

# Meaning in Life as Comprehension, Purpose, and Mattering: Toward Integration and New Research Questions

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To advance meaning in life (MIL) research, it is crucial to integrate it with the broader meaning literature, which includes important additional concepts (e.g., meaning frameworks) and principles (e.g., terror management). A tripartite view, which conceptualizes MIL as consisting of 3 subconstructs—comprehension, purpose, and mattering—may facilitate such integration. Here, we outline how a tripartite view may relate to key concepts from within MIL research (e.g., MIL judgments and feelings) and within the broader meaning research (e.g., meaning frameworks, meaning making). On the basis of this framework, we review the broader meaning literature to derive a theoretical context within which to understand and conduct further research on comprehension, purpose, and mattering. We highlight how future research may examine the interrelationships among the 3 MIL subconstructs, MIL judgments and feelings, and meaning frameworks.

*Keywords:* meaning, purpose, meaning making, beliefs, existentialism

A sense of meaning in life (MIL) has been discussed for millennia in religion, literature, and philosophy and is widely acknowledged to be a central human concern (Yalom, 1980). Contemporary psychology has also taken an interest in this concept, and MIL has increasingly been the topic of copious research (e.g., Hicks & Routledge, 2013; Leontiev, 2013; Wong, 2012). However, MIL research faces significant hurdles that impede its growth. The present article uses a tripartite view of MIL to address some of these hurdles and advance research.

## Two Hurdles: Conceptual Clarity and Integration With Broader Meaning Literature

Two barriers impede MIL research, the first of which is conceptual clarity (Hicks & King, 2009; Martela & Steger, 2016). The MIL construct tends to be ambiguous and amorphous with unclear conceptual boundaries. MIL has been defined in a variety of ways with “no consensus definition for the construct” (Hicks & King, 2009, p. 638). From study to study, MIL tends to take a different form. Such ambiguity in conceptualizations impedes the ability to generate and test targeted hypotheses and to generalize findings across studies.

The second hurdle is integration of MIL research to the broader meaning research literature. MIL research can be viewed as a subset of the broader meaning research which includes additional concepts, such as meaning frameworks and meaning making (Park, 2010), and research areas such as threat compensation

(Proulx, Inzlicht, & Harmon-Jones, 2012), meaning maintenance model (MMM; Heine, Proulx, & Vohs, 2006), goals and goal pursuit (Carver & Scheier, 1998), coping with trauma (Park, 2010), identity (McAdams, 2008), self-enhancement (Alicke & Sedikides, 2009), and terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986). These diverse areas are bound together by the common theme of studying how “people come to understand themselves, their environments, and their relationship to their environment” (i.e., sense making; Markman, Proulx, & Lindberg, 2013, p. 4). MIL research has, for the most part, grown independently of this broader research. This lack of integration is unfortunate as the broader meaning literature has established numerous principles and findings, all of which are directly relevant to understanding MIL. Tying MIL research to this broader literature could greatly advance our understanding of MIL.

## A Tripartite View of Meaning in Life as a Possible Solution

Recently, a tripartite view of MIL as composed of three distinct subconstructs—comprehension, purpose, and mattering—has been gaining momentum (Heintzelman & King, 2014, p. 154; Martela & Steger, 2016; Steger, 2012a, p. 165). We believe this tripartite view could add clarity to the literature as it outlines three more specific and targeted subconstructs without lumping them together into a singular more diffuse concept (George & Park, 2014). Martela and Steger (2016) recently elaborated on such a tripartite conceptualization of MIL, suggesting that such a view could contribute to conceptual clarity.

In addition to bringing clarity, we believe the tripartite view could facilitate integration of MIL with the broader meaning literature. By specifying more explicit subconstructs (Martela & Steger, 2016), the tripartite view offers the flexibility and precision necessary to draw clear connections between MIL and the broader literature. In contrast, a unidimensional conceptualization that ag-

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gregates the three aspects of meaning renders relationships between MIL and the broader meaning research indeterminate.

For a tripartite view to truly facilitate integration and advance research on MIL, two things need to happen. One, relationships need to be established between the three subconstructs of MIL (comprehension, purpose, and mattering) and meaning frameworks (Heine et al., 2006). Meaning frameworks—which go by several names, such as beliefs, worldviews, and expectations—comprise the crucial concept that connects MIL research with the broader meaning literature (Markman et al., 2013). It will be important to establish how different types of meaning frameworks and related concepts (e.g., meaning-making) may relate to comprehension, purpose, and mattering. Doing so will facilitate integration of MIL with the broader meaning literature.

Two, for a tripartite view to be maximally useful, relationships among comprehension, purpose, and mattering, and subjective judgments and feelings of MIL (Heintzelman & King, 2014; Hicks & King, 2009) must be determined. We use the phrase “subjective judgments of MIL” to refer to the subjective judgments that people make when endorsing statements such as “my life is meaningful” and “my life has meaning” (Hicks & King, 2009). Without formal definitions of MIL, people can rely on their lay and intuitive conceptions of what “meaning” and “meaningful” mean in order to make judgments regarding how much meaning they have in their lives. Such judgments have been the foundation of MIL research. From the first measure—the Purpose in Life Test (Crumbaugh & Maholick, 1964)—to the most widely used contemporary measure—the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006)—most MIL measures have relied on items that use the words “meaning” or “meaningful.” It is crucial to note that such items leave it entirely up to participants to make intuitive and subjective judgments regarding what MIL means and how much of it they have in their lives, without reference to any scholarly notions of MIL. This approach seems justifiable, given that such subjective judgments may capture the phenomenological experience of MIL (see Hicks & King, 2009, for a justification of this approach). In an area of research that struggles with conceptual ambiguity, subjective judgments of MIL serve as a useful compass to determine whether theoretical conceptualizations of MIL align with the phenomenological experience.

In addition to subjective MIL judgments, an associated *feeling* (i.e., an affective experience) may also be important. Recently, Heintzelman and King (2014) discussed this affective experience at length as well as the roles that it may play in people’s lives. They suggest that this affective experience may differ from other widely studied emotional experiences (e.g., happiness, sadness, anger) and is specific to the MIL concept. They suggest that when individuals make MIL judgments (i.e., endorse statements such as, “my life is meaningful”), such judgments may reflect an underlying affective experience. Thus, MIL judgments and the associated feeling are crucial aspects of MIL research that need to be tied to any new tripartite approach to MIL.

In summary, a tripartite view could facilitate integration and advancement of MIL research. However, for such an integration to occur, researchers need to identify how comprehension, purpose, and mattering relate to meaning frameworks and MIL judgments and feelings.

## Aims of the Present Article

The present article has three aims: (a) to outline a tripartite view of MIL as it relates to meaning frameworks and subjective MIL judgments and feelings, (b) to review the broader meaning literature that can be integrated to generate a better understanding of the MIL subconstructs, and (c) to highlight new avenues of future research that capitalize on the tripartite view and its links with the broader literature.

Before proceeding, it is worth noting what we do not do in this article. We do not review the extant literature within MIL research that has dealt with conceptualization of MIL (e.g., Reker & Wong, 1988). Readers are referred to Martela and Steger (2016) for a review of previous MIL conceptualizations in relation to a tripartite view. We also do not discuss many other possible subconstructs of MIL and why they were not included within the tripartite view—in other words, we do not discuss why a three-part view was selected over a four- or five-part model. We refer readers to Martela and Steger (2016) for such a justification. Here, we instead focus on using the tripartite view to integrate the broader meaning literature with MIL and highlight new research directions.

## A Tripartite Conceptual View of MIL

We define *MIL* as the extent to which one’s life is experienced as making sense, as being directed and motivated by valued goals, and as mattering in the world (King et al., 2006; Reker & Wong, 1988; Steger, 2009, 2012a). MIL can be conceptualized multidimensionally as consisting of three subconstructs: comprehension, purpose, and mattering. *Comprehension* refers to the degree to which individuals perceive a sense of coherence and understanding regarding their lives (Baumeister, 1991; Reker & Wong, 1988). To experience comprehension is to feel that one’s life makes sense, things seem clear in one’s life, things in one’s life fit together well, and things are as they ought to be. For someone experiencing low comprehension, life seems incoherent, fragmented, and unclear. *Purpose* can be defined as the extent to which individuals experience life as being directed and motivated by valued life goals (Battista & Almond, 1973; Klinger, 1977; McKnight & Kashdan, 2009). Individuals experiencing purpose have a clearer sense of direction in their lives and the ends toward which they are striving. Their commitment to their life goals provides them with a sense of engagement with life, and they feel pulled and directed toward their goals. Individuals experiencing low purpose have a sense of aimlessness, and nothing in the future seems worthwhile to them. Finally, *mattering* conveys the degree to which individuals feel that their existence is of significance, importance, and value in the world (Becker, 1973/1997; King et al., 2006). To experience mattering is to feel that the entirety of one’s life and actions are consequential. Individuals with a low sense of mattering feel that their existence carries little relevance and their nonexistence would make little difference in the world.

MIL should be distinguished from meaning frameworks. *Meaning frameworks* are the complex web of propositions that we hold about how things are in the world and how things will be (Baumeister, 1991; Heine et al., 2006; Proulx & Inzlicht, 2012). They refer to both “implicit and explicit propositions are abstracted from our experiences” (Proulx & Inzlicht, 2012, p. 320). They are “mental representations of expected relationships among people, places, objects, and ideas” (Heine et al., 2006, p. 90).

Meaning frameworks tell us “what is and what ought to be” and “what goals should be pursued” (Koltko-Rivera, 2004, p. 4). Thus, meaning frameworks are the relationships we perceive and expect in the world (Baumeister, 1991). Individuals’ meaning frameworks are unique to the way they perceive the world, and meaning frameworks are influenced by culture and experience (Baumeister, 1991; Koltko-Rivera, 2004). However, people who share the same cultures, experiences, ideologies, and beliefs may share similar meaning frameworks. In the current article, we use meaning frameworks to refer to single propositions (e.g., water is odorless) as well as clusters of propositions that include multiple, closely related propositions pertaining to a particular topic (e.g., a sense of identity, which represents multiple interconnected propositions regarding the self).

What is the relationship between meaning frameworks and MIL? We suggest that meaning frameworks contribute to a sense of MIL (Baumeister, 1991; Becker, 1973/1997; Koltko-Rivera, 2004). That is, the implicit and explicit propositions we hold about the world may contribute to our sense that life makes sense, is directed and motivated by valued goals, and matters. However, not all meaning frameworks equally contribute to MIL and its three subconstructs. Meaning frameworks with specific properties have specific relationships with comprehension, purpose, and mattering. We suggest that meaning frameworks that are consistent and coherent, and have the explanatory power to make sense of one’s life and life experiences, primarily provide a sense of comprehension (Baumeister, 1991; Heine et al., 2006). For example, for an individual with coherent religious beliefs, the proposition that one’s suffering serves a higher reason can help make sense of one’s hardships and provide a sense of comprehension. We posit that meaning frameworks that specify worthy high-level goals that are central to one’s identity and reflective of one’s core values, primarily provide a sense of purpose (Carver & Scheier, 1998; McKnight & Kashdan, 2009). For example, a college student may have meaning frameworks that specify for her a career path that is central to her identity and congruent with her core values, which would contribute to a sense of purpose. Finally, meaning frameworks that suggest that one’s life is of significance, importance, and value in the world contribute to a sense of mattering (Becker, 1973/1997; Greenberg et al., 1986). For instance, the proposition that one’s actions have a lasting impact on one’s community could provide mattering.

MIL should also be distinguished from meaning maintenance (Heine et al., 2006; Proulx & Inzlicht, 2012) and meaning making (Park, 2010). *Meaning maintenance refers to the processes by which meaning frameworks are applied to one’s experiences and how new meaning frameworks are created, or old meaning frameworks modified, in light of one’s experiences* (see Proulx & Inzlicht, 2012 for a more detailed discussion). Meaning maintenance is the primary focus of MMM (Heine et al., 2006), and MMM attempts to specify the processes by which individuals detect and respond to experiences that are inconsistent with their meaning frameworks. The term *meaning making* is used to convey a similar notion in the adjustment literature wherein the focus is on how stressful life events violate individuals meaning frameworks, how individuals try to make sense of the event by applying their meaning frameworks to the event, and how in this process, new meaning frameworks may be created or old one’s modified (see Park, 2010, for a review). MIL is different from meaning maintenance

(and meaning making) in that the former is not primarily concerned with the processes that are occurring in the interplay between meaning frameworks and one’s life experiences. Rather, MIL refers to the extent to which one’s life is experienced as making sense, as directed toward valued goals, and as mattering.

How might comprehension, purpose, and mattering relate to subjective MIL judgments or feelings? The assumption in the literature appears to be that MIL judgments and feelings reflect the three subconstructs (Heintzelman & King, 2014). For example, MIL is often conceptually defined as a sense of comprehension, purpose, and mattering, and then operationalized using MIL judgment items (e.g., Steger et al., 2006; Wong, 1998). King and colleagues (2006) write, “lives may be experienced as meaningful when they are felt to have significance beyond the trivial or momentary [mattering], to have purpose [purpose], or to have a coherence that transcends chaos [comprehension]” (p. 180; parenthetical statements added). In Heintzelman and King’s (2014, p. 162) discussion of the affective experience of MIL, they similarly suggest that comprehension, purpose, and mattering, although distinct, may share the same affective state.

However, the assumption that MIL judgments and feelings reflect the three subconstructs (Heintzelman & King, 2014; King et al., 2006) has not been empirically verified. Numerous possibilities exist regarding relations among the subconstructs and MIL judgments and feelings. One possibility is that MIL judgments equally reflect all three subconstructs. Another possibility is that MIL judgments are primarily reflective of one of the subconstructs, and is only reflective of the other subconstructs to a smaller or null extent. Yet another possibility is that MIL judgments do, in fact, reflect the three subconstructs, but also reflect additional concepts such as a sense of fulfillment or happiness. Finally, MIL judgments may not reflect the three subconstructs at all, but instead entirely reflect other things such as a sense of fulfillment or happiness (Wong, 1998). Thus, many possibilities exist regarding relations among MIL judgments and feelings and the three MIL subconstructs. However, based on the assumptions of the literature (King et al., 2006; Steger et al., 2006), one would expect at the least that MIL judgments are to some extent reflective of comprehension, purpose, and mattering. Clearly, future research on this topic is warranted (see section on future directions).

Figure 1 depicts the key concepts discussed so far and their interrelationships. The figure illustrates the multidimensional conceptualization of MIL as consisting of three subconstructs. The figure further shows that meaning frameworks with varying characteristics may differentially contribute to the three subconstructs. Finally, it shows that MIL judgments and feelings are likely to reflect the three subconstructs, and possibly also other concepts.

We now discuss each MIL subconstruct as it relates to the broader meaning literatures. These literatures have established principles and processes that ought to be integrated into our understanding of each subconstruct. They provide a rich theoretical context which can inform future research on the subconstructs.

### Comprehension

Comprehension refers to the degree to which individuals perceive a sense of coherence and understanding regarding their lives and their experiences (Baumeister, 1991; Reker & Wong, 1988).

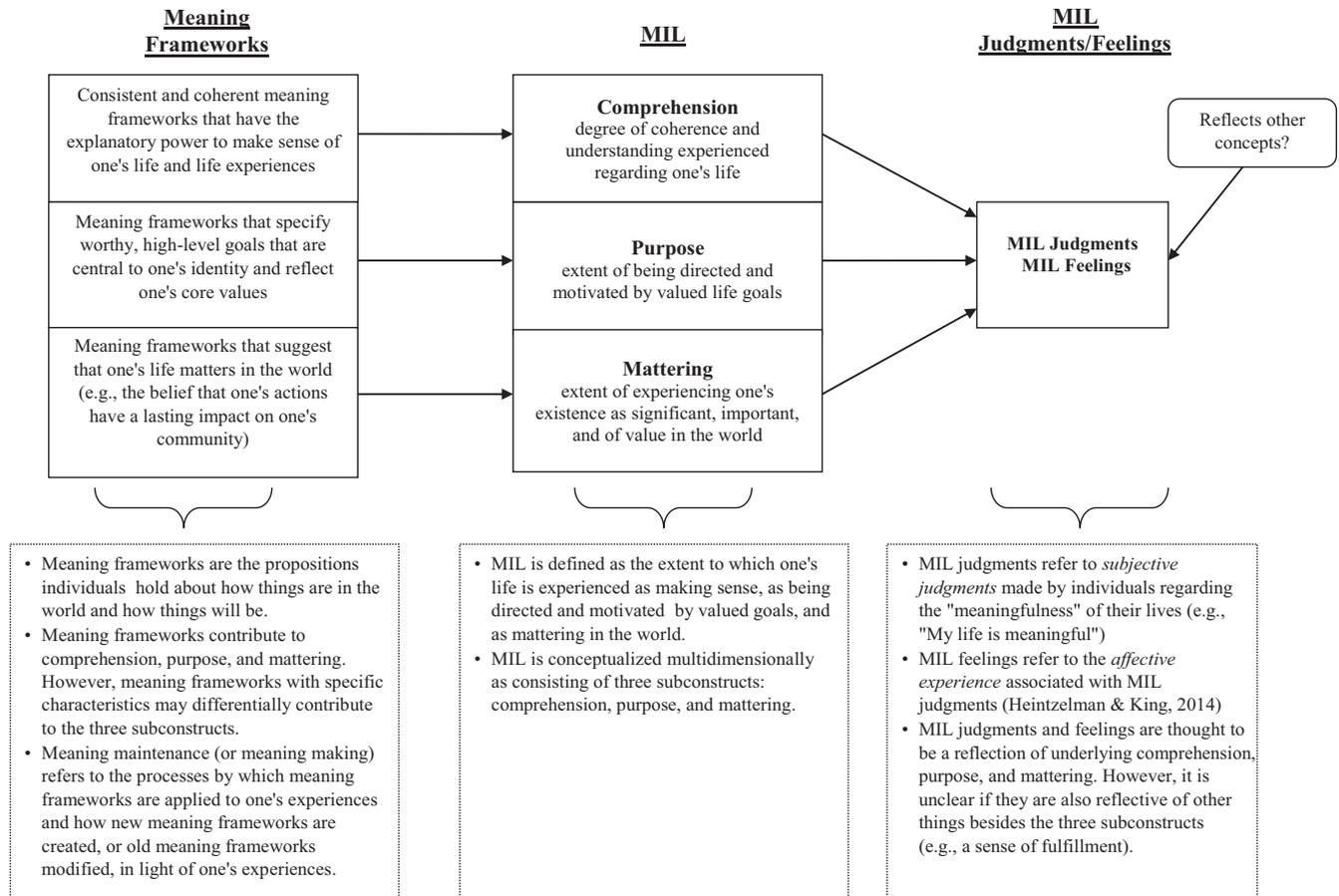


Figure 1. A tripartite conceptual view of meaning in life (MIL): Definitions and relationships between key concepts.

To experience high comprehension is to perceive that one's life and life experiences make sense, and that things in one's life are clear and fit together well. We further propose that consistent and coherent meaning frameworks—that is, propositions that are cohesive and not mutually contradictory—that are capable of explaining one's life circumstances, contribute to a sense of comprehension (Heine et al., 2006; Swann, 2012). In other words, the coherent propositions that one holds help explain why one's life is as it is, which leads to a sense of understanding regarding one's life (i.e., comprehension; Baumeister, 1991; Heine et al., 2006).

**Literature relevant to comprehension.** Many different literatures discuss the relationship between consistent and coherent meaning frameworks and a sense of understanding (e.g., Heine et al., 2006; Swann, 2012). Consistent and coherent meaning frameworks in this context refer to (a) consistency between one's propositions of how things are and (b) consistency between one's propositions of how things are and life experiences. These bodies of literature vary in terms of their focus and their content (e.g., some focus on propositions regarding the self as a meaning framework, whereas others focus on all propositions ranging from trivial to core ones). However, despite the differences in their focus, together, such perspectives convey that consistent and coherent meaning frameworks are important as they help individuals derive

a sense of understanding regarding their experiences and conduct themselves in an effective manner (Gawronski, 2012; Heine et al., 2006; Proulx & Inzlicht, 2012).

Self-verification theory (Swann, 1987) and the narrative identity literature (McAdams, 2008; McLean, 2008) are both based on the idea that an important function of a sense of self (i.e., propositions regarding the self) is to provide a sense of understanding and to help individuals navigate their lives. Self-verification theory posits that individuals desire a sense of understanding regarding the world around them and a sense of coherence within their beliefs and experiences (Swann, 1987, 2012; Swann & Buhrmester, 2012). This desire is satisfied by one's self-views, which serve to organize one's experiences and help make sense of one's life. As self-views serve this crucial function of helping organize and understand one's experiences, individuals become very invested in maintaining their self-views. The theory posits that the desire for coherence and understanding is so powerful that people will go to great lengths to confirm and maintain their self-views, "even if it means enduring pain and discomfort" (Swann & Buhrmester, 2012, p. 405). Research based on self-verification theory has shown that individuals will create specific social environments and engage in biased informational processing in order to verify and maintain their existing self-views (Swann & Buhrmester, 2012).

Thus, self-verification theory is based on the idea that individuals desire a sense of understanding regarding the world and such an understanding is provided by propositions that individuals hold regarding the self (i.e., their self-views).

Similar to self-verification theory, the narrative identity literature (Habermas & Bluck, 2000; McAdams, 2008; McLean, 2008), which views the self as constituted of stories, posits that an important function of such stories is to provide a sense of understanding. This literature suggests that narrative identities, which refer to internalized and integrative stories of the self, specify for individuals who they are and how they relate to the world (McAdams, 2008). Such narratives serve to bring together disparate aspects of one's experiences and self into a coherent understanding. By "actively creating coherence between events and the self" (Habermas & Bluck, 2000, p. 749), life stories enhance a sense of understanding and help individuals interpret and understand future experiences.

The literature around trauma and adjustment, in its attempts to understand the adjustment process, also emphasizes the relationship between meaning frameworks and a sense of comprehension (e.g., Janoff-Bulman, 1992; Thompson, & Janigian, 1988). Meaning-making models of adjustment (see Park, 2010, for a review) converge on the idea that individuals have meaning frameworks in place that enable them to make sense of and understand their experiences. These meaning frameworks are violated by major life stressors and trauma, and this inconsistency between an individual's meaning frameworks and life experiences generates distress. Addressing this inconsistency is a big part of the coping process. Many cognitive approaches to posttraumatic stress disorder (PTSD) similarly suggest that meaning frameworks organize our experiences, and inconsistencies between one's meaning frameworks and one's experiences can generate symptoms of PTSD (see Dalgleish, 2004, for a review). Thus, many meaning-making models and cognitive approaches to PTSD hold central the idea that meaning frameworks contribute to a sense of comprehension, and that inconsistency between meaning frameworks and experiences may generate distress.

The threat compensation literature is another large body of literature that directly highlights the importance of consistency and coherence in individuals' meaning frameworks (Heine et al., 2006; Proulx, 2012; Proulx et al., 2012). This literature has repeatedly demonstrated that when people face inconsistencies within their own meaning frameworks (e.g., mismatch between two sets of propositions) or are exposed to experiences that are inconsistent with their meaning frameworks, they experience an aversive state and engage in a wide variety of compensatory behaviors (Festinger, 1957; Heine et al., 2006; Proulx et al., 2012). Several theoretical models that have been applied to account for such findings posit that coherent meaning frameworks provide a sense of understanding and are essential in order to act effectively in one's life (e.g., Gawronski & Strack, 2012; Hirsh, Mar, & Peterson, 2012).<sup>1</sup>

The principle of cognitive consistency has been proposed as an explanation for the findings in the threat compensation literature (Gawronski, 2012). According to this view, cognitive consistency is a core human motive: People strive to have consistency among their beliefs and propositions (Gawronski, 2012; Gawronski & Strack, 2012). Consistency is important because of its epistemic and pragmatic functions. Inconsistency indicates that there are

errors in one's meaning frameworks, and accurate meaning frameworks are necessary for effectively navigating one's life. In other words, if our beliefs about the world contradict one another, this inconsistency indicates that there are mistakes in our beliefs, and we cannot be relying on incorrect beliefs to operate in our environment (Gawronski, 2012; Gawronski & Strack, 2012). Another model, the action-based model of dissonance (Harmon-Jones, Amodio, & Harmon-Jones, 2009, 2010), makes a similar suggestion regarding inconsistencies. This model aims to explain why cognitive inconsistencies evoke dissonance and dissonance reduction. The model states that inconsistency in one's cognitions generates dissonance or aversive arousal as discordant cognitions interfere with effective action (Harmon-Jones et al., 2009, 2010). Conflicting meaning frameworks prevent knowing how to act in one's environment. In contrast, consistent meaning frameworks allow people to behave more effectively and navigate their lives more effectively.

Uncertainty management perspectives have also been applied to understanding threat compensation behaviors (e.g., Hirsh, 2012; Van den Bos, 2009). Such perspectives highlight that uncertainty is aversive and people need to be able to make sense of their lives and minimize uncertainty. The entropy model of uncertainty (EMU) posits that "uncertainty poses a critical adaptive challenge" (Hirsh et al., 2012, p. 304) for organisms, motivating them to keep uncertainty at manageable levels. Uncertainty in the entropy model is conceptualized as the number of different ways in which incoming sensory information can be perceived and the number of ways in which one may act in one's environment. Too many conflicting ways of perceiving or behaving in a situation hinder effective action (Hirsh et al., 2012). In order to navigate through one's life effectively, individuals need to be able to minimize uncertainty so that they can determine how to make sense of their surroundings and behave in them. According to the EMU model, having meaning frameworks that clearly specify and outline how to make sense of one's life reduces uncertainty and minimizes the aversiveness associated with uncertainty. Hirsh and colleagues (2012) predict based on the EMU model that clear meaning frameworks, such as a coherent life story, strong religious beliefs, or strong political ideologies, may minimize uncertainty.

The theoretical model of threat compensation that is perhaps most relevant to the current article is MMM (Heine et al., 2006; Proulx & Inzlicht, 2012). MMM postulates that meaning frameworks allow individuals to make sense of their experiences and thus provide a sense of understanding and familiarity. Meaning frameworks allow us to understand what is going on and why it should be so, and allow us to control ourselves and the environment. Inconsistencies within meaning frameworks, and between meaning frameworks and experiences, evoke neurocognitive activation and aversive arousal, and undermine a sense of familiarity. What sets the MMM apart from some of the previously mentioned perspectives on meaning frameworks, is the central focus that MMM places on the aversive arousal that results from inconsistencies in meaning frameworks (Heine et al., 2006; Proulx &

<sup>1</sup> These models tend to draw heavily on earlier models of discrepancy or imbalance as a source of discomfort or distress and the motives to reduce this discomfort or distress by making changes in some attitude, belief or behavior (e.g., Festinger, 1957; Heider, 1958).

Inzlicht, 2012). To MMM, inconsistencies ranging from trivial (e.g., seeing nonsense word pairings that are inconsistent with one's expectations regarding word pairings) to significant (e.g., trauma that violates one's most central beliefs), regardless of content, converge on the same state of aversive arousal. Compensatory behaviors are seen as palliative efforts to relieve the arousal and return the individual to a feeling of familiarity. Thus, central to MMM is the idea that meaning frameworks provide a sense of understanding, and inconsistencies in them undermine that sense of understanding.

In summary, several bodies of literature discuss meaning frameworks, the sense of understanding they provide, and their importance in helping individuals conduct themselves in an effective manner. These literatures differ in terms of their specifics: Some focus on the consistency within meaning frameworks for effective action (Gawronski & Strack, 2012), others focus on the explanatory power of meaning frameworks for minimizing aversive levels of uncertainty (Hirsh et al., 2012), and yet others focus on the sense of understanding provided by meaning frameworks (Heine et al., 2006). However, taken together, these bodies of literature converge on the idea that consistent and coherent meaning frameworks provide a sense of understanding and allow us to act effectively. They suggest that a lack of understanding is aversive and/or impairs effective action in one's life (Hirsh et al., 2012; Proulx & Inzlicht, 2012). Such postulates that can be drawn from this literature are informative regarding the comprehension subconstruct and the meaning frameworks that contribute to comprehension.

**Implications for understanding comprehension and future research on it.** The relevant literatures suggest that the comprehension subconstruct may convey important information regarding individuals' underlying meaning frameworks. In some sense, it is a gauge of the "health" of the underlying meaning frameworks. High levels of comprehension indicate that meaning frameworks are coherent and have the explanatory power to provide the individual with a clear sense of understanding regarding his or her life (Steger, 2012a). This information conveyed by the comprehension subconstruct is important because individual differences in having coherent meaning frameworks that provide a sense of understanding could have significant implications. One, having better meaning frameworks may help minimize uncertainty and allow one to better respond to ambiguous situations (Hirsh et al., 2012; Steger, 2012a; Van den Bos, 2009). In fact, the EMU model (Hirsh et al., 2012) makes the specific prediction that those with meaning frameworks that provide a greater sense of understanding are better able to minimize uncertainty and uncertainty-related anxiety in their lives. Two, having meaning frameworks that provide greater comprehension may allow individuals to better navigate their lives and act more effectively (Gawronski & Strack, 2012; Proulx & Inzlicht, 2012). During important life experiences and transitions (e.g., loss, major illness, career change, becoming a parent), individuals rely on their meaning frameworks to answer important questions such as who they are, what their life is about, what their experiences mean, and how to proceed (Park, 2010). Individual differences in the availability of meaning frameworks that provide comprehension may impact how people navigate important life experiences and changes. Even further, the availability of meaning frameworks may impact quotidian circumstances and responses to trivial experiences. For example, Inzlicht

and Tullett (2010) found that priming religious beliefs mitigated neural activity in response to making errors on the Stroop task. The authors concluded, on the basis of these results, that religious beliefs and other meaning frameworks that provide the sense that the world is understandable and predictable may quell distress responses to even minor errors and mitigate anxiety. Thus, the comprehension subconstruct may convey critical information about the extent to which one's meaning frameworks provide a sense of understanding regarding one's life, information that may help researchers understand many topics such as coping, responses to uncertainty, motivation behind religiosity, and well-being.

## Purpose

We define purpose as the extent to which individuals experience their lives as being directed and motivated by valued life goals (Battista & Almond, 1973; Klinger, 1977; McKnight & Kashdan, 2009).<sup>2</sup> To experience purpose is to have a clear sense of the valued ends toward which one is striving and to be highly committed to such ends. Further, we suggest that meaning frameworks contribute to purpose in the following manner. People's meaning frameworks—their mental representations of how things are—outline for them what ends and states are desirable and worth striving for (Heine et al., 2006; Koltko-Rivera, 2004). Specifically, meaning frameworks that specify worthy high-level goals that are central to one's identity and reflective of one's core values, contributes to purpose (McKnight & Kashdan, 2009). For example, one's propositions about the world may specify that being a good parent is a highly desirable end, and this goal may be central to the person's identity and reflect his or her core values. Such a goal would contribute to a sense of purpose; to a sense of being directed and motivated by valued ends in one's life.

**Literature relevant to purpose.** The propositions that we set forth regarding purpose is consistent with and related to a wealth of research on the goal construct (e.g., Carver & Scheier, 1998; Emmons, 1986; Little, 1999). This body of research has investigated aspects emphasized in our views of purpose such as the high-level nature of goals, valuing of goals, and degree to which goals reflect one's identity and values.

Carver and Scheier's (1998) self-regulation model offers a useful framework for organizing and understanding goal research that is pertinent to the purpose subconstruct. The model accords goals a central role in human behavior, suggesting that behavior can be understood as a process of identifying goals and working to attain these goals (Powers, 1973). Others, such as Klinger (1977), have similarly suggested that goals are central to behavior and profoundly influence attention, cognition, emotion, and action. The self-regulation model adopts a hierarchical view of people's goals as existing in a hierarchy based on their level of abstractness (see also Austin & Vancouver, 1996; Johnson, Chang, & Lord, 2006; Powers, 1973; Scholer & Higgins, 2013, for similar hierarchical views of goals). The most abstract, higher order goals exist at the

<sup>2</sup> It is worth pointing out here that there may be a difference between defining purpose with an emphasis on having multiple valued goals versus an emphasis on a primary life goal or aim. The former has been more prevalent in the literature and is the approach we take in this study. In contrast, some previous discussions have focused on a primary reason for living (Frankl, 1959/2006) or a single "self-organizing life aim" (McKnight & Kashdan, 2009).

top, while more concrete, lower level goals exist at the bottom. Abstract high-level goals give rise to more concrete goals below them, which give rise to even more concrete goals below them. For example, the abstract goal of being a good parent gives rise to the goal of providing the child a good education, which in turn gives rise to the more concrete goal of driving the child to school. At the highest level of the hierarchy are what Carver and Scheier (1998) refer to as the *be goals*. The *be goals* represent an individual's highest ideals regarding the most aspired-to and desired states (e.g., be a good parent, be honest, be kind). The *be goals* thus represent one's most important higher order values. Klinger (1977) described these as incentives that "cannot be fully attained" (p. 133) but that create many other "fairly stable incentives that are instrumental in achieving them" (p. 133). These high-level ideals and values give form and structure to more concrete goal pursuits. According to Carver and Scheier (1998, p. 348), more clearly specified goals at the higher levels will facilitate better identification and pursuit of lower level goals. Individuals with more clearly specified *be goals*, such as *be an honest person* and *be a good parent* are better equipped to adjust their lower level goals when lower level goals are blocked. Such individuals will be better able to adjust their goals by finding alternate routes to higher level goals (see Hirsh et al., 2012, for similar perspective).

One feature of the self-regulation model's hierarchical view of individuals' goals is that goals higher on the hierarchy are more important and more central to one's sense of self (Carver & Scheier, 1998). The higher the goal, the more it reflects the individual's identity. The self-regulation model also emphasizes the role of a goal's value in creating behavior. Only goals that are perceived to have value will motivate behavior. This emphasis on value is in line with expectancy-value models of motivation that posit that individuals will be motivated to engage in goal pursuit to the degree that the goal is perceived to have value (e.g., Shah & Higgins, 1997).

The emphasis that self-regulation and expectancy-value models place on the value of goals has stimulated research efforts to examine the relationship between individual differences in having valued goals and health and wellness. The Life Engagement Test (Scheier et al., 2006) was created to assess individuals' sense of having valued goals. Studies using this scale have shown that Life Engagement Test scores are positively related to mental health and well-being (Scheier et al., 2006) and negatively related to objective indices of poor health such as aortic calcification (Matthews, Owens, Edmundowicz, Lee, & Kuller, 2006) and nocturnal blood pressure (Mezick et al., 2010). Research using a similar measure has also found evidence that having valued goals is important to health and wellness. The Purpose subscale of the Psychological Well-Being Scales (Ryff, 1989) attempts to assess the degree to which individuals have valued goals and a sense of aims and objectives in their lives.<sup>3</sup> Scores on this Purpose subscale are positively associated with well-being and mental health variables such as autonomy, mastery (Ryff, 1989), anxiety, and depression (Smith & Zautra, 2004), and negatively associated with mortality (Boyle, Barnes, Buchman, & Bennett, 2009; Hill & Turiano, 2014). These studies suggest that understanding the degree to which individuals have valued goals may be important to understanding health and wellness.

The work of other researchers who have focused on the quality of the motivation behind individuals' goals also highlights the

perceived value of one's goals as important (e.g., Emmons, 1986; Little, 1999; Sheldon & Elliot, 1999). These researchers have examined the degree to which one's goal pursuits are intrinsically motivated, are important to the individual, and represent the individual's core values. Findings show that the pursuit of goals that are perceived by the individual to be of value and importance leads to well-being and flourishing (Emmons, 1986; Little, 1999). The self-concordance model (Sheldon, 2002; Sheldon & Elliot, 1999) lays out a formal explanation of such relationships that have been found between goal pursuit and well-being. The model states that goal pursuit will lead to well-being to the extent that individuals are pursuing goals that are congruent with their core interests and values. According to the model, goal pursuit provides a sense of fulfillment to the degree that one's goals reflect one's true desires. Studies based on the self-concordance model have supported such assertions, showing that self-concordance of goals—the degree to which one's goals are concordant with one's interests and values—positively predicts well-being (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001).

In addition to discussing how essential goal engagement is to health and wellness, Carver and Scheier (1998) also use their self-regulation model to speculate on the potent negative effects of a lack of goal engagement. They write, ". . . goal engagement is a *necessity* of life. There must be goals, striving toward one end or another, for life to continue. Without goal engagement, life ceases" (Carver & Scheier, 1998, p. 346). According to them, the lack of valued goals that can be pursued leads to emptiness, disengagement, and poor outcomes. Successful self-regulation therefore, is a continuous process of finding and pursuing valued goals, and switching to new valued goals when the existing goal is completed or becomes unattainable. The emerging literature on goal adjustment, which examines how individuals make changes to their goal pursuit in the face of blocked goals, adds credibility to such views (Wrosch, Scheier, Carver, & Schulz, 2003a). This literature suggests that reengaging with new goals after disengaging from blocked goals is beneficial for individuals' sense of well-being (Wrosch et al., 2003a; Wrosch, Scheier, Miller, & Carver, 2012; Wrosch, Scheier, Miller, Schulz, & Carver, 2003b).

In summary, the literature on goals presents the following picture. Individuals' goals are central to understanding their behavior (Carver & Scheier, 1998). High-level goals, which represent abstract ideals regarding desired states, will generate and motivate pursuit of more concrete, everyday goals. The value of a goal determines the degree to which it drives and motivates behavior, and individual differences in having valued goals in life may be associated with health and wellness (Boyle et al., 2009; Scheier et al., 2006). These tenets conveyed by the goal literature are central to understanding purpose and the role it plays in individuals' lives.

**Implications for understanding purpose and future research on it.** The relevant literature suggests that purpose conveys important information about individuals' underlying goal hierarchies, and this information may have significant implications for phenomena such as goal adjustment, health, and well-being (Carver & Scheier, 1998; McKnight & Kashdan, 2009). The purpose subcon-

<sup>3</sup> Note that although the Life Engagement Test and the Purpose subscale of the Psychological Well-Being Scales are similar, an inspection of their items demonstrates that they do not map on to one another exactly.

struct conveys the degree to which an individual has valued, higher order goals that reflect his or her sense of identity. That is, those higher in purpose may have goal hierarchies, the highest levels of which are more developed and more specified; put simply, they have a clearer sense of their higher order goals. Such valued, higher order goals can generate and motivate the pursuit of desirable lower level goals in individuals' daily lives (Carver & Scheier, 1998). In other words, people with more purpose would be expected to pursue and engage in more valued activities on a day-to-day basis. Having a clear sense of one's higher order goals may also be related to individual differences in how well people manage the many experiences in life where they have to adjust their goals and turn to new goals (e.g., a cancer patient who can no longer engage in goals that require physical fitness; Carver & Scheier, 1998; Hirsh et al., 2012). Existing research has also shown that aspects of people's goals, such as the degree to which one's goals are valued and intrinsically motivated, are related to important variables such as health and wellness (Emmons, 1986; Sheldon & Elliot, 1999). The purpose subconstruct powerfully captures variance relevant to such aspects of people's goals and therefore may help predict and understand many phenomena of interest to researchers.

## Mattering

Mattering refers to the degree to which individuals feel that their existence is of significance, importance, and value in the world (Becker, 1973/1997; King et al., 2006). To experience mattering is to feel that one's life has some profound and lasting importance (Baumeister, 1991). To experience a low sense of mattering is to feel that one's existence carries little significance and that one's nonexistence would make no impact on the world. Meaning frameworks with certain qualities can contribute to a sense of mattering: meaning frameworks that suggest that one's life is in fact of significance and importance in the world, and those that can help make sense of potentially unsettling situations and help one conclude that one's life does matter (e.g., the belief in an afterlife may help an individual on his deathbed conclude that his life matters; Becker, 1973/1997; Greenberg et al., 1986).

Of the three subconstructs of MIL, mattering has received relatively less empirical attention (George & Park, 2014). For this reason, consideration of mattering requires more speculation than comprehension and purpose. We therefore start the discussion on mattering by specifying in more detail the context within which mattering can be seen as playing a role in people's lives. Then we discuss TMT (Greenberg et al., 1986), showing that the central tenets of TMT are reflected in the present views on mattering. Finally, we discuss the self-enhancement motive (Alicke & Sedikides, 2009; Sedikides & Gregg, 2008), arguing that the research on self-enhancement too is consistent with the present views.

### Mattering and the Existential Predicament of the Human Animal.

You are not special. You are not a beautiful or unique snowflake. You're the same decaying organic matter as everything else.—Tyler Durden, *Fight Club*

The mattering concept can be understood within the following views regarding human life. Human beings are thrust into a pecu-

liar situation where they have to reconcile two conflicting views of their lives (Becker, 1973/1997; Greenberg et al., 1986). The first view is of their lives as mattering in the world: a view that suggests that their existence is unique, special, important, and of a great deal of value. The second view, a less pleasant one, is one that is inherent in the human condition: a view that suggests that one's existence is not unique or special in the world, that one can easily be replaced, that one serves no grand role or function that is ultimately important, and that the value of one's life in the world is no higher than that of a worm or an insect. Amid these two conflicting views, it can be assumed that people prefer to gain and maintain a view of their lives as mattering in the world (Becker, 1973/1997; Greenberg et al., 1986).

Existential scholars have long discussed the problem of the apparent lack of inherent value to human life (e.g., Becker, 1973/1997; Camus, 1955). There exists no objective evidence to suggest to us that our lives (or the lives of billions of other human beings) matter in the universe. Psychological approaches to existential concerns also discuss the human struggle to feel that one's life matters in the face of a lack of evidence for it (e.g., Baumeister, 1991; Frankl, 1959/2006; Pyszczynski, Greenberg, Koole, & Solomon, 2010; Yalom, 1980). The human animal has enough awareness to look at the larger scheme of things and the universe and evaluate just how valuable s/he is in it. The question, "Does my life matter in the world?" seems like it would (or should) be a pernicious problem!

Note that mattering in this context is not simply about whether we matter in specific life domains (e.g., Do we matter to ourselves? Do we matter within our close relationships? For research on interpersonal mattering, see Elliott, Kao, & Grant, 2004; Rosenberg & McCullough, 1981). Rather, mattering directs attention to the overall evaluation of the worth and value of one's life in the world. Becker (1973/1997) discussed such a more broad sense of mattering, stating that humans strive for a sense of value that lasts across time and context. He suggested that we like to feel a sense of "cosmic specialness"—we yearn to feel that our lives matter in the world and in the "eyes of the cosmos." We do not want to think that our lives are merely important to us; rather we hope that there is some profound and lasting importance to our lives (Baumeister, 1991, p. 61). In fact, in our own research, we have had participants rate items such as "Whether my life ever existed matters even in the grand scheme of the universe" and "Even a thousand years from now, it would still matter whether I existed or not" on a seven-point response scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). The mean score was 4.68 and 4.45, respectively, with less than 30% of people disagreeing with either item (George & Park, 2016).

It is interesting to note that many existential realities of human life seem capable of suggesting to us that our lives do not matter in any grand scheme and that the universe is indifferent to our existence. These existential realities include many things: the universe existed long before us and will exist long after us; our actions and our existence appear spatially and temporally constrained to an incredibly miniscule part of an incredibly large world; myself and the other 8 billion people on the planet will die within the next century and will be replaced by another 8 billion or more; the people closest to us die, and the world goes on completely unconcerned; people seem to die or get gravely injured with no apparent justification for their misfortune; the memories of

our loved ones fade over time from our own minds; the most venerated of our life bonds, such as marriages, seem to end abruptly. Such unpleasant realities of life could cause one to have the sense that one's life does not matter in the world (Yalom, 1980).

But of course, most people do not go through life with the sense that their lives do not matter; neither do they continuously question whether their lives matter. Rather, most people assume their lives matter (Baumeister, 1991). Our lives and the most valued aspects of our life take on a very special value to us, and more importantly, we assume this value to exist outside of us, to be objectively true to some degree. To us, our spouses, our children, our lives, are all important, and we do not typically stop to think how unimportant it all is in the larger scheme of things. To the contrary, the things most important and closest to us seem to get imbued with an objective sense of specialness, uniqueness, and permanence. Becker (1973/1997) suggested that this sense of specialness, uniqueness, and permanence echoes throughout our lives and throughout human society. On children's birthdays, they are told how unique and special they are and how lucky the world is to have them. During weddings, toasts are given regarding the unique and eternal love that the two soul mates have found in one another. At funerals, eulogies state how the world has lost a valued, special, and truly unique individual, and how the dearly departed will live on forever in the minds of those they have touched.

It is worth speculating on the adaptive role played by a sense of mattering. It may be adaptive to hold the view that one's existence, and the important things in one's life, have some profound and objective value in the world. There is something very deflating about the quote at the beginning of this section. The suggestion that we are not "beautiful and unique snowflakes" and that we are the "same decaying organic matter as everything else" is simply not a comforting and pleasant view of our lives. It is likely much more conducive to our mood to maintain the sense that we are significant and important (Baumeister, 1991). Further, a sense of mattering may be particularly adaptive during the most difficult times of our life such as during bereavement and illness. During difficult times, it may be particularly helpful to have more pleasant views of life. For example, the trauma literature has discussed how when trying to cope with a traumatic event, people often do not consider the event pointless and as without value (Janoff-Bulman & Yopyk, 2004). Rather, people often look for a sense of significance and positive value in the event in order to better cope with it (Davis, Nolen-Hoeksema, & Larson, 1998). In a similar way, during the most difficult times in our lives, maintaining a sense of mattering may be much more comforting. In the past, researchers have argued that positive illusions such as an exaggerated sense of control and optimism facilitate coping and mental health (Korn, Sharot, Walter, Heekeren, & Dolan, 2014; Taylor & Armor, 1996; Taylor & Brown, 1988). Along the same lines, the "illusion" of mattering—the illusion of uniqueness, specialness, and value—may be conducive to helping us get by and cope.

**Terror management theory and mattering.** The present view of mattering overlaps to a substantial degree with the perspective of TMT. TMT views much of human behavior as directed at gaining a "sense of enduring significance" (Greenberg & Arndt, 2012, p. 403) and value in the world in order to cope with anxiety about mortality (Greenberg et al., 1986; Greenberg, Solomon, & Arndt, 2008). TMT posits that the human awareness of death

generates anxiety and fear, and we deal with this anxiety by striving to feel a sense of significance in the world. TMT states that gaining a sense of symbolic immortality, the "sense that one is a valuable part of something larger, more significant, and longer lasting than one's individual existence" (Kesebir & Pyszczynski, 2014, p. 59) assuages death anxiety. If we can feel that our lives have value beyond our physical selves, then death seems less problematic, as we can transcend it.

According to TMT, we derive symbolic immortality from our internalized "cultural worldviews" (to use the vocabulary of the current article, our meaning frameworks). Our worldviews provide standards for what makes an individual a person of value in the world, and we strive to live up to such standards to earn this sense of value (Greenberg et al., 1986; Greenberg & Arndt, 2012). Doing so assuages the fear of death and allows us to live our lives with more equanimity. Greenberg and colleagues (1986) wrote,

... we propose that culture reduces the terror engendered by awareness of our vulnerability and mortality by providing a shared symbolic conception of reality that imputes order, predictability, significance, and permanence to our lives. This cultural drama provides the possibility of leading a meaningful and enduring existence; equanimity is attained only when a person believes that she or he is a valued participant in such a cultural drama. (p. 206)

From the TMT perspective, much of human behavior can be understood as (a) efforts to maintain one's meaning frameworks (cultural worldviews) that provide a sense of significance and (b) efforts to live up to the standards of value prescribed by such meaning frameworks. Thus, the TMT literature—a substantial body of literature that reportedly includes over 500 experiments (Pyszczynski, Greenberg, & Arndt, 2012)—is based on the idea that individuals strive for a sense of value and significance in the world.

It is this sense of value and significance in the world that is referred to in the present article as mattering. We have suggested here that the extent to which people feel their lives matter warrants empirical attention as it could be systematically related to a host of important variables. The TMT literature is built on a similar assertion. TMT sees human behavior as fundamentally motivated by a desire to secure a sense of value (as a way of coping with death anxiety; Greenberg et al., 1986; Greenberg & Arndt, 2012). Thus, the TMT literature is consistent with the present view that people prefer to feel a sense of mattering, that this preference may play a significant role in people's lives, and that therefore, research on mattering may prove fruitful.

**The self-enhancement motive and mattering.** The literature on the self-enhancement motive can also be seen as supportive of the view presented here that people are inclined to feel a sense of mattering, and that this preference for mattering may be systematically related to important variables. The literature on the self-enhancement motive has shown over the years that people tend to see themselves in more positive ways than is warranted (Alicke & Sedikides, 2009; Sedikides & Gregg, 2008; Taylor & Brown, 1988). Whether it is regarding one's skills and abilities, attractiveness, or morality, people perceive themselves more favorably than what objective standards would suggest. Furthermore, people overestimate the amount of control they have and are overly optimistic. This tendency for more positive self-conceptions appears to influence memory (Skowronski, 2011), perceptions of

time (Wilson & Ross, 2011), and information processing (Critcher, Helzer, & Dunning, 2011). People appear to perceive reality in ways “that place themselves, their characteristics, and their place in the world in a more favorable light” (Critcher et al., 2011, p. 71). Drawing on this literature, Sedikides and Gregg (2008) posited that *self-enhancement*, which is the tendency to see oneself in a positive fashion, is a “fundamental part of the human nature” (p. 102).

We suggest that the literature on the self-enhancement motive supports the idea that people are motivated to gain and maintain a sense of mattering. If self-enhancement is a fundamental part of human nature (Sedikides & Gregg, 2008), then this motive is likely to also manifest regarding individuals’ sense of mattering. The self-enhancement motive is thought to manifest in many different contexts such as social comparisons, beliefs regarding one’s abilities, and attractiveness (Alicke & Sedikides, 2009). To such different manifestations, we add mattering, suggesting that people prefer to see themselves as having importance and value in the world. We assert that just as people like to evaluate positively their capabilities and important aspects of their self (Sedikides & Gregg, 2008), people prefer to evaluate positively how much they matter in the world. This self-enhancement motive manifests because the view that one’s existence does not matter contradicts the fundamental desire to see oneself in a positive fashion.

The self-enhancement literature also highlights the possibility of research uncovering interesting and important findings regarding how people gain and maintain a sense of mattering. If people are inclined to maintain a sense of mattering, how is it that they do so, especially when the existential context of their lives is such that there is limited evidence to suggest that their lives do matter? The self-enhancement literature has shown that in order to see oneself in a positive manner and preserve one’s positive self-views, individuals engage in various strategies such as feedback preferences and expectations, channeling of attentional resources, strategic information search, and biased information processing (Sedikides, 2012; Sedikides & Gregg, 2008). Such findings highlight the plausibility of similar discoveries regarding how people gain and maintain a sense of mattering. Do people maintain their sense of mattering through strategies such as biases in attention and information processing? For example, do they overestimate the uniqueness of their lives, underestimate the likelihood that their spouse can be just as happy with numerous other potential partners, or direct attention away from information that shows that their actions have limited impact in the universe?

**Implications for understanding mattering and future research on it.** We suggest that the discrepancy between the unpleasant existential realities of life that suggest that one’s life does not matter (Becker, 1973/1997; Yalom, 1980), and individuals’ inclination to maintain a sense of mattering (Greenberg et al., 1986) is one that warrants future research. Research on mattering may shed light on many of the behaviors that people engage in, and the ways in which they respond to many situations in life that threaten a sense of mattering. First, research may uncover the types of information and situations that may serve as threats to people’s sense of mattering. Research may uncover if/how quotidian circumstances (e.g., passing a cemetery, viewing pictures of the vastness of the universe) and substantial experiences (e.g., experiencing the death of a loved one, terminal illness, being subject to trauma) may impact individuals’ sense of mattering. Second, research may uncover, how is it that people deal with some of the

harsh realities of life such as mortality and transience and still maintain the sense that their lives matter in the world. It may well be that individuals employ many strategies such as biased information processing and attention allocation to preserve their levels of mattering. Third, research may reveal many behaviors that are motivated partly by the desire to maintain a sense of mattering (Becker, 1973/1997). For example, research may show that people volunteer, join religious groups, or join various causes as a way to maintain levels of mattering. In fact, some researchers have applied such a perspective to understanding the motives behind suicidal terrorism, arguing that the “quest for significance” could drive one to sacrifice oneself for a greater cause (Kruglanski, Chen, Dechesne, Fishman, & Orehek, 2009). Finally, research may show that individuals’ sense of mattering buffers the impact of existential threats (e.g., mortality reminders) or serve as “positive illusions” that can facilitate better adjustment to difficult life circumstances.

### Putting the Pieces Together: The Overall MIL Construct

Although a multidimensional view of MIL is useful, conceptualizing the three subconstructs as entirely separate and orthogonal would be inaccurate. Comprehension, purpose, and mattering are interconnected in complex ways and therefore, they can be conceptualized as constituting an overall MIL construct (King et al., 2006; Reker & Wong, 1988; Steger, 2012a). Thus, the constructs are best thought of as distinct but closely related.

The experiencing of comprehension, purpose, and mattering may mutually influence one another (Reker & Wong, 1988; Steger, 2012a). Low levels of one subconstruct may be reflected in the experiencing of the others. For example, a low sense of understanding regarding one’s life would make it difficult to have a sense direction in one’s life, a lack of direction would make it difficult to feel that one is living one’s life in a significant manner, and the perception that one is not living a life that is significant could undermine one’s sense that life makes sense. Similarly, high levels of each dimension are likely to be reflected in the others. For example, when one’s life is experienced as significant, it may be easier to experience life as making sense and as having direction. Thus, the experiencing of each of the subconstructs may impact one another. There may even be synergy among the subconstructs such that the combined experience of the three dimensions reinforces and intensifies the experiencing of each one.

The comprehension, purpose, and mattering subconstructs are also interrelated due to the common meaning frameworks that contribute to them, as well as the common life events that impact them (Baumeister, 1991; Koltko-Rivera, 2004; Park, 2010). Various meaning frameworks and life events may not solely contribute to a single subconstruct and may be linked to more than one subconstruct. For example, consider an individual holding the meaning framework, “being a good parent is very important.” This proposition directs the individual to form his or her life goals around being a good parent, and thus provides a sense of purpose. However, in addition, it may secondarily contribute to comprehension, as orienting one’s life around being a good parent may make much sense to the individual, and provide a sense of coherence and understanding regarding his or her activities and pursuits. Further, the proposition may provide mattering as it helps the individual

feel that s/he is living a life in pursuit of something that is of value (i.e., being a good parent). Similar to meaning frameworks, various life events may also impact more than one subconstruct of MIL. For example, a highly stressful life event such as suddenly becoming disabled may lower the sense of understanding regarding one's life, disrupt one's sense of direction and goals, and lower the sense that one's existence matters (Park, 2010).

### Differential Roles of the Subconstructs: The Example of Well-Being Outcomes

A tripartite view emphasizes considering the distinct natures of comprehension, purpose, and mattering (Martela & Steger, 2016). Thus, in generating theoretical accounts of MIL in various contexts (e.g., MIL's role in adjustment, religious behaviors, among the terminally ill), researchers should outline the specific roles each subconstruct plays, and how such roles are similar or different from one another. We believe integrating the tripartite view with the broader meaning literature provides a rich theoretical context in which to consider such differential roles.

In this section, we consider such differential roles in the context of well-being. We discuss well-being outcomes given that it is a topic that is often studied in relation to MIL (Steger, 2012a) and serves as a useful illustration of how differential roles can be hypothesized for each subconstruct. Due to their distinct natures, the subconstructs may impact well-being primarily via different processes.

As discussed, individuals high in comprehension may have more consistent and coherent meaning frameworks that provide a sense of understanding regarding their lives and life circumstances. High comprehension may therefore be related to better well-being via the following:

- **Minimized uncertainty:** As a result of having more coherent and consistent meaning frameworks that provide a sense of understanding, those higher on comprehension may experience less uncertainty on a day-to-day basis (Hirsh et al., 2012; Van den Bos, 2009). Uncertainty can be an aversive experience that may be detrimental to well-being.
- **Greater sense of clarity:** Those higher on comprehension may experience a greater sense of clarity as they navigate through their lives (Gawronski & Strack, 2012; Proulx & Inzlicht, 2012). They may be able to more easily discern the best actions to take and choices to make, which may positively contribute to their well-being.
- **Better ability to make sense of challenging life circumstances:** Higher comprehension may give rise to a better ability to make sense of and manage difficult life circumstances (i.e., stressors) as they arise (Park, 2010). This ability may lead to greater well-being.

Higher purpose is characterized by having higher order goals that one is committed to and that are congruent with one's values and identity. Purpose may therefore impact well-being via the following:

- **Greater day-to-day pursuit of valued goals:** Being committed to higher order goals may give rise to greater pursuit of valued, lower order, daily goals (Carver & Scheier, 1998; Klinger, 1977). Pursuit of more valued daily goals would be expected to lead to higher levels of well-being.

- **Greater positive emotions:** Making progress on one's goals and achieving those goals generates positive emotions (Carver & Scheier, 1998; Klinger, 1977). The greater goal pursuit characteristic of people high on purpose may transpire into greater positive emotions.
- **Greater concordance between pursued goals and core values:** Those with higher purpose are likely pursuing goals that are more congruent with their core values and identity. Research on the self-concordance model (Sheldon, 2002; Sheldon & Elliot, 1999) suggests that concordance between one's goals and values are an important determinant of whether goal pursuit leads to well-being.
- **Better ability for goal adjustment:** As a result of having more clearly specified higher order goals, those with purpose may be better able to adjust their lower level goals in the face of obstacles (i.e., adapt ongoing goals or giving up and identifying alternative goals that can be pursued; Carver & Scheier, 1998). Being able to effectively adjust goals is thought to be crucial for well-being (Wrosch et al., 2003a).

Individuals higher on mattering feel to a greater degree that their existence is of significance, importance, and profound value in the world. Mattering may be related to well-being via the following:

- **Buffered death (or existential) anxiety:** As indicated by TMT (Greenberg et al., 1986, 2008), the sense of significance and value characteristic of mattering may buffer the ever-present fear of death.
- **Greater equanimity and security in the face of stimuli that threaten one's sense of existential value:** Just as individuals frequently face threats to their sense of self-worth (Alicke & Sedikides, 2009), they may often experience threats to their sense of value and worth in the world. Higher mattering may be a resource that provides more equanimity and comfort in the face of such threats.

### Measurement of MIL in Light of a Tripartite View

In light of the tripartite view, multidimensional measurement approaches that specifically and individually assess comprehension, purpose, and mattering are crucial. Such measures would allow for development and examination of hypotheses specific to each subconstruct. Unfortunately, most widely used measures in the MIL literature tend to be unidimensional, lumping together the different tripartite subconstructs into a single score. For example, the widely used Presence subscale of the MLQ (Steger et al., 2006) and the Purpose in Life Test (Crumbaugh & Maholick, 1964) both measure meaning unidimensionally, deriving a single omnibus score.

Several multidimensional measures of MIL exist. Unfortunately, however, most of these measures do not correspond well to a tripartite view and are based on different conceptualizations of MIL. One example is the Life Regard Index—Revised (Debats, 1998), which has two subscales—titled, a Framework for Living and a Sense of Fulfillment—neither of which align with the tripartite subconstructs.

Two existing multidimensional measures may appear to be good choices in assessing the tripartite subconstructs because they have subscales that roughly correspond to the subconstructs. However, a close examination of the items suggests otherwise. The first of

these scales is the Life Attitude Profile—Revised (Reker, 1992), which has several subscales, two of which are very similar to the subconstructs of comprehension and purpose. However, the items that form these subscales show that they may not specifically assess the intended subconstructs. For instance, the subscale that corresponds with comprehension has items such as, “I have been aware of an all-powerful and consuming purpose toward which my life has been directed,” “I have a philosophy of life that gives my existence significance,” and “In thinking of my life, I see a reason for my being here.” Another multidimensional measure, the Meaningful Life Measure (Morgan & Farsides, 2009), similarly has subscales that roughly correspond with the tripartite subconstructs. However, again, the subscales do not specifically target a single subconstruct. For instance, the Principled Life subscale of this measure seems to correspond with comprehension, yet has items such as “I have a philosophy of life that really gives my living significance” and “I hold certain values that I feel greatly enrich my life with significance.” Without subscales and items that specifically target comprehension, purpose, and mattering, it would be difficult to capitalize on the tripartite view of MIL (Martela & Steger, 2016).

Because of the lack of existing measures, we recently developed a scale that adopts a tripartite view. Our Multidimensional Existential Meaning Scale (MEMS; George & Park, 2016) was developed to specifically and individually assess comprehension, purpose, and mattering. Items were generated that primarily target each of the three subconstructs. Sample items for comprehension include “My life makes sense” and “I understand my life”; for purpose, “I have certain life goals that compel me to keep going” and “My direction in life is motivating to me”; and for mattering, “I am certain that my life is of importance” and “Whether my life ever existed matters, even in the grand scheme of the universe”. Exploratory and confirmatory factor analysis of the MEMS items yielded results consistent with the three-part conceptualization of the tripartite view. The factor analyses suggested that underlying the items are three correlated factors that correspond to the comprehension, purpose, and mattering subconstructs (George & Park, 2016).

The three subscales of the MEMS—comprehension, purpose, and mattering—have been examined in regard to their relationships with three other MIL scales (George & Park, 2016). The first two were established measures of meaning: the Presence subscale of the MLQ (Steger et al., 2006) and the Perceived Personal Meaning Scale (Wong, 1998). Both these measures employ a unidimensional strategy where a single score represents MIL. The third scale was a composite scale that was created by compiling eight widely used meaning in life judgment items (see Heintzelman et al., 2013 for a prior successful use of this approach). In other words, all of the items on the scale used some form of the word *meaning* in it and left it up to participants to rely on their subjective judgments of what *meaning* means when rating the items. Sample items on this composite scale included “My life is meaningful” and “I have found a really significant meaning in my life.” The composite MIL judgments scale was created to examine how the tripartite subconstructs relate to MIL judgments.

Regression and relative importance analyses were used to examine how the three MEMS subscales together predicted the three other scales. Results showed that the MEMS subscales accounted for much of the variance in the three measures ( $R^2 \geq .60$ ).

Furthermore, each subscale of the MEMS accounted for a significant amount of variance even after taking into account the other subscales—in other words, each subscale has unique predictive power, and they are not simply redundant with one another. For example, in predicting the MIL judgments composite scale, the MEMS subscales together predicted an impressive 71% of the variance, of which 29%, 19%, and 24% of the variance could be attributed to comprehension, purpose, and mattering respectively (as indicated by the relative importance analyses). The beta weights also showed that all three subscales were significant unique predictors. Thus, unidimensional measures and MIL judgment items appear to be capturing an amalgam of comprehension, purpose, and mattering, and the MEMS subscales appear to specifically assess each of these subconstructs.

In summary, measures that specifically and individually assess comprehension, purpose, and mattering are necessary to capitalize on the tripartite view. Preliminary data from the MEMS suggests that constructing such measures is possible. Future research should use such tripartite measurement approaches.

### Future MIL Research: Three Categories of Research Questions

We see future research questions on MIL as pertaining to three broad categories and their interrelationships (see Figure 2). These categories include the subconstructs, MIL judgments and feelings, and meaning frameworks. Within the first category of the subconstructs (top panel of Figure 2), we need to better understand the nature of each subconstruct and their interrelationships. Research should identify how closely associated or independent comprehension, purpose, and mattering are to one another (Martela & Steger, 2016). Further, the nomological network around each subconstruct should be identified (i.e., identify relationships with other variables such as well-being, health, self-esteem, goal adjustment, need for structure, coping, resilience, and so forth). Comparing such nomological networks informs us of the ways each subconstruct is similar or distinct from one another. Experimental studies would be useful in determining the factors that differentially or similarly impact the three subconstructs. Developing experimental manipulations that can specifically target each subconstruct would also pave the way for testing of differential hypotheses regarding the subconstructs.

The second category of future research questions pertains to MIL judgments and feelings (Heintzelman & King, 2014; Hicks & King, 2009). Within the second category (bottom right panel in Figure 2), we need to better understand the stability and fluctuations in MIL judgments and feelings, and the factors that impact these fluctuations. More important, do these fluctuations in MIL judgments and feelings correspond to fluctuations in comprehension, purpose, and mattering? Further, do the factors that impact MIL judgments and feelings also impact all three of the subconstructs? Such questions would inform us of the nature in which MIL judgments and feelings are reflective of the subconstructs. What will be crucial to know is if MIL judgments and feelings are (a) reflective of comprehension, purpose, and mattering; (b) are equally reflective of the three subconstructs or if they over or under reflect one of the subconstructs; and (c) if MIL judgments and feelings are reflective of other concepts besides the three subconstructs (e.g., a sense of fulfillment or positive affect). An-

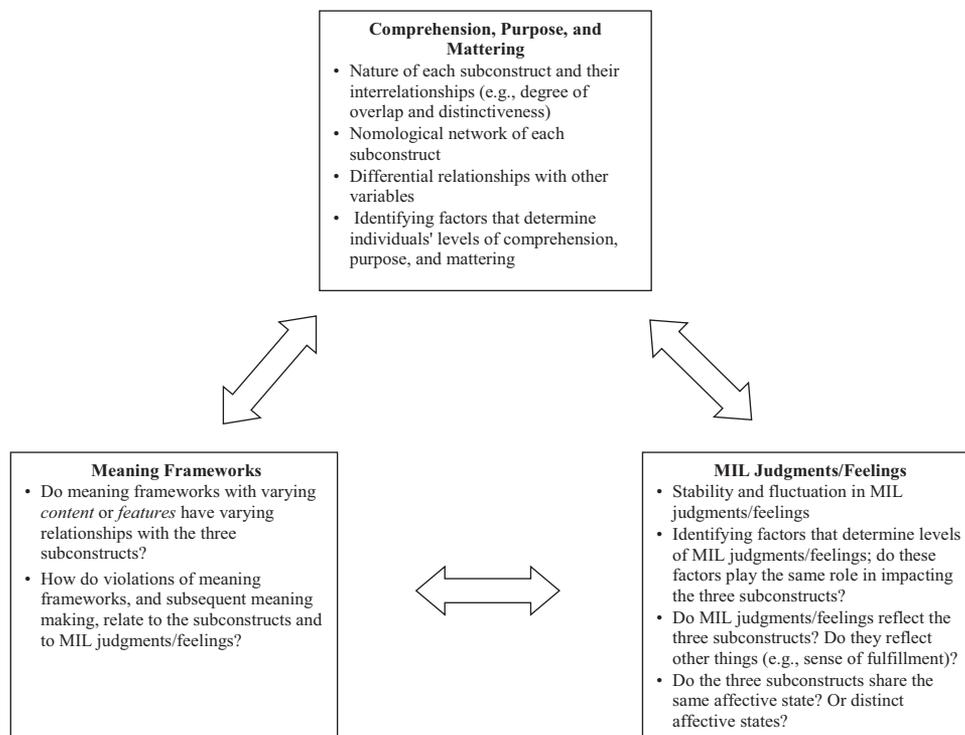


Figure 2. Directions for future research pertain to three broad categories.

other important possibility to consider is if the feeling or affective experience associated with comprehension, purpose, and mattering are different. Following Heintzelman and King (2014, p. 162), we have so far assumed that there is singular common feeling corresponding with the three subconstructs. However, it may be possible to differentiate distinct affective states for each subconstruct.

Finally, the third category pertains to meaning frameworks (Heine et al., 2006; Proulx & Inzlicht, 2012) and how they relate to MIL (bottom left panel in Figure 2). It will be important to explore if meaning frameworks with varying *content* (e.g., varying beliefs regarding God) and *features* (e.g., cohesiveness or strength of beliefs regarding God) may differentially relate to comprehension, purpose, and mattering. It will also be important to examine how violations of meaning frameworks (e.g., occurrence of event that is inconsistent with belief) and subsequent meaning maintenance efforts (e.g., assimilation, affirmation; Park, 2010; Proulx & Inzlicht, 2012) may differentially relate to the subconstructs. Finally, it will be important to see how such relationships with comprehension, purpose, and mattering compare to relationships with MIL judgments and feelings. That is, compared with the three subconstructs, do MIL judgments and feelings show similar relationships with meaning frameworks and meaning maintenance?

### Conclusions

Because of its specificity and conceptual clarity, a tripartite view facilitates integration of MIL research with the broader meaning literature. The broader literature in turn provides a rich theoretical context within which to understand and conduct further research on comprehension, purpose, and mattering. Future research will

benefit from examining how the MIL subconstructs relate to key concepts and principles from the broader meaning literature, and tying them back to subjective judgments and feelings of MIL.

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### Correction to Nilsson and Kazemi (2016)

In the article “Reconciling and Thematizing Definitions of Mindfulness: The Big Five of Mindfulness” by Håkan Nilsson and Ali Kazemi (*Review of General Psychology*, 2016, Vol. 20, No. 2, pp. 183–193. <http://dx.doi.org/10.1037/gpr0000074>), there was an error in the abstract. The second core element of the concept of mindfulness yielded by the analysis was incorrectly listed as “nonjudgmental attitude.” It should be “present-centeredness.” The online version of this article has been corrected.

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