TOWARD A COMPREHENSIVE UNDERSTANDING OF EXISTENTIAL THREAT: INSIGHTS FROM PAUL TILLICH

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Experimental existential psychology (XXP) empirically investigates how people's motives for meaning and personal value influence their lives, and how symbolic self-awareness undergirds these motives and experienced threats to their fulfillment. The authors attempt to synthesize the insights that have already accumulated from XXP, and simultaneously point to a new direction for this field. Researchers have debated whether there is a "core threat" in human experience, but the authors propose that a more fruitful direction for research is to examine the simultaneous independence and interdependence of different existential threats. Paul Tillich's (1952) theory of existential threat is put forward as one model for understanding how a core threat to non-being (mortality) can nevertheless be experienced in proximally different forms, in terms of anxieties about meaninglessness or condemnation of the self. In addition to presenting Tillich's theory, the authors make several concrete suggestions for how future research in XXP should proceed.

Mainstream social psychology portrays the human being as either an information processing machine or a social animal. Both conceptions have utility, but fail to capture defining features of the human condition. We are constantly buffeted by shocks, trials, and fears, and we organize our lifestyles around an urgent quest for meaning and guidance. When the research area known as *experimental existential psychology*, or "XXP," formally entered the intellectual scene with the publication of the *Handbook of Experimental Existential Psychology* (Greenberg, Koole, & Pyszczynski, 2004), it promised to enrich our conception of human nature by illuminat-

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ing how people's efforts to come to terms with the "big" questions shape how they think and act.

Yet progress in this area has been regrettably slow. Rather than maturing into a unified research program, XXP can be likened to an occasional meeting place for separate theories that limit their scope to people's confrontation with one threatening reality (e.g., that life is uncertain, that they lack control). What's more, different theories compete to explain the same empirical result, and although these disputes have energized researchers to conduct presumably crucial empirical confrontations, typically what one side views as opposition-falsifying findings are viewed by the opposed side as conceptually or empirically flawed efforts. In one such impasse that has lasted more than a decade, researchers have periodically critiqued terror management theory (TMT) on the grounds that the effects of mortality reminders on social behavior are not specific to thinking about death per se, but are instead the result of thinking about outcomes that are uncertain (e.g., McGregor, Zanna, Holmes, & Spencer, 2001), socially excluding (Leary & Baumeister, 2000), meaningless (Heine, Proulx, & Vohs, 2006), or uncontrollable (Fritsche, Jonas, & Fankhänel, 2008). This controversy does not appear to be approaching resolution.

Is XXP fated to be plagued with convoluted, unresolved theoretical controversies? The hopeful belief behind this special issue of *Social Cognition* is that we can achieve a more unified XXP by identifying the "core" threat—that is, the ultimate source of people's unease. The current authors laud this effort in principle, yet they believe that other "core" issues about theory and method need to be addressed if XXP is to be sustainable and practically relevant. Specifically, we need to clarify: (1) what is meant by the term *existential threat*; (2) how different types of existential threats relate to each other; and (3) how to optimally design and test theories about the experience of existential threat. Part of what uniquely positions XXP to illuminate the human experience of threat is its theoretical grounding in the work of philosophers and psychodynamic thinkers who explored these issues in exhaustive detail. The current article therefore addresses these three major issues by revisiting the foundational work of these scholars, particularly that of theologian/philosopher Paul Tillich, and using it to integrate current research.

It is important to note, however, that in reviewing Tillich's perspective on existential threat our goal is not to present the reader with an unequivocally accurate portrait of the human condition. In fact, as a group, the authors of this article do not themselves necessarily agree on the veracity of some of Tillich's deeper claims, such as his position that the ultimate source of all existential angst is located in the awareness of death (a proposition that Sullivan and Landau view as correct but Kay stubbornly labels himself as "agnostic" toward). Rather, we present this model as an especially useful example of existential theorizing that overcomes many of the limitations we think are responsible for fragmenting the field. Thus, it is our hope that even those who may disagree with some of the content of Tillich's analysis will still find the structure of his model useful and worth considering. The fact that the current authors do not perfectly agree on the content of some of Tillich's claims but are nonetheless unanimous in the view that this model, if considered seriously, could advance our understanding of XXP, is in many ways a testament to this.

In particular, we think this model offers four structural features that, in combination, set it apart from most contemporary pieces of XXP: (i) it offers precise definitions of the terms *existential* and *existential threat*; (ii) it presents a broad theory that

recognizes both the psychological independence and interrelatedness of threats and coping mechanisms; (iii) it highlights the role of consciousness in threat experience and defense, including the importance of proximal/distal distinctions; and (iv) although it proposes a core threat, it also provides sufficient theorizing to meaningfully examine the unique responses that may be engendered by different kinds of related threats. Although different social psychological theories may include one or another of these aspects, none, to our knowledge, so comprehensively include each of them.

We hope this article contributes to the current issue's discussion of the "core" threat topic in two primary ways. In the first part of the article, we present Tillich's model of existential threat, which, as mentioned, both recognizes the theoretical importance of positing a "core" threat and explains how other, more "peripheral," threats independently affect individuals' experience and behavior. Then, in the second part of the article we apply insights gleaned from Tillich's model to offer suggestions for how, regardless of what type of existential threat a given research program is focusing on, empirical investigations may best proceed. In particular, in this second section we focus on the idea that however important it might be to theorize about the "core" threat, the realities of hypothesis testing make it extremely difficult to definitively establish the predominance of such a threat. In sum, we intend this article to both encourage researchers to think more critically about what a quest for the "core" threat actually entails, and to introduce an existential theory that can be flexibly used either to facilitate this quest, or to pursue other, more empirically feasible ends, such as examining the relationships between particular threats and defenses.

TILLICH'S TYPOLOGY OF ANXIETY

A THEORETICAL DEFINITION OF EXISTENTIAL THREAT

In order to organize and draw conclusions from XXP in general and the emerging literature on existential threat in particular, we need to first be clear about what it means to call a particular experience of the individual one of *existential threat*. It is important to clarify what one means by existential threat—at least on a theoretical level—for at least two reasons.

First, it is important to make clear what distinguishes the XXP perspective from other research perspectives and programs within social psychology that have long examined experiences that could be generally classified as threatening for the individual (see Tesser, Martin, & Cornell, 1996, although note that these authors also review TMT). The most obvious distinction between XXP and these other programs is that the former incorporates theoretical perspectives on human behavior and motivation derived from existential philosophy. This distinction may appear like an unimportant issue of theoretical preferences; however, it is in fact an important distinction if we seriously consider what it means to call an experience *existential*.

Second, within XXP, clarifying the meaning of existential threat may contribute to current discussions about what the "core" threat in human experience might be. While TMT proposes that death is the ultimate unavoidable threat confronting humans (e.g., Pyszczynski, Greenberg, Koole, & Solomon, 2010), other perspectives

have argued that humans are especially motivated to avoid meaninglessness (e.g., Proulx & Heine, 2010) or feelings of helplessness that result from a perceived lack of control or structure (e.g., Kay, Whitson, Gaucher, & Galinsky, 2009). It is not necessarily the case that researchers working from all these perspectives claim to have identified the primary existential threat that motivates humans. Compensatory control theory (CCT; Kay, Gaucher, Napier, Callan, & Laurin, 2008), for example, focuses on understanding the relation between a particular type of threat and a particular class of coping mechanisms, rather than the psychological primacy of the threat itself. Nonetheless, more careful consideration of the implications of using the term *existential threat* should shed light on which of these perspectives adheres more closely to theoretical roots in existentialism.

In his book *The Courage to Be* (1952/2000), Tillich wrote a simple sentence that offers an elegant definition of existential threat: "Anxiety is the existential awareness of nonbeing" (p. 35). This sentence highlights four key aspects of existential threat: *anxiety*, *awareness*, *nonbeing*, and *existential*. We will consider each aspect in turn.

For Tillich, all experiences of existential threat are varieties of anxiety. *Anxiety* refers to the fact that, during an experience of existential threat, the individual senses (at least initially) a loss of clear direction to guide her actions and the absence of a concrete object on which to focus her fear or negative affect (Tillich, 1952/2000, p. 37). As the experience of existential threat begins, the individual experiences a surge of welling negative affect, but struggles—at first in vain—to find an object to which she can attach the emotion. According to Tillich, all objectless anxiety strives to become object-directed fear. Thus an initial state of anxiety, if it does not dissipate or fade as a result of some change in the individual's immediate circumstances, will eventually become concretized and attached to some object. This desire to concretize initially objectless anxiety is partly the reason why there are different varieties of existential threat: the individual will experience her anxiety differently depending on the object to which it is eventually attached.

Awareness suggests that existential threat inherently involves some experience of self-consciousness on the part of the individual. In one of their initial expositions of the nature of existential threat and anxiety, the co-creators of TMT pointed out that self-awareness is inherently linked to the potential for debilitating anxiety (Pyszczynski, Greenberg, Solomon, & Hamilton, 1990). Existential threat always involves an initial sense either that the self may be deviating from cultural standards designed to protect it from anxiety, or that the external standards which uphold the self are in question. The awareness Tillich refers to as inhering in a state of existential threat does not necessarily imply full conscious awareness of the threat; defenses acquired through socialization can "short circuit" existential threats before they enter full consciousness (Lazarus, 1991). The important point is that a degree of *self*-awareness is active during existential threat. Such threats are not cognitively localized, as in the case of more routine threats, but rather involve the spreading activation of a negatively valenced associational network, through which a discrepancy between an ideal and an actual state potentially becomes globalized, possibly leading to an ultimate perceived discrepancy between the individual's desire for being and awareness of nonbeing (Pyszczynski et al., 1990; Westen, 1985).

Nonbeing is thus that of which the self is aware during the experience of existential threat. What does it mean for a person to be aware of her nonbeing? The individual has become aware of the potential for her "being" —understood by Tillich

to be her sense of personal existence in reality—to be lost or partly lost; in short, her personal existence becomes decoupled from the external reality in which it is immersed. This means that for Tillich, all anxiety is ultimately grounded in the individual's awareness of her impending mortality, a point to which we will later return. All temporary losses of self in experiences of partial nonbeing (i.e., experiences which call into question one's sense of meaning or personal value) would not be threatening in the absence of the guaranteed total and irreversible state of nonbeing upon death.

Finally, the person experiences awareness of nonbeing in an *existential* fashion. This has two primary implications. First, it suggests that existential threat is part of the normal range of experience of the average person within a culture (i.e., it is not pathological or the result of a neurotic condition; Tillich, 1952/2000, p. 41). Second, it means that existential threat involves awareness of *one's own* potential (and imminent) nonbeing specifically (Tillich, 1952/2000, p. 35).

To summarize, existential threat entails the individual becoming aware of the tenuous nature of her own, unique existence—the fragility of her meaning systems and/or sense of self-value—in such a way that she is initially unable (or unwilling) to precisely pinpoint the source of the threat. An initial state of free-floating negative affect in consciousness (or the activated potential for negative affect in nonconsciousness; see Westen, 1985) arises as the individual senses that the structures that maintain her convictions of value and meaning are under threat. Existential threat implies a deviation from the normal, taken-for-granted relationship between self and world—a deviation sharp enough for the self to intuit that her working understanding of herself or the world may be entirely called into question.

To label a threat *existential* (as opposed to non-existential) therefore implies that the threat is experienced (either consciously or nonconsciously) as an attack on one's own symbolic structures of meaning and value. Non-existential threats do not involve the level of self-awareness that is activated in a state of existential threat. We may encounter many threats (often with greater realistic potential for causing us physical harm) on a more or less regular basis that are either processed in a more automatic fashion (as when we swing aside to avoid an incoming fist outside a barroom) or for which we have more ready responses (as when we adjust our strategy in the course of an increasingly difficult game) than in the case of existential threat.

The four aspects of Tillich's theoretical definition readily suggest how researchers might operationalize an experience of existential threat in a way that is distinguishable from more general forms of threat, and they suggest testable hypotheses about observable outcomes of such an experience. An existential threat should be operationalized as an actual or merely contemplated threat to either the self's physical integrity or the constructs (cultural worldview and sense of personal value) that buttress the self-concept. Threats directed at these different aspects of the self can be classified as different types of existential threat; we elaborate on this point below. Furthermore, it follows from Tillich's definition that an existential threat should be operationalized as: (1) directly involving or implicating the self (*existential*), and (2) inducing *anxiety*, meaning the experience of or potential for negative affect, either conscious or nonconscious. In addition, experiencing truly existential threat should: (3) increase the accessibility of higher-order, self-relevant

goals or beliefs as objective self-*awareness* is elevated, and (4) increase the accessibility of death-related cognitions (*nonbeing*).

THREAT DIALECTIC THEORY

In forming his definition of existential threat, Tillich (1952/2000) drew on the work of many prior philosophers of the so-called existentialist school, among them Nietzsche, Kierkegaard, and Sartre. Examination of the work of the existentialists reveals a remarkable unity in their analyses of existential threat. In particular, their analyses converged at a broad conceptual level on a common theory of the *types* of existential threat humans experience.

We refer to this as the "threat dialectic" theory of existentialism. According to this theory, people oscillate on a fairly regular basis between two opposing "poles" of anxiety. At a very basic level, we can conceptualize these poles as the anxiety that can occur *prior to* action in the world, and the anxiety that can occur *following* action in the world. The former type of anxiety is usually discussed in terms of *abstractness* and the experience of uncertainty, while the latter type is usually discussed in terms of *concreteness* and the experience of inadequacy or guilt. Threat dialectic theory posits that people generally shift from one form of anxiety to the other in dialectic fashion as they engage in and reflect upon action.

Multiple theorists have triangulated on this theory, although they formulate it in different ways and employ different terminologies. Kierkegaard (1844/1981, 1849/2004) proposed that humans' symbolic self-awareness leads them to realize that their actions are not determined by necessity or instinct, and that every act is a (semi-)conscious selection of one out of an infinite array of possible behaviors. This awareness causes uncertainty about how to act and has the potential to generate intense anxiety, experienced as a kind of "dizziness" at the multifarious paths to action lying before the individual. The individual is impelled to action in an attempt to overcome this uncertainty, but the same level of self-awareness that allows the individual to see her actions as undetermined often causes her to question her actions after they have been performed. The capacity for abstract, counterfactual thinking prompts the individual to compare her actual actions and life circumstances to her imagined possibilities. This comparison often generates depressive sentiments of inadequacy or remorse. Kierkegaard (1849/2004) described these two poles of existential threat as *possibility's despair* and *necessity's despair*, and indeed argued that the self resides in a synthesis of these two experiences.

Following Kierkegaard, Sartre (1943/2001) gave the threat dialectic a more promotion-focused orientation, asserting that humans are defined by *facticity* (unchangeable aspects of identity, embodiment, and historical circumstance), but aware of their potential for and motivated toward *transcendence* (put simply, altering or overcoming facticity by asserting free will). In Sartre's system, the conditions of both facticity and transcendence which make up the self can provide comfort or strength but can also be seen as threatening. The self's agency is threatened by the limiting, potentially inadequate nature of its facticity; but the self can also be overwhelmed by the burden of responsibility it bears for its uncertain transcendence, the realization that it always has an alternate choice in any situation.

The writings of the existential philosophers concerning the experience of threat have influenced a number of psychologists, who have commonly reframed threat dialectic theory in terms of the experience of two opposing *existential emotions*: anxiety and guilt. One such formulation is found in the work of Otto Rank (1996). For Rank, the psychological experience of threat is grounded in the biological reality of death, which manifests for the individual as an instinctive fear of separation (beginning with the original traumatic separation from the mother at birth). Two forms of negative emotion develop out of this rudimentary death fear: anxiety, a "separating" emotion experienced as the potential loss of selfhood and driving the individual toward individuation; and guilt, a "binding" emotion experienced as the potential loss of the Other (the loved one, deity, or broader community) and driving the individual toward re-immersion in or re-identification with the Other (for a similar conception of the existential emotions, see Lazarus & Lazarus, 1994).

In summary, many scholars have argued that existential threat or anxiety takes two forms—uncertainty about how to act given nearly endless possibilities for action, and inadequacy experienced in connection with the self or its actions—and that defensive compensations for one type of threat often orient the individual toward an experience of the other type (for a similar, more detailed review of the threat dialectic in existentialism, see Schneider, 1999). In his typology of existential threat, Tillich (1952/2000) draws heavily on threat dialectic theory, classifying uncertainty/anxiety and inadequacy/guilt as the two major forms of threat. He supplements the theory, however, by denoting a third, primary type of anxiety: that associated with awareness of death. All the threat-dialectic theorists reviewed above emphasized the importance of death awareness for the experience of existential threat; however, Tillich incorporates this aspect explicitly into his model of anxiety.

TILLICH'S THREE TYPES OF ANXIETY

Recall that, for Tillich, all existential threat involves the experience of anxiety. In this way, Tillich anticipated more recent claims that existential threat involves either the conscious experience of a negative affective state (e.g., Laurin, Kay, & Moscovitch, 2008; Nash, McGregor, & Prentice, 2011) or the nonconscious activation of the potential for anxiety (Greenberg, Martens, Jonas, Eisenstadt, Pyszczynski, & Solomon, 2003; Proulx & Heine, 2008; Westen, 1985). Different construals of this anxiety (inside or outside consciousness) will produce distinct threat experiences and corresponding defensive responses. When Tillich refers to different types of threat, he labels them in terms of different types of anxiety.

Tillich (1952/2000) provides a two-stage account of the experience of anxiety. This aspect of his model bears marked similarity to the model of anxiety presented by Pyszczynski et al. (1990). The latter model combines the theory of objective self-awareness (Duval & Wicklund, 1972), Carver and Scheier's (1981) cybernetic model of self-regulation, and TMT (Greenberg, Pyszczynski, & Solomon, 1986) into a comprehensive framework for understanding anxiety. According to Pyszczynski et al. (1990), people have a hierarchy of goals, derived largely from culturally afforded standards for valued behavior, and they experience low levels of anxiety when a relatively lower-order goal is blocked or threatened. Similarly, Tillich (1952/2000, p. 41) speaks of "relative" or *temporary threats*: comparatively

mild experiences of anxiety resulting from threats to more proximate, lower-order goals or sources of value and meaning.

According to Pyszczynski et al. (1990), if a threat to a lower-order goal goes unresolved—in other words, if the individual experiences a chronic inability to reduce the apparent discrepancy between herself and the standard of value she is seeking to fulfill—then this will generate a ripple effect, causing more important, distal goals higher up the hierarchy to be threatened. In Tillich's (1952/2000, p. 41) model, this inability to successfully cope with a temporary threat results in what he terms an experience of "absolute" or *ultimate threat*. This is the second stage of existential threat. To experience an ultimate existential threat is to experience nihilism, at least temporarily. In this state, one's core sense of value as a human being, or the ultimate value or validity of one's beliefs about reality, is fundamentally called into question.

In both the models of Tillich and Pyszczynski et al., it is assumed that normally functioning individuals experience ultimate threats only on a rare basis. Most typically, individuals employ one of a variety of defensive responses acquired during socialization to resolve an experience of temporary threat before ever passing to the second stage of anxiety. In some instances, through acquired processes of repression, a person's nonconsciousness "short circuits" (defends against) a temporary threat before it passes into full conscious awareness (Hayes, Schimel, Arndt, & Faucher, 2010; Lazarus, 1991; Westen, 1985). What is critical for both models, however, is that humans' capacity for self-awareness makes them realize the ever-present possibility of their ultimate goals being thwarted, and this motivates them to defend against more proximal, temporary threats. It is also important to note that in extreme situations, individuals may be directly thrust into an experience of ultimate threat without passing through any initial stage of temporary threat. For example, if a person witnesses the death of a parent or friend, they may be overcome by raw anxiety about their own impending death, without this anxiety being filtered and experienced as a more proximal threat to the sources of value or meaning that typically protect the individual from death anxiety.

Because anxiety involves the awareness of (potential) nonbeing, anxiety experiences derive their specific character from the aspect of a person's being that is under threat (Tillich, 1952/2000, p. 40). Tillich sees the *being* of the self-aware human as consisting of three core aspects. He refers to these aspects as sources of *affirmation*, confirming that his understanding of "being" involves not only physical existence, but also "psychological existence" in the sense of the positive presence of meaning and felt personal value. Largely consistent with Pyszczynski et al. (1990), Tillich (1952/2000, p. 41) proposes that being consists of *ontic self-affirmation*, *spiritual self-affirmation*, and *moral self-affirmation*. Ontic self-affirmation refers to physical, biological existence (p. 42). Spiritual self-affirmation is Tillich's term for what could more comprehensively be described as *cultural affirmation* (p. 46). Moral self-affirmation is Tillich's term for what could more comprehensively be described as *personal value affirmation*, that is, the individual's fulfillment of a unique, valued personal legacy (pp. 51-52). In the terms employed by Pyszczynski et al. (1990), cultural affirmation is the individual's investment in a cultural worldview, while personal value affirmation is self-esteem.

Tillich (1952/2000, p. 41) proposes that there are three broad types of anxiety, with each type manifesting as either a temporary or ultimate threat to one of the human's three aspects of being. His typology of anxiety is markedly similar to the
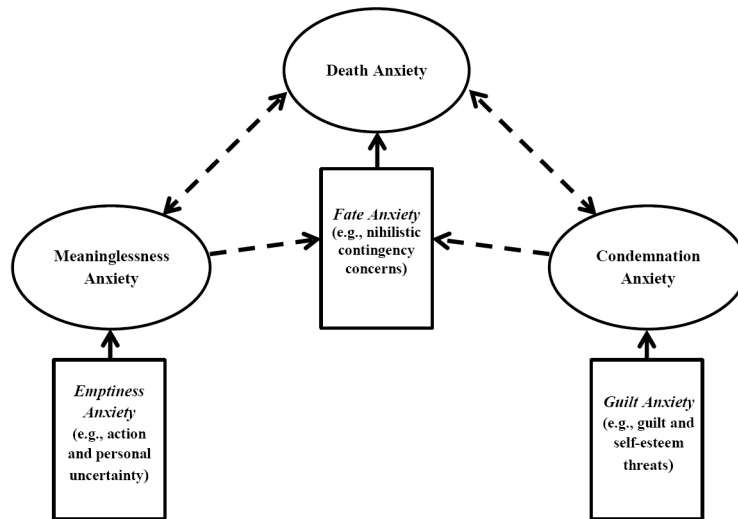
FIGURE 1. A schematic presentation of Tillich's typology of anxiety.

model presented by existential psychologist Karl Jaspers (1919), and some empirical evidence has supported the discriminant and predictive validity of Tillich's three proposed categories of anxiety (Weems, Costa, Dehon, & Berman, 2004). According to Tillich, the *anxiety of fate* is a temporary threat to ontic self-affirmation, and the *anxiety of death* is an ultimate threat to ontic self-affirmation. The *anxiety of emptiness* is a temporary threat to cultural affirmation, and the *anxiety of meaninglessness* is an ultimate threat to cultural affirmation. The *anxiety of guilt* is a temporary threat to personal value affirmation, and the *anxiety of condemnation* is an ultimate threat to personal value affirmation. Below we discuss each of these three broad types of anxiety in greater detail.

A pictorial overview of Tillich's model is provided in Figure 1. The bidirectional arrows in the diagram—pointing from meaninglessness and condemnation anxiety to death anxiety and vice versa—represent two fundamental principles of the relationship between these different species of anxiety as Tillich understood it. First, they suggest that experiences of meaninglessness or condemnation anxiety always imply a simultaneous experience of the ultimate form of anxiety, that of death, even if the latter is only nonconsciously activated. Second, they suggest that death anxiety may be cognitively and emotionally filtered such that it is primarily experienced in the guise of either meaninglessness or condemnation anxiety. In other words, the reality of one's impending physical nonbeing may be temporarily experienced in terms of the potential nonbeing of one's cultural affirmation or personal value affirmation. Although we will not discuss this latter point in detail here, it is especially relevant in considerations of existential threat experience across cultures, as cultural worldviews can be partly differentiated based on whether they primarily orient individuals to experience threat as condemnation or as meaninglessness (Sullivan, in press).

The Anxiety of Fate and Death. As do Pyszczynski et al. (1990), Tillich (1952/2000) proposes that all experiences of anxiety are ultimately grounded in human awareness of mortality. Death is the distal source of all existential threat. Without the

threat of ultimate nonbeing, all more proximal experiences of (potential) nonbeing would lose their impact. Just as our strivings for cultural meaning and personal value are built upon more fundamental strivings for sustenance and continued existence, our experiences of threat to these more symbolic goals are, for Tillich, built upon our awareness of the ultimate physical threat of death.

Tillich (1952/2000, pp. 43-45) proposes that death anxiety—experience of the ultimate threat to the human's ontic self-affirmation—sometimes manifests in a more proximate form as fate anxiety. Fate anxiety encapsulates a broad array of experiences of existential threat that may be summarily referred to as nihilistic contingency concerns. This temporary threat emerges when the individual is prompted to consider the arbitrariness and contingency of all human existence (which Tillich calls "fate"). Each individual is born at a particular time and place, and accidents of history and birth contribute a great deal to the shape of our personalities and the course of our lives. Our lives, seemingly so significant and purposeful, could just as well have happened very differently; there is no ultimate determining purpose to their course. Contemplating the contingent nature of human life evokes a threat which, if unresolved, can open a void for the individual to focused awareness of the reality that life is a futile process, bound to end. If this occurs, the individual has passed from a state of fate anxiety to one of death anxiety.

Although they see death anxiety as the ultimate source of all experiences of existential threat, both Tillich (1952/2000) and Pyszczynski et al. (1990) propose that we often experience anxiety as a threat to a level in our hierarchy of goals that is lower than the ultimate task of self-preservation. Existential threats may always activate the potential for death anxiety outside of immediate conscious awareness, but consciously these threats are often experienced as directed at a more symbolic aspect of our being. Tillich (1952/2000) writes: "Certainly the anxiety of death overshadows all concrete anxieties and gives them their ultimate seriousness. They have, however, a certain independence and, ordinarily, a more immediate impact than the anxiety of death" (p. 43). More specifically, then, anxiety is often experienced primarily in connection with the awareness of a threat to either our cultural affirmation (our worldview) or our personal value affirmation (our self-esteem), rather than directly as death anxiety.

The Anxiety of Emptiness and Meaninglessness. The anxiety of emptiness is a temporary, and the anxiety of meaninglessness an ultimate threat to the individual's cultural affirmation. In other words, these anxieties are experienced in connection with events or targets that are ultimately perceived as threatening to one's cultural worldview. Tillich posits this more proximal form of the threat of nonbeing based on the observation of the threat-dialectic theorists that existential threat is often experienced as a feeling of paralyzing *uncertainty* about how to act in the world, about which course of action to take out of many possible courses. Thus, the anxiety of emptiness and meaninglessness is comparable to what Kierkegaard called possibility's despair, what Sartre called transcendence, and what Rank referred to simply as anxiety.

Emptiness anxiety is experienced as a sense of doubt about the significance, purpose, or validity of one's endeavors and beliefs about reality. If sustained, this doubt transforms itself into a profound sense of meaninglessness anxiety, a feeling that the world is chaotic and human endeavors are pointless. Meaninglessness anxiety represents the individual's emotional experience of a particular form of

nihilism, the belief that one's highest values are not worth achieving, and therefore that one's life has no meaning.

There are a number of ways in which the anxiety of emptiness and meaninglessness has been examined and operationalized in the existential threat literature within social psychology. At a very basic level, this form of anxiety manifests in instances of extreme frustration, of uncertainty about how to act in a particular situation. It might be argued that the action identification literature (e.g., Vallacher & Wegner, 1987) has examined mild forms of emptiness anxiety in studies where participants are asked to perform routine tasks in unconventional and difficult ways (e.g., eat Cheetos with chop sticks). Studies derived from the Meaning Maintenance Model (MMM; Proulx & Heine, 2008; Proulx & Heine, 2010) have operationalized emptiness anxiety more straightforwardly as the uncanny violation of expected routines. Other studies have examined emptiness anxiety in the form of uncertainty about one's values or the worth of one's goals, a threat shown to elicit compensatory affirmation of meaning sources (e.g., political attitudes) and reactive approach motivation (e.g., Hogg, Adelman, & Blagg, 2010; McGregor, 2007; Nash et al., 2011). The TMT literature (e.g., Hayes et al., 2010) has yielded an impressive number of studies demonstrating the effects of emptiness anxiety in the form of threats to the validity of one's cultural worldview posed by members of an alternate worldview. This research has also demonstrated that such manifestations of emptiness anxiety elicit death-related cognitions outside of consciousness, supporting Tillich's contention that the threat of ultimate nonbeing lies behind all more proximally experienced existential threats.

In all of these diverse research programs concerned (at least in part) with emptiness and meaninglessness anxiety, it has been established that individuals respond to various gradations of this type of threat by defensively overinvesting in existing meaning structures, whether it be through reconceptualizing action in narrower terms, bolstering group identities, or defending cultural values. In Sartre's (1943/2001) terminology, individuals in a state of emptiness anxiety fly from transcendence toward the bad faith of facticity: they deny the realities of uncertainty and possibility in their lives by seeking stable guides and standards for action. This is precisely the response to emptiness/meaninglessness anxiety predicted by Tillich (1952/2000, pp. 49-50). In the same year that Tillich published *The Courage to Be*, social psychologist Muzafer Sherif (Sherif & Harvey, 1952) summarized his own work on compensatory defensiveness against emptiness anxiety in a highly compatible fashion:

> Anxiety in its milder or neurotic form expresses a state of ego-tension which is the by-product of experienced threats or uncertainties . . . which are felt as directed at our personal goals, personal values . . . under critical circumstances, the stability of our physical and social bearings are disrupted with the subsequent experience of not being anywhere definitely, of being torn from social ties of belongingness, or when nothing but a future of uncertainty or blockages is experienced as our lot . . . The individual tossing in such a state of anxiety or insecurity flounders all over in his craze to establish for himself some stable anchorages . . . the result is an increased degree of suggestibility. (pp. 280-281)

Thus several decades of social psychological research has established that circumstances of uncertainty and perceived potential meaninglessness prompt individu-

als to defensively seek and adhere to entitative social identities and rigid, narrow patterns of behavior.

The Anxiety of Guilt and Condemnation. The anxiety of guilt is a temporary, and the anxiety of condemnation an ultimate threat to the individual's personal value affirmation. In other words, these anxieties are experienced in connection with events or behaviors that are ultimately perceived as threatening one's self-esteem or feelings of moral righteousness. Guilt anxiety is experienced as a sense that the person's actions may have fallen short of her internalized standards or rules of conduct, or her goals for herself. If sustained in the absence of contradicting evidence, this state of apprehension will turn into a sense of the self as lacking in value, which Tillich calls condemnation anxiety. Tillich posits this category based on the threat-dialectic theorists' assertion that existential threat often takes the form of feelings of *inadequacy* connected with one's actions in the world. Thus, the anxiety of guilt and condemnation is comparable to what Kierkegaard called necessity's despair, what Sartre called facticity, and what Rank referred to as guilt feelings.

Tillich (1952/2000, pp. 51-53) highlights the fact that the element most basic to a guilt-inducing situation is the perception of some discrepancy. This same observation has been the basis of the majority of the social psychological research on guilt. Specifically, for many researchers guilt arises primarily from the perception that one's behavior is discrepant from an internalized moral or social standard, prescribed role in a given social context, or goal (e.g., Kelly, 1955; Kugler & Jones, 1992; Lewis, 1997). For example, Higgins's (1987) self-discrepancy theory holds that there are two hypothetical "self-guides" —the *ideal* self (the self one ideally wishes one to be) and the *ought* self (the self one believes one morally or dutifully *ought* to be). According to the theory, emotional distress results when we compare our actual self with our ideal or ought selves and perceive a discrepancy.

Research has established that the individual needs to feel a sense of control or responsibility for a particular action (at either a personal or collective level) in order to experience guilt in connection with that action. For example, McGraw (1987) argued that attribution of personal responsibility—deciding that one had control over a negative outcome—is the foundation of any guilt feeling. This highlights the distinction Tillich makes between guilt anxiety and emptiness anxiety. While the latter type often involves the threat of lack of control or uncertainty in a situation, the former is characterized by the perception that one had control over one's actions, and performed an action discrepant with one's internalized standards.

Much of the social psychological research relevant to the anxiety of guilt and condemnation has focused on the distinction between guilt and shame as negative self-conscious emotions. Tangney and colleagues (e.g., Tangney & Dearing, 2002; Tracy & Robins, 2007) hold that guilt is related to isolated behaviors perceived as wrong ("I shouldn't have done that"), while shame is related to global attributions of unworthiness to the *self* ("I'm a terrible person"). From the perspective of Tillich's model, guilt anxiety may be compared to guilt as it is typically operationalized in the social psychological literature, whereas the ultimate threat to personal value affirmation—condemnation anxiety—may be compared to shame as it is typically studied. While guilt anxiety arises in connection with a particular act that is discrepant with internalized standards, it can be transformed into condemna-

tion anxiety (i.e., shame) if this discrepancy is interpreted as a representation of the self's global deviation from internalized standards.

A critical connotation of the threat-dialectic theorists' discussion of human experiences of inadequacy—and Tillich's model in particular—is that self-esteem and one's sense of moral value are connected. This implies that self-esteem threats and guilt-arousing situations have more in common than is typically recognized within the social psychological literatures on these two phenomena. Historically, the field seems to have separated these constructs by positing that a self-esteem threat is directed at one's sense of competence, efficacy, or intelligence, and does not necessarily elicit a particular type of emotional experience, while guilt is an emotion that arises not from threatened ability, but from perceived moral violations. The fact that, in recent years, both self-esteem and guilt research have shifted somewhat toward a focus on the successful maintenance of interpersonal relationships suggests more overlap than was previously recognized between these areas of investigation (see, for example, Leary & Baumeister, 2000). Of course, operational distinctions between self-esteem threats and guilt inductions are certainly meaningful and may be necessary to conduct certain types of research. However, from Tillich's broad perspective, any existential threat interpreted as an attack on one's personal value—whether it be directed at one's sense of competence or one's perceived moral value—is experienced as some form of guilt or condemnation anxiety. Research in the TMT tradition has established that both self-esteem threats and guilt feelings have existential connotations and are connected to the potential for death anxiety (e.g., Arndt, Greenberg, Solomon, Pyszczynski, Schimel, & Nerham, 1999; Greenberg et al., 1992). Tillich's typology suggests that the vast body of research and perspectives on self-esteem threat and defense within social psychology (e.g., Steele, 1988; Tesser, 1988) should be further integrated with the body of research on guilt and shame. In the present model, diminished self-esteem and experienced guilt both involve the perception that the self has (or may have) fallen short of internalized standards, rules, or goals, and are both instantiations of the anxiety of guilt and condemnation.

Tillich (1952/2000, p. 53) proposes that individuals defend against guilt anxiety in one of two primary ways. In many instances, people respond to guilt anxiety by compensatorily attempting to adhere more closely to moral standards in the future, or by boosting the self's value in a different domain, responses that have been empirically observed in research on guilt (Tangney & Dearing, 2002) and on self-affirmation processes (Steele, 1988). However, Tillich also notes an interesting second class of defensive responses: namely, individuals will sometimes deny the validity of the rule they have violated, or the information threatening their self-esteem, as a means of preserving the self's value at the expense of certainty about culturally determined standards. This strategy has also been documented in various research studies (e.g., Landau, Greenberg, & Sullivan, 2009).

Tillich's model is useful because, unlike most other contemporary XXP theories, it has the potential to meaningfully integrate several diverse research programs on different experiences of threat. For example, it bridges experimental existential research with the extensive research on guilt and shame in social psychology. Perhaps most importantly for the present discussion, Tillich's is a "hybrid" model that posits a "core" threat—death anxiety—while simultaneously acknowledging the importance and relative independence of other experiences of threat. As should become clear in the next section, we believe such a model to be quite use-

ful, because although XXP, with its grounding in existential philosophy, is unique-
ly poised to theorize about what the "core" threat that drives human motivation
might be, it is empirically much more difficult to establish such a threat than has
been typically assumed. As we enumerate some suggestions for how future re-
search on existential threat might best proceed, we hope readers will bear in mind
the potential Tillich's model has to inspire research that follows these suggestions.
The model gives researchers important flexibility by positing a core threat, yet also
furnishing multiple hypotheses about the unique aspects of different threat experi-
ences, as well as the interrelatedness between threats and between certain threats
and certain patterns of response.

BACK TO THE LAB: SUGGESTIONS FOR DEVELOPING RICHER THEORIES AND MORE PRODUCTIVE LINES OF RESEARCH ON EXISTENTIAL THREAT

Here we offer some suggestions that researchers may find useful as they create,
refine, and test theories of existential threat. Some of these suggestions are inspired
by the schematization of Tillich's ideas presented in the previous section; others
are based more generally on a critical survey of the contemporary empirical land-
scape. When possible, we discuss how researchers have already applied these
suggestions to launch new and fruitful lines of empirical inquiry. It is important
to acknowledge at the outset of this review that we draw somewhat dispropor-
tionately on our own research in the area of existential threat, as a natural result
of our familiarity with it and its partial inspiration in the work of Tillich and the
other existentialists. We should also mention that we ourselves have not always
followed many of the suggestions for research practice that we are about to offer.
Rather than as a litany of accusations or a rehashing of old debates, the follow-
ing is truly intended to be a list of possibilities for moving research on existential
threat forward in a spirit of collaboration and dialogue.

1. THE IMPORTANCE OF DISTINGUISHING EXISTENTIAL THREATS FROM OTHER TYPES OF EXPERIENCES

As noted earlier in this article, many experiences in everyday life are threatening
but would not qualify as existential by most definitions. We spelled out definitional
criteria that we believe are useful for distinguishing existential and non-existential
threats. Researchers developing a new theory concerning the experience of exis-
tential threat—or refining an existing threat theory within XXP—should consider
these criteria and whether they apply to their operationalizations of threat. Or, if
researchers disagree with our criteria, they should at least make their own criteria
explicit when presenting their theory.

  One key definitional question for research considered part of XXP is the follow-
ing: Even if a particular construct or experience may be termed *existential*, is it
also necessarily *threatening*? One of the major critiques leveled against uncertainty
management theory (McGregor et al., 2001; Van den Bos, Poortvilet, Maas, Mi-
edema, & Van den Ham, 2005) is that there seem to be many situations in which

people seek out and enjoy uncertainty (e.g., Landau, Greenberg, & Kosloff, 2010; Landau, Sullivan, & Solomon, 2010). The same might be said for the experience of losing control and even death itself. This point was not lost on influential theorists in the existential tradition. Recall how Sartre, for one, discussed how facticity and transcendence can be experienced as threatening but can also provide consolation and strength (e.g., a lack of freedom and control might be relieving if it means not taking responsibility for a choice). Researchers should clarify *when* an experience is likely to be threatening, and when it is not (or even the opposite).

This issue is often overlooked because the zeitgeist encourages researchers to demonstrate just how subtly threats can be induced and still elicit defensive responses. We are not arguing that this experimental approach lacks merit. It can be useful for methodological reasons of experimental control, and the psychodynamic tradition has demonstrated the importance of the salience of threatening information outside of conscious awareness. Nevertheless, it is important to recognize that such subtle operationalizations of "threat" seem to lack many of the phenomenological qualities of a threatening experience.

If researchers more carefully address the question of when potentially threatening sources of self-relevant information are experienced as existential threats, they will be able to generate more fine-grained hypotheses about how individuals and cultures differ in the extent to which they interpret events as threatening and respond defensively. Indeed, we should recognize the fact that culture *creates* as well as resolves many existential threats. For example, without a tightly socialized culture, the problem of guilt would not exist, or, at least, it would exist in a very different form—for example, we would probably experience "guilt" in terms of impurity concerns or physical disgust rather than more symbolically in relation to internalized social and moral standards. Culture filters what we perceive as threatening (Sullivan, in press). Nevertheless, current XXP theories assume a given threat is equally motivating for all individuals in all times and places.

2. CLARIFYING THE LINKS BETWEEN PARTICULAR THREATS AND PARTICULAR DEFENSES

Once it is clarified that a target experience is both existential and threatening, it is important to carefully consider what protective structures or defensive behaviors people rely on to defend against that threat in particular. The guiding assumption behind most XXP theories is that people defend against a given threat in a "fluid" manner, such that they deploy defenses that are superficially unrelated to the threat. Indeed, empirical demonstrations of such remote defenses are often prized as valuable scientific discoveries. For example, researchers have been excited by evidence that threats to meaning elicit a wide gamut of defenses that share no obvious link with the threat (e.g., responding to an unnoticed change in the identity of the experimenter running a study by more severely penalizing a prostitute; Proulx & Heine, 2008).

We appreciate that motivational theories are useful largely because they trace superficially unrelated behaviors to a common drive. Still, are all threat-defense links truly so fluid in the realm of everyday experience? At some point are people so flexible in the defenses they deploy to cope with a given threat that their thoughts and actions carry only the slightest hint of relevance to their environ-

ment? To answer this question, it is important to take the cultural and evolutionary aspects of existential threat into consideration. Although culture and self-esteem are undoubtedly distally connected to a wide variety of threats, because they perform a wide variety of functions, it is also important to recognize that culture has evolved to address many "core" threats in fairly direct ways. In every culture people address the problem of death, for example, by constructing detailed systems of beliefs, rituals, and ceremonies, and it is worth recognizing that these symbolic systems are purposive in a way that differs from card-playing and other cultural beliefs or practices. As mentioned, culture conditions what we perceive as threatening, and how we characteristically respond to these threats; this is obviously evolutionarily adaptive (imagine how far humans would have gotten if they actually experienced existential threat every time something potentially anomalous occurred in their environment!).

In short, we urge researchers to carefully theorize about why a given threat should (or should not) lead to superficially unrelated defenses. Earlier in this article we advanced Tillich's idea that anxiety seeks to attach to some object. Clearly, this notion allows for cognitive flexibility in the experience of existential threat. At the same time, for research on the different experiences of threat to progress—and to meaningfully map on to the "real world" experience of threat—there must be some theoretical parameters and constraints placed on that flexibility.

In addition to clarifying why defensive responses to a given existential threat should (or should not) be fluid or distal, researchers should address a closely related question: Even if people can and sometimes do respond to a given threat with remote defenses, given a choice between remote and distal defenses, would people generally choose the former? And, are there benefits to compensating for a given threat with a more proximal defense? This is the kind of question that Stone, Wiegand, Cooper, and Aronson (1997) pursued in response to evidence that people can reduce cognitive dissonance stemming from one context by affirming their overall moral integrity in another context. This may be true, but Stone et al. (1997) demonstrated that, if given the choice, people prefer to reduce dissonance directly. XXP theories proposing fluid threat-defense links should subject themselves to the same empirical scrutiny.

Although there is clearly some explanatory merit to tracing several fluid defenses back to a single source of threat, it can also be quite informative to investigate whether a given threat (versus another threat) produces specific types of defenses that are more proximally related. For example, Shepherd, Kay, Landau, and Keefer (2011) showed that participants responded to threats to their personal control with increased support for a leader who offers external control, whereas they responded to mortality salience with increased support for a leader who offers symbolic immortality. Shepherd et al. would not have been able to formulate these diverging predictions if CCT and TMT did not make specific predictions about the type of psychological reassurance people seek in response to particular threats.

Further extending this point, by conceptualizing the threat-defense relationship at a more proximal or theoretically driven level, we can make progress toward identifying broad, but irreducible trends in the association between classes of threat and classes of response. For example, returning to Tillich's typology, the research reviewed above suggests that the anxiety of emptiness and meaninglessness typically prompts individuals to engage in worldview defense (i.e., reaffirming aspects of their culture or meaning system) while the anxiety of guilt and

condemnation typically elicits self-esteem striving (i.e., self-affirming in another domain, or relying on self-serving biases to defuse the threat). On some occasions, however, meaninglessness anxiety prompts individuals to abandon or redefine cultural boundaries, while guilt anxiety sometimes promotes genuine efforts at reconciliation and atonement. Research on the self-conscious emotions of guilt and shame has profitably attempted to distinguish between the types of responses that occur depending on how threatening self-relevant information is perceived (e.g., Tangney & Dearing, 2002). XXP should follow suit.

Another benefit of specifying the types of defenses people characteristically employ in response to a particular threat is that it provides a basis for formulating hypotheses about individual and cultural differences in the types of defenses people deploy in response to the same existential threat. These differences can be predicted on the basis of personality traits, gender, socialization factors, genetic factors, cultural experiences, and so on. Individuals within the same cultural milieu will share many dominant strategies for threat defense, but will also allay threat 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 mortality salience (for a review of this work, see Landau & Sullivan, in press). Likewise, CCT suggests that processes of enculturation and socialization can lead to individual differences in where people prefer to find order in the world, with some people focusing their control needs on the self (i.e., personal control) and others looking more toward external systems such as religions and governments (Kay & Sullivan, in press). Understanding these distinctions can lead to important differences in predicting what, to a given individual, will threaten their sense of control and order, and how they will resolve these threats.

Researchers can also consider how defenses are interrelated. So far, the template for XXP threat theories tends to be: people are inherently motivated to maintain an adequate level of X (where "X" represents a given culturally afforded psychological resource, like certainty or self-esteem), and therefore they respond to threats to X with efforts to restore X. This maxim is generally true, but it ignores the fact that affirming X often requires having other social-psychological structures in place. Moreover, situations sometimes arise in which defenses conflict with each other. For example, Landau et al. (2009) examined how people respond to mortality salience in situations where their efforts to enhance their self-esteem threaten to undermine the exalted status of cultural authorities. Would people self-enhance nevertheless, or would they sacrifice personal esteem on the altar of revered cultural icons? TMT suggests that threats to meaning invalidate all self-esteem striving (because self-esteem is predicated on cultural standards for meaningful action), so Landau et al. predicted and found that under mortality salience people self-enhance unless doing so threatens the status of revered authorities.

3. CLARIFYING THE ROLE OF CONSCIOUSNESS

Theory and research could also be greatly advanced by more careful exploration of the role of consciousness in the experience of existential threat and the link between particular threats and particular defenses. Most current XXP theories as-

sume that threats activate defenses outside of conscious awareness. Based on the extant literature, it would certainly be folly to question this assumption. Nevertheless, as mentioned, many theorists emphasize that the experience of existential threat is inseparable from the human capacity for self-awareness. Yet XXP researchers rarely focus on how people subjectively cope with existential threats when they are in full consciousness.

TMT has perhaps gone further than any other current theory in investigating the role of consciousness in the threat-defense link. As is generally known among XXP researchers, the theory (Greenberg, Arndt, Simon, Pyszczynski, & Solomon, 2000) distinguishes between proximal and distal responses to death anxiety, and hypothesizes a time course in cognitive-behavioral reactions to reminders of mortality. Some important meta-analytic work uses this kind of theorizing about the time-course of conscious and nonconscious threat reactions to integrate different threat theories. For example, Martens, Burke, Schimel, and Faucher (2011) have shown that while defensive reactions to MS are increasingly heightened as a function of delay in observing the dependent variable, reactions to meaning or certainty threats are increasingly *lessened* as a function of delay. In short, distal defenses seem more important in the case of death anxiety than in the case of emptiness anxiety. Regardless of how such findings are interpreted, it is important to acknowledge that the role of consciousness in threat experience should be further studied with the dual aim of deepening our understanding of people's experience of a given threat and discovering patterns across people's experience of different threats.

Pursuing this line of inquiry will also likely advance our understanding of what occurs when people consciously contemplate existential threats. For example, recall our earlier discussion of Rank's conception of the dialectical interplay between the emotions of guilt and anxiety that often arises as a consequence of existential threat. It should be possible to examine this process empirically. Further work along these lines would likely open up new areas of inquiry into the relation between existential threat and emotion. Although Lazarus and Lazarus (1994) proposed a model of core existential emotions, little empirical research has drawn on this model to date, most likely due to a narrow empirical focus on nonconscious threats.

Contemporary researchers often cite the melancholic ruminations of Gilgamesh or the Underground Man, with the implicit assumption being that these are the experiences of special people who made extreme contact with the tensions that beset us all. After making these citations, however, researchers often comfortably switch to empirical paradigms that do not pay much attention to people's subjective experience of threat. The next implicit assumption, of course, is that the normative undergraduate participants in our studies seldom (if ever) explicitly wrestle with questions about authenticity, control, freedom, or mortality. They are viewed instead as mere "carriers" of an automatic threat-defense mechanism buried somewhere deep in their unconsciousness. It seems as if there might be a gap here—and not only a methodologically necessary one—between the concerns and experiences explored in detail by classic existential theorists and the typical approach of the current XXP study.

4. BENEFITS OF ALTERNATIVES TO A "CORE" THREAT APPROACH

Not every theory or research program within XXP needs to search for the "core" threat underlying human motivation. Although this is certainly a valuable topic for investigation, researchers might also advance knowledge by considering some other approaches.

In this regard, we stress the importance of Tillich's recognition that each type of anxiety has a certain psychological independence. Just as there are different sources of human motivation and self-affirmation, so too there are different experiences of threat (depending on what aspect of the self is primarily threatened in a given instance). We propose that researchers might focus on a particular type of threat and "drill down" to discover how and when it operates, and what kinds of defenses it elicits. This sort of research can be done without becoming embroiled in debates about the relative "importance" or primacy of a given type of threat.

To illustrate, consider the research done by Kay and colleagues (2008) demonstrating that a personal control threat does not increase general belief in God, but more specific beliefs in the existence of a *controlling* God. Now, one may argue that some deeper motivation, such as the fear of death, underlies control needs, and this may or may not be the case. But even if it is, if Kay et al. had only investigated this "ultimate" threat, our understanding of the ways in which more specific threat experiences elicit particular defenses would necessarily be limited.

This example highlights the fact that investigations of particular threats should not only focus on successfully operationalizing the threat, but also consider more nuanced dependent measures. For example, certainty, mortality, control, and group identity threats all likely lead to broad increases in nationalism or religious identification. If one measured these outcomes broadly following a range of existential threats, one might conclude that all these threats exert an identical effect, making the search for a "core" threat seemingly more paramount. However, as some of us have argued before (Shepherd et al., 2011), these effects may have more to do with the multifaceted nature of constructs like nationalism or religious belief. Nationalism, for example, involves adherence to a set of rules as well as a set of values, and a particular identity. The same can be said for religiosity, which involves beliefs in supernatural order, a moral code, group identification, and guides for action. When these broad constructs are measured more precisely, in ways that decompose them into their component parts, we see that different existential threats exert very different effects (Shepherd et al., 2011).

In other words, by focusing on a more proximal threat-defense link, we are able to formulate novel hypotheses about specific phenomena that do not follow easily from TMT, or any core threat model for that matter. In a similar vein, we believe researchers can continue to investigate any of the diverse types of existential threat experience identified by Tillich and presented in Figure 1, even if they disagree with Tillich's view of the ultimate importance of death awareness in all existential threat experiences.

As alluded to above, another potential benefit of stepping back from the quest for a "core" threat might be to examine the interrelationships between different threats. For example, it might be possible to show that different threats can lead to the same defense, but via different intermediate processes. This was the approach that Rothschild, Landau, Sullivan, and Keefer (2012) adopted in studying

the defensive process of scapegoating. Rather than tracing scapegoating back to a single experience of existential threat, Rothschild et al. considered the possibility that it might occur as a result of either threats to perceived personal control (associated with Tillich's emptiness anxiety) or to personal moral value (associated with Tillich's guilt anxiety). It was found that people will scapegoat outgroups for contributing to harmful climate change when they are exposed to a portrayal of this social problem that emphasizes either their own (the participants') inability to understand or cope with climate change (a control threat), or their personal culpability for hazardous climate change (a moral value threat). Critically, however, the effect of a control threat on scapegoating was mediated by diminished perceived personal control, while the effect of a moral value threat on scapegoating was mediated by increased feelings of guilt. A similar approach has been adopted by some system justification theorists (e.g., Jost & Hunyady, 2002), who argue that system justification phenomena are not the result of one motive but the congruence of a number of different existential motives acting in concert.

5. DIFFICULTIES INHERENT IN EMPIRICALLY ESTABLISHING A CORE THREAT

Setting aside the potential benefits of theorizing about existential threat in ways that go beyond a "core" threat approach, actually establishing a "core" threat empirically is quite difficult. Replacing extant threat theories in a scientifically responsible fashion is no easy matter. The minimum criterion involves demonstrating that the new theory can parsimoniously account for all of the observations that support the theory which is to be superseded. Moreover, it is important to show that the new theory can be used to derive novel predictions that would not follow easily from the to-be-superseded theory.

Within XXP as it has developed in recent years, most attempts to supplant one "core" threat theory with another have failed to satisfy these criteria. For example, the MMM has been presented as a framework for more parsimoniously explaining effects derived from TMT and other social psychological theories (Proulx & Heine, 2010; although note that Heine has stated that he does not intend for the MMM to fully replace any existing theories; personal communication). However, the only effect derived directly from TMT that MMM studies have also demonstrated in response to meaninglessness threats is worldview defense. TMT has produced studies showing the effects of mortality salience not only on worldview defense but also on self-esteem striving and motivated distancing of humans from animals. Additionally, threatening sources of meaning and self-esteem has been shown to increase the accessibility of death-related ideation (Hayes et al., 2010). To truly establish meaninglessness anxiety as a "core" threat with motivational primacy over death anxiety, researchers working within the MMM would need to address and provide new explanations of all these empirical phenomena that support TMT.

In addition to having an obligation to explain existing findings, "core" threat theorists also need to be concerned with the reality of multiple causation. The most common empirical strategy for attempting to show that one has discovered the "core" threat thus far is to show evidence that Threat B instigates the same defense that another researcher has found Threat A to instigate. Generally, in these investigations, Threat B is shown to instigate levels of defense above and beyond

Threat A, the latter being included in the design as a comparison condition. These sorts of findings are then generally presented as evidence that Threat A is "nothing but" Threat B. Whatever merit this empirical strategy might have, it essentially overlooks the fact that any complex phenomenon is multidetermined. Mortality salience can increase worldview defense, *and* a meaning threat can increase worldview defense, and nothing in those two observations suggests that mortality salience "is just" a meaning threat or vice versa; more likely, worldview defense is a multiply determined phenomenon.

Although we are pointing to some potential advantages of relaxing the search for a "core" threat, we do not wish to dispute the empirical and theoretical importance of establishing the ultimate threat at the heart of the human psychological experience (if it exists). Indeed, Tillich's model, as mentioned, can be characterized as a hybrid model that posits a core threat (death awareness), but at the same time acknowledges interesting effects and dynamics that are unique to the operation of more specific instantiations of nonbeing. We believe such a model may be useful, insofar as it can generate continued interest in the search for a core threat, while also opening doors to more focused investigations of important, variegated threat experiences.

CONCLUSION

We believe that a major contribution of XXP to the question of the "core" threat underlying human motivation (and psychology more generally) lies in the fact that it offers researchers a framework for thinking deeply about the meaning of the term *existential threat.* It is certainly not the case that all social psychological theorists who study the experience of threat need to situate themselves in an existential framework. Indeed, we are arguing quite the opposite: adopting this framework necessitates making certain theoretical assumptions that many researchers may be unwilling to make. However, to the extent that researchers consider themselves to be studying the experience of threat within the purview of the existential tradition, we believe it advisable to seriously consider the perspective on threat put forward by Tillich, and the theorists on which he drew.

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