically based self-esteem should be less threatened in situations that arouse existential fear and should react more favorably toward offending others. Several recent studies support this hypothesis. For example, Williams, Schimel, and Hayes (forthcoming) showed that when reminded of their mortality, people who were less focused on extrinsic contingencies for self-esteem were more forgiving of a moral transgressor. Similarly, Weise et al. (forthcoming) found that when primed with an unconditionally accepting relationship, individuals who had been reminded of their own death (vs. a control topic) reacted less favorably to the use of extreme military force to counteract international terrorism. Research has also shown that when people are focused on values of empathy and tolerance, death reminders evoke less defensiveness and in some instances encourage

more favorable responses toward those who have wronged them. For example, Greenberg, Simon, Pyszczynski, Solomon, and Chatel (1992) found that when mortality was made salient, liberal individuals, who are more likely to focus on values of tolerance and open-mindedness, were less negative in their evaluation of a conservative person than were conservative individuals in their evaluation of a liberal person. Similar results have been obtained among people with an intrinsic religious orientation who value a sense of brotherhood and the transcendence of self-centered motivations (Allport, 1966). Indeed, Jonas and Fischer (2006) showed that people high in intrinsic religiousness exhibited less worldview defense in response to mortality reminders (especially when given an opportunity to affirm these values) relative to people low in intrinsic religiousness. Even more encouraging, Schimel, Wohl, and Williams (2006) recently found that among people who see themselves as highly empathic, a reminder of death increased their tendency to forgive an offending outgroup member compared to those with low self-perceived empathy. Taken together, these studies suggest that self-esteem can be pursued in ways that are beneficial for the individual and for society. When exposed to reminders of their mortality, people who derive self-esteem from meeting self-determined standards, autonomy supportive relationships, and expressing empathy and tolerance exhibit lower levels of worldview defense and prejudice and in some cases respond with more favorable reactions toward outgroup members.

If intrinsic bases of self-worth and a focus on pro-social values are associated with positive outcomes, then how does one come to pursue self-esteem in these ways? One possibility has to do with early experiences that foster the child's sense of dependence on others vs. autonomy. For example, parenting styles that emphasize strict obedience to authority and the use of intimidation, guilt, and punishment to impose one's will would likely heighten the child's anxieties and force a kind of rigid adherence to parental demands. Children raised in this kind of environment may lack the courage to act on their own thoughts and perceptions and therefore come to rely too heavily on external, delegated powers. In contrast, parenting styles that allow the child to explore and act in the world as freely as possible, set and reinforce necessary limitations in a consistent, non-threatening way, and emphasize the child's autonomy and power to choose would likely reduce the child's proneness to anxiety and allow for a more flexible, open way of meeting parental and societal values. Children who are nurtured in this kind of environment would develop the sense that they can trust their own perceptions and would have the courage to act on them without guilt or fear. As a result, children would have a greater sense that their feelings of self-worth were internally derived and less at the whim of other's evaluations.

Even if a person lacked autonomy-supportive relationships in early childhood, similar kinds of empathic, trusting relationships can be developed later in life. Not only would these relationships serve as stable, intrinsic

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bases of self-esteem in their own right but may also provide individuals with the security to act freely and to further develop an autonomous sense of self. Indeed, many humanistic and client-centered theorists (e.g., Rogers, 1959; Sullivan, 1953) have long observed that unconditionally accepting, empathic relationships are crucial for promoting personality change and mental health.

In addition to finding empathic, unconditionally accepting relationships, it may also be beneficial for people to live with at least a minimal understanding of the existential forces driving their need for meaning and self-esteem. In other words, through education and self-analysis, people can gain a broad understanding of the existential realities of the human condition and the particular symbols of power that govern their lives. Perhaps this insight can provide people with a basis for stepping back from their life course, in much the same way that self-consciousness allows humans to step back from momentary sensory experience, and thoughtfully choose healthier more intrinsic ways of deriving meaning and self-worth.

Short Biographies

Jeff Schimel is an experimental social psychologist. His research interests are focused on questions such as, why do people need self-esteem, why do people go to such great lengths to defend it, and why do people have such a hard time getting along with people from different cultural backgrounds and belief systems. Dr. Schimel has authored and co-authored several papers in the field of social psychology such as the *Journal of Personality and Social Psychology*, *Personality and Social Psychology Bulletin*, the *Journal of Experimental Social Psychology*, and *Psychological Science*. Dr. Schimel is currently an associate professor at the University of Alberta (UA). Before coming to the UA, Jeff did his MA in experimental psychology at the University of Colorado, Colorado Springs and completed his PhD in social psychology at the University of Arizona (the other UA). His published papers test numerous hypotheses derived from terror management theory (TMT). This theory posits that much of human social behavior is aimed at maintaining self-esteem and faith in a cultural worldview, which serves to quell deeply rooted existential fear. Dr. Schimel has also conducted research showing that intrinsic (vs. extrinsic) bases of self-worth, such as intimate relationships and the pursuit of intrinsic values, can promote more secure bases of self-worth. The bulk of his research efforts have been, and are currently funded, by grants from the Social Sciences and Humanities Research Council (SSHRC).

Mark Landau joined the Psychology faculty at the University of Kansas after receiving his degree from the University of Arizona. His current research interests focus on the role of existential concerns in people's need to perceive themselves as valuable members of a meaningful world. Using terror management theory as a vehicle, he has examined how meaningful

conceptions of other people, social events, political leaders, art, and oneself function to protect the individual from existential anxieties stemming from the awareness of mortality. He has also embarked on research examining how conceptual metaphors shape everyday social thought and behavior.

Joseph Hayes is a PhD student at the University of Alberta, where he studies experimental social psychology under the supervision of Dr. Jeff Schimel. He received his BA from St. Francis Xavier University in Nova Scotia. In 2004, he began his graduate studies at the University of Alberta where he was awarded an MA in psychology in 2007. His research is focused on various aspects of terror management theory, such as how people acquire meaning and purpose in life, and what happens when these meaning structures are threatened. Mr. Hayes has published papers in the *Journal of Experimental Social Psychology*, the *Journal of Personality and Social Psychology*, and *Psychological Science*. He is currently the recipient of a Queen Elizabeth II graduate scholarship.

Endnote

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