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## Suicide, Sex, Terror, Paralysis, and Other Pitfalls of Reductionist Self-Preservation Theory

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As Pyszczynski, Greenberg, and Solomon note, most current theories of motivation and human behavior tend to be micro-theories, which is to say that they explain one small subset of behavior. We agree with Pyszczynski et al. as to the desirability of developing some broad macro theories. A unified theory of motivation would be a valuable advance.

Terror management theory (TMT) is a bold attempt at just such a broad synthesis. In its attempt to explain the broad sweep of human motivation and action as arising from the existential fear of death, TMT goes far beyond the narrow constructs that have defined recent motivational theory. The research program conducted by Pyszczynski et al. has already satisfied some of the metatheoretical requirements outlined by Baumeister and Leary (1995) for proposing a fundamental motivation, although clearly there is additional work yet to be done.

Inevitably, broad and sweeping generalizations about human motivation invite criticism in the form of exceptions and counterexamples. The simple assertion

that people generally do not want to die and therefore generally lean toward self-preservation is hardly controversial, and Pyszczynski et al. are not the first to propose that. What is novel and controversial about their position is the assertion that all human motivation can be subsumed under that basic motive. Our comments in this brief criticism therefore begin with the question of whether all human behavior is indeed driven by fear of death. The weaker assertion that some behavior is driven by that fear is, as we said, beyond dispute.

Thus, for now, the crucial statement by Pyszczynski et al. is the following: "According to TMT, the self-preservation instinct—the goal of staying alive—is the superordinate goal toward which all behavior is oriented." They go on to say that all other motives derive from self-preservation, which they call the "master motive." From our own experiences, such as capsizing a small boat during a gale or being lost in the mountains during an evening snowstorm, we can readily agree that some behavior is oriented toward staying alive. But *all*?

#### Some Counterexamples

There is a large gap between the empirical findings reported by Pyszczynski et al. and their theoretical claims. Their studies, of which we are both admirers, have shown in many ways that reminding people of death can alter their behavior. But these findings fall far short of justifying the sweeping assertion that all motivation is derived from the fear of death.

#### Suicide

We begin with a consideration of suicide, because it reveals several flaws and problems in the notion of proposing that all behavior is geared toward self-preservation. Suicide is the deliberate infliction of death on oneself, and so it directly contradicts the assertion of TMT that all behavior is aimed at preserving life.

Examination of empirical findings regarding suicide suggest several further problems in TMT. In particular, the terror management account of self-awareness seems inadequate.

Pyszczynski et al. propose that the capacity for self-awareness increases the terror of death, and this is only handled by comparing oneself to standards because "such comparisons shortcircuit the potential for terror that would otherwise result." Yet this is plainly wrong. Self-awareness without comparing to standards is value free (by definition: values are standards) and thus less likely to reveal problems and shortcomings. Often it is precisely the comparison of self with standards that creates distress and anxiety. Comparing self to standards is the problem of self-awareness, not the solution, as Pyszczynski et al. propose.

Research on suicide has highlighted this problem (for reviews, see Baumeister, 1990, 1991a, 1993). The process that leads to suicide often involves precisely such a moment of self-awareness, in which the person compares himself or herself to some standard and finds that he or she falls short. Presuicidal people, in other words, are highly self-aware and are busy blaming themselves for various problems, setbacks, failures, and other misfortunes. It is misleading to say that the failures or problems cause suicide, because other people manage to survive similar failures without killing themselves. The self-aware focus on oneself as falling short of standards is a crucial mediator between objective misfortune and suicide.

Pyszczynski et al. go on to say that "comparison with standards functions to avert this awareness of basic fear [of death]." They say that when people do feel bad after comparing themselves with standards, it is because of a "leakage of basic fear." In other words, fear of death

is the source of distress that arises from recognizing one's shortcomings.

But why would people then commit suicide? If fear of death is indeed the master motive, leaking into awareness especially at moments of aversive self-awareness, then suicide should be least likely at such moments. The data show the opposite, however: Suicide is most likely as a response to aversive self-awareness. Without the aversive self-awareness, suicide is far less likely (Baumeister, 1990, 1991a, 1993).

The truth of the matter appears then to be quite different from the account given by TMT. Awareness of self as deficient gives rise to negative affect for reasons that are not directly related to the fear of death. People sometimes turn to death as a way of escaping from the negative affect. To commit suicide as an escape from emotional distress only makes sense if the root of that distress is something other than the fear of death.

In short, the case of suicide is alone sufficient grounds to question and probably to reject the claims of TMT that self-preservation is the master motive toward which all behavior is oriented and to which all other motives are subservient. People do choose death when other options are available, and so sometimes other motives take precedence over self-preservation. Moreover, these other motives clearly are not derived from the fear of death, because they lead the person to choose death.

We hasten to add that suicide is only the most extreme counterexample concerning death. There are far more phenomena in which people are willing to risk death even though they do not explicitly seek it. Climbing mountains, picking fights, or marching off to war all carry risks that would be unacceptable to a person whose primary, overriding concern was to avoid death.

#### Sex

Sex is another behavior that TMT has difficulty explaining. Sex does not meet any essential biological need, because people can live for a very long time without having sex. Neither does sex boost one's world view, for indeed some world views disapprove of sex, and a few even prohibit it.

If anything, sexual activity is contrary to a terror management motive, because sex increases the risk of death. Nowadays, warnings about AIDS provide familiar and dramatic evidence of how sexual activity can lead directly to death. But these are only the latest link. Sex has carried mortal risk throughout history. Probably the greatest number of sex-related deaths involves women dying in childbirth, which in the eras that lacked

contraception made every act of intercourse a mortal risk for the woman (e.g., Shorter, 1982). Prior to antibiotics, many other venereal diseases could also bring death. And of course, the social consequences of sex have also claimed a large share of victims, such as when jealous husbands killed adulterous wives, their lovers, or both.

Terror management theorists conceivably might try to salvage their perspective by arguing that people perceive sex to be a means of achieving a pseudo-immortality through progeny. The attempt to create such an illusion of living on in one's offspring is indeed one traditional source of interest in reproducing (see Baumeister, 1991b; Kearl, 1989; Thompson, Clark, & Gunn, 1985). Yet it plainly falls far short of being adequate to explain sexual activity, given that the vast majority of sexual acts in the United States today (as well as in other times and places) are conducted with the deliberate intention of avoiding procreation. The belief that sex is done for the sake of reproduction is a view that is occasionally espoused by prudish Victorian grandmothers and the like, but it is not defensible as a psychological argument.

In short, if fear of death and the corresponding desire to prolong one's life were the master motive, it is doubtful that anyone would ever have sex. The pervasiveness and protean resilience of sexual motivation reveal the futility of trying to reduce all motivations to the single formula of self-preservation.

There is a further irony in this. TMT is hardly the first theory to attempt to reduce all human motivation to a single formula. Probably the first such effort in psychology was Freud's endeavor to treat sexuality, broadly defined, as the master motive. Yet despite being perhaps the most brilliant reductionist that the social sciences have ever had, Freud ultimately gave up the project of trying to explain all human behavior in terms of sex. Thus, whereas sex was once the failed solution, now it is the counterexample.

#### Problems in the Theory

#### Where is the Terror?

The original statements of TMT (e.g., Greenberg, Pyszczynski, & Solomon, 1986), based on Becker's (1973) work, emphasized precisely what the title implies: the management of terror. Yet one rather embarrassing pattern emerged from the otherwise clever and important series of studies that the authors conducted: The terror never seemed to materialize. In study after study, even when death cues led to changes in behaviors and attitudes, there was no evidence that people felt the

"paralyzing terror" that lay at the center of the original theory.

In this new formulation, Pyszczynski et al. have downplayed their assertions about terror. They are to be commended for being willing to make at least some minor adjustments to their theory in the face of a rather impressive mass of contrary evidence (including in their own data). Yet have they gone far enough?

Originally, terror was supposed to be ubiquitous. In their new view, Pyszczynski et al. say that the terror is still there but merely invisible. They say that it exists outside of focal awareness and is largely unconscious. They claim that death-related thoughts are "highly accessible but not in current focal consciousness."

Terror is a strong word, and it appears to us to be far too strong to describe either the phenomenology of death-related thoughts in everyday life or the experimental results provided by Pyszczynski et al. Most people do not report experiencing an overwhelming fear of death in everyday life. Even though there are certainly enough cues to remind them of death and mortality, these cues do not generally trigger a panic or anxiety attack. To be sure, in most cases people do not want to die, and so there is some validity to the argument that people occasionally are motivated to avoid death. But the view of mankind as endlessly struggling in the grip of a paralyzing fear of mortality is almost impossible to reconcile with the facts.

#### Where is the Paralysis?

Another frequent assertion of TMT is that fear of death produces paralysis. This assertion is especially central in the early versions of TMT, but Pyszczynski et al. continue to make it in this latest version.

Again, though, we note the absence of empirical support for the notion that people become paralyzed by fear of death. Even when Pyszczynski et al. provide laboratory participants with cues designed to activate the fear of death, they do not become paralyzed. Quite the opposite: They show a variety of responses.

Becker's (1973) original theory argued that anxiety was a crucial mediator between fear of death and the various responses such as supporting one's cultural world view and seeking self-esteem. The "paralyzing terror" cited by Pyszczynski et al. presumably is a form of anxiety. It is fair to ask the broader question, then, of whether anxiety is generally a source of paralysis?

One of us has pursued this question empirically but without success. In a series of studies, Baumeister and Cairns (1991) sought to demonstrate inaction or indecision as a result of both measured and manipulated anxiety. The procedure involved giving participants an

ongoing decision task (based on a simulated stock-market investment game) in which there were the options of doing nothing or making changes, so that the researchers could measure active versus passive responses. In several studies, the results repeatedly came out in the opposite direction to the hypothesis of paralyzing anxiety: Anxious participants consistently made more changes than nonanxious ones. In short, among human beings, anxiety produced the opposite of paralysis. Although these studies cannot be regarded as the ultimate last word on the topic, they do highlight the need for some evidence to back up the claim of TMT that terror produces inaction.

#### Are All Motivations Increased?

A broader problem with Pyszczynski et al.'s theory is that the evidence, even if available, seems unlikely to support the view that death avoidance is the master motive. They have shown in several clever studies that reminding people of mortality will increase certain motivations. But if self-preservation underlies all other motivations, then reminding people of death should increase all motivations.

Certainly researchers are many years away from testing whether every single motivation is intensified by mortality salience. Still, there is already some contrary evidence. Taylor (1983) showed that a brush with death (such as among the breast cancer patients who were her main sample) seems to alter one's pattern of motivation, increasing some concerns but decreasing others. Note that the mortality-salience manipulation involved in getting breast cancer far exceeds the sort of laboratory manipulation used in the studies done by Pyszczynski et al. (e.g., presenting people with words such as coffin, or having them reflect briefly about dying). Despite its strength, it seems to have effects opposite to the one currently asserted by Pyszczynski et al. The brushes with death described by Taylor led some cancer patients to change careers and break away from certain relationships. In particular, many of these women reported losses in motivation to do some things that fit the cultural worldview, such as trying to meet the expectations of others and worrying about the impressions they were making. These patterns directly contradict the terror management view that all motivations are driven by existential terror and should be increased by a reminder of mortality.

#### Conclusion

Pyszczynski et al. have provided a valuable perspective. By seeking to look at broad motivational patterns,

they have helped stimulate social and personality psychologists to think in terms that may go beyond the narrow confines of specific laboratory findings. Their studies on death and related phenomena have also made valuable contributions to the empirical literature.

Yet they are wrong. The attempt to reduce all human motivation to a single formula is probably doomed to failure. As we noted, others have already tried. Freud himself gave considerable thought to the self-preservation motive early in his career. The pervasiveness of motivational conflict in humans made it obvious to Freud that human motivations did not have a single root, and this observation should give pause to any modern reductionists (like Pyszczynski et al.) who again seek to find a single root for all motivation. When Freud became convinced that a single motivation would not explain the complexity of human phenomena, he spent some time thinking of sexuality and self-preservation as the two overriding motives. He then abandoned that view because self-preservation did not seem pervasive or powerful enough to explain all the empirical observations he made, and so he introduced the theory of the aggressive instinct as the main opponent of the sex drive (Freud, 1930).

One of us was sufficiently stimulated by TMT to consult large bodies of empirical evidence about human motives and the roots of anxiety, but the data do not lend themselves to a reduction to self-preservation. In the anxiety literature, for example, there appear to be two main sources of anxiety. One involves fear of injury, harm, or death, but the other (larger) one involves social abandonment and exclusion (for review, see Baumeister & Tice, 1990). Meanwhile, in terms of pervasive effects on cognition, emotion, and behavior, the "need to belong" is far better supported than the fear of death (for review, see Baumeister & Leary, 1995). Unlike Pyszczynski et al., we are not reductionists and do not claim that social belonging is the master motive that holds the key to all other motives. It is, however, a broad and powerful motive that exists prior to and apart from self-preservation. Moreover, it can explain several phenomena (such as engaging in life-endangering sex) that seem to contradict the self-preservation view.

Meanwhile, other motivational patterns such as guilt and affect regulation seem to have little to do with death but a great deal to do with interpersonal concerns (Baumeister, Stillwell, & Heatherton, 1994, 1995, in press; also Baumeister, Reis, & Delespaul, in press; Tice, Muraven, & Baumeister, 1994). Can one argue that both emotion and the efforts to control emotion both serve the same "master motive," even though they operate in opposite directions?

Self-esteem, too, has strong links to interpersonal patterns (see Baumeister, 1993a; Baumeister, Tice, &

Hutton, 1989), and recent work suggests that it is centrally concerned with interpersonal belongingness (Leary, Tambory, Terdal, & Downs, 1995). One does not need death to explain these things.

Undoubtedly there is a place in motivation theory for self-preservation, and Pyszczynski et al. have been among the most creative and important contributors of empirical findings about it. Its place is not, however, the one that Pyszczynski et al. wish to assign it—namely, being the master motive from which all other motivations are derived. It is only one among several motivations. Frankly, we concur with Freud that there is no such place at all: The pervasiveness of motivational conflict discredits any view that all motivations are derived from the same root.

#### Note

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# Terror Management Theory: Extended or Overextended?

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Whosoever believeth in him shall not perish from the earth but have everlasting life. (John 3:16)

Over the last decade, the terror management theory (TMT) trio of Pyszczynski, Greenberg, and Solomon

have developed a theory of monumental scope, trenchant explicatory power, and scintillating creativity. Although it borrows central elements from psychoanalysis, TMT is more open to empirical scrutiny. Although empirically rooted like behaviorism, TMT probes behavior at many more levels. Even the once-missing