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## **Unresolved Issues With Terror Management Theory**

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The central premise of terror management theory (TMT)—that people are distressed by thoughts of death—might seem so obvious and commonsensical as to be nearly useless. Yet, according to Pyszczynski, Greenberg, and Solomon, the implications of this simple assumption go far beyond the obvious to inform us regarding a fundamental motive that accounts for a great deal of human behavior. Although their earlier writings used TMT to explain the functions of the self-esteem motive, Pyszczynski et al. have extended the purview of the theory to encompass much of the content of social psychology. In our commentary, we examine logical problems with TMT, critically evaluate the empirical evidence offered to support it, and then discuss what we see as the merits of this controversial approach.

#### **Logical Issues**

According to Pyszczynski et al., TMT "requires only one commonly accepted and rather noncontroversial a priori assumption: specifically, that living organisms are oriented toward self-preservation." In linking their theory so directly to self-preservation, they seem to root it on unshakable ground. In fact, the theory does not follow directly from this admittedly noncontroversial assumption. The direct implication of the assumption that organisms are oriented toward self-preservation is that they will behave naturally in ways that increase their likelihood of survival. One logical difficulty with TMT is that the authors have not made a strong case that terror management processes increase the organisms' chances of survival. It simply does not follow that

a motive for self-preservation will lead organisms to minimize the perceived severity of threats to their survival as the theory suggests.

In fact, we suggest that a terror-management mechanism that ostensibly reduces an organism's concerns about death would likely *decrease* its long-term viability. According to most theorists, the propensity for experiencing anxiety evolved, as did most emotions, because it promoted survival. To oversimplify only slightly, anxiety promotes the organism's well-being because it deters behaviors that place the organism at excessive risk and it tends to stop ongoing behavior to allow a reassessment of potential danger in a situation (Fridja, 1986). Thus, an organism that possessed a system for automatically reducing mortality concerns before they reached awareness would be at considerable risk for behaving in ways that were detrimental to its well-being.

Pyszczynski et al.'s claim that fundamental psychological motives evolved because they facilitated survival and reproduction is an exceptionally important one (see Barkow, Cosmides, & Tooby, 1992). However, if the capacity for anxiety promotes welfare and survival, we find it difficult to understand the process by which humans would have evolved a mechanism that buffers them against such feelings. Specifically, what evolutionary process would lead people to be less afraid of death than they would (or should) otherwise be? Such a mechanism seemingly would decrease the organism's chances of survival.

TMT anticipates this objection. According to Pyszczynski et al., "knowledge of the inevitability of death gives rise to the potential for paralyzing terror, which would make continued goal-directed behavior impossible." Perhaps, but on what basis do we assume that existential terror is necessarily paralyzing? After all, even people faced with certain death often engage in meaningful final acts despite whatever terror they experience. One could even argue that, rather than resulting in behavioral paralysis, awareness of possible death leads to specific goal-directed behaviors that reduce the probability of dying. In brief, the theory fails to show how terror management processes emerge from self-preservation or enhance the survival of the organism. And if such processes do not promote survival, what do they do and where did they come from? Any psychological process that underlies the range of human behavior posited for TMT must have evolved for some very important reason (for an alternative explanation, see Baumeister & Leary, 1995; Leary & Downs, 1995).

In part, this difficulty with TMT emerges because Pyszczynski et al. do not always clearly distinguish between avoidance of death and avoidance of the *fear* of death. Saying that organisms are motivated to avoid death does not imply that they are motivated to avoid the terror associated with death. Yet the authors seem to assume that the existence of a survival motive necessarily indicates that organisms will be anxious about death as well as motivated to avoid such anxiety. We would argue that people are motivated actually to enhance their safety and survival rather than simply trying to make themselves *feel* safe, as TMT suggests.

Pyszczynski et al. maintain that the fact that nonhuman primates exhibit a motive to survive in the absence of a "true sense of self" suggests that sophisticated cognitive capacities are not essential for the instinctive pursuit of life. We agree, but we do not believe that this provides support for the terror management perspective. Because of differences in cognitive ability, nonhuman primates presumably do not fear death in the same sense as humans, certainly not in a way that leads to the elaborate terror management processes proposed by the theory. As the authors note, thinking about one's own death requires linguistic capabilities, an ability to contemplate the future, and a symbolic sense of self. The fact that other organisms appear to possess a motive for survival says nothing about whether they experience existential terror when their survival is threatened. Thus, we think it is risky to base analyses of existential terror among humans on extrapolations from nonhumans.

#### Empirical Evidence: What the Data Do and Do Not Show

TMT posits that people are buffered against existential anxiety by two distinct components: a cultural

worldview and a sense of personal value (i.e., self-esteem). As Pyszczynski et al. indicate, support has been obtained for many hypotheses derived from the theory. However, our reading of the research suggests that the evidence is much stronger for the first of these two aspects of the theory than for the second.

A considerable body of research supports the idea that mortality salience leads people to evince support for the cultural worldview. Several studies have shown that making mortality salient leads people to derogate and punish those who violate cultural standards and to reward those who exemplify such standards. This is a fascinating finding, particularly given that it does not appear to be mediated by mood. TMT may be correct in its claim that these reactions are in response to awareness of death and that doing things to buttress one's worldview somehows lead to decreased uneasiness about mortality. Certainly, TMT offers as parsimonious an explanation of these mortality salience effects as any other perspective. However, even if this is so, we view it as a giant leap to conclude that the other phenomena discussed by Pyszczynski et al.—cognitive consistency, belief in a just world, self-presentation, and so on-also reflect efforts to manage existential terror. Clearly, research is needed to test the effects of mortality salience on these other phenomena.

The second claim—that self-esteem plays a central role in buffering people against death-related fears—has received much less direct support. According to TMT, people seek self-esteem because it provides protection from anxiety. The terror associated with living in a dangerous and unpredictable world is minimized when people accept and live up to cultural standards of value (i.e., when they behave in ways that maintain or enhance self-esteem). In support of this aspect of the theory, Pyszczynski et al. review research showing that state and trait self-esteem are associated with lower anxiety, whether anxiety related to death or from other sources. However, TMT does not uniquely predict a negative relation between self-esteem and anxiety. A variety of other approaches also explain this connection, including self-efficacy theory (Bandura, 1977) and sociometer theory (Leary & Downs, 1995; Leary, Schreindorfer, & Haupt, 1995), albeit without reference to death.

Furthermore, the relation between self-esteem and death-related fears is not as straightforward as the theory predicts. On one hand, Sowards, Moniz, and Harris (1991) found no evidence that people were more likely to enhance their self-evaluations after contemplating their own deaths. This null finding does not contradict the idea that self-esteem buffers people against existential anxiety, although it suggests that people do not necessarily respond to mortality salience with efforts to

enhance self-esteem. In contrast, Chaudhary, Gardiner-Parks, and Hass (1994) obtained evidence that inducing mortality salience causes an increase in self-esteem, but only after a short delay. The immediate effect of mortality salience was to lower self-esteem. However, participants in the control condition, who were not exposed to a mortality salience induction, showed unexplained changes in self-esteem that make the pattern of data difficult to interpret. Furthermore, it is not clear that the theory predicts that mortality salience should cause an initial drop in self-esteem before defensive esteem-inflation occurs.

In our own research (Leary, Saltzman, & Bednarski, 1995), we have had difficulty detecting a relation between death-related thoughts and trait self-esteem. For example, TMT would seem to predict that people with high self-esteem should be less bothered by thoughts about death because their sense of personal value buffers them against existential terror. Yet, we found trait self-esteem to be unrelated to self-reported anxiety after participants wrote about their own deaths, although trait self-esteem was strongly negatively correlated with anxiety when participants wrote about being rejected.

In another study (Leary et al., 1995) we examined the relation between trait self-esteem and scores on standard death anxiety scales. We found that self-esteem was correlated with certain facets of death-related fears, but it was related more strongly to fears about dealing with pain and uncertainty rather than with non-existence, as TMT predicts. TMT explicitly suggests that people fear death primarily because of the threat of nonexistence. As Solomon, Greenberg, and Pyszcsynzski (1986) stated, "whenever we refer to the terror of death, we do not mean the intense fear of death per se, but rather death as absolute annihiliation" (p. 96).

Pyszczynski et al. similarly imply that existential terror emanates from a primitive fear of biological death rather than from symbolically based fears. Yet, research suggests that people are often more concerned about the unknown, separation from loved ones, and eternal damnation than they are of no longer existing per se (Fiefel & Nagy, 1981). In fact, when given a choice between living forever alone or dying prematurely surrounded by loved ones, we found that most people chose death, which suggests that fear of death often involves more than worries about no longer existing.

Proponents of TMT might argue that the failure to obtain a relation between self-esteem and fear of death does not reflect directly on the theory because the existential anxiety that lies at the heart of terror management is largely nonconscious. Without denying the existence of nonconscious influences on behavior, we find it surprising that nonconscious concerns would not

somehow find their way into participants' self-reported attitudes and thoughts about death.

#### On the Positive Side

Having discussed what we see as unresolved issues surrounding TMT, let us comment on the merits of the theory and its supporting research. First, Pyszczynski et al. are quite correct in observing that contemporary social and personality psychologists have eschewed broad theories in favor of perspectives of very limited domain, and they are correct that psychology will benefit from broader, integrative perspectives. Although some will view TMT as excessively broad and overly ambitious, we see its breadth as welcome relief from the micro-theories of the past 30 years.

Second, TMT has succeeded in stimulating attention to several important issues involving motivation, emotion, and self-esteem. The worth of a theory must be judged partly by the degree to which it draws connections among previously unconnected concepts, stimulates research, and promotes discussion. On these counts, TMT ranks highly, and thus it has provided a service to the field.

Third, Pyszczynski et al. should be commended for their careful and programmatic approach to testing propositions of TMT over the past deade. Few theorists have devoted so much concerted effort to testing their theories and, when necessary, revising them.

And last, whatever verdict is ultimately reached regarding the viability of TMT as a general theory of human behavior, it highlights the neglected role that death plays in human affairs. Although researchers interested in death, dying, suicide, and grief have studied people's reactions to death, mainline behavioral researchers have probably underestimated the importance of death-related thoughts and emotions in human behavior. More attention should be devoted to the psychology of death.

#### Note

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# What Does the Belief in a Just World Protect Us From: The Dread of Death or the Fear of Undeserved Suffering?

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In general, the terror management conception of the development and operation of just-world beliefs is highly compatible with Lerner's ... formulation. ... The major difference between the two perspectives is that ... [terror management theory] posits that this general fear of aversive events is rooted ultimately in the self-preservation instinct and the consequent fear of death. From our perspective, all fears are either directly or indirectly related to the problem of death. (Pyszscynski, Greenberg, & Solomon, this issue)

The research that Pyszczynski, Greenberg, and Solomon have done, stimulated by their "terror management" theory (TMT), is unquestionably very impressive. However, the scope of their integrating theoretical speculations is so encompassing as to be difficult for me, and possibly for others, to accept. I believe that further evidence is needed to help us decide whether people's commitment to justice in their world is located in their anxieties about death.

#### **Initial Obstacles**

For me, a main obstacle to accepting TMT is that, on critical points, its assumptions contradict common experience. The theory openly recognizes that most people do not walk around consciously preoccupied with thoughts of death. However, the insufficiently addressed issue is whether people's awareness of their

mortality elicits "abject terror," which they then generate elaborate defenses to manage.

A related obstacle is the need for a compelling psychological description of how people are able to control their terror through the buffering mechanisms of self-esteem and faith in their worldview. Specifically, how do high self-esteem and the belief that the world is just make people immune from (or at least less frightened of) the possibility of dying? Do these mechanisms function through the promise of immortality, or does that not matter?

A last obstacle is the question of evidence. What kind of information do we need to decide whether the development and operation of a belief in a just world is a manifestation of an anxiety-buffering system that people construct to manage their fear of death? Let us consider these points in order.

#### **TMT Versus Common Experience**

Both observation and introspection convince me that if humans have a fundamental terror, it is not of death but of Hell—of unrelieved suffering, either in this life or eternity. And it does not seem plausible that the fear of suffering is a psychological manifestation of the fear of death. These fears seem to be distinct and often competing concerns, and may involve distinct choices with radically different outcomes: life or death.

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