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A Theory of Human Needs Should be Human-Centered, not Animal-Centered:

A Commentary on Kenrick et al.

Selin Kesebir

Jesse Graham

Shigehiro Oishi

University of Virginia

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Selin Kesebir  
Department of Psychology  
University of Virginia  
P. O. Box 400400  
Charlottesville, VA 22904-4400  
[selin@virginia.edu](mailto:selin@virginia.edu)

#### ABSTRACT

Kenrick et al. make an important contribution by presenting a theory of human needs within an evolutionary framework. In our opinion, however, this framework bypasses the human uniqueness that Maslow intended to capture in his theory. We comment on the unique power of culture in shaping human motivation at the phylogenetic, ontogenetic and proximate levels. We note that culture-gene co-evolution may be a more promising lead to a theory of human motivation than a mammalian-centric evolutionary perspective.

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Kenrick and colleagues' renovation of Maslow's (1943a) hierarchy of needs makes a great contribution by basing human needs on the strong theoretical and empirical foundation of evolutionary biology and psychology. In addition, Kenrick et al. consider human needs at three different levels: evolutionary function, ontogenetic development, and proximate inputs. Neither Maslow's hierarchy, nor previous lists of human needs by Murray (1938) and instincts by McDougall (1908/1921) had such strong empirical justification and broad theoretical foundation.

However, because Kenrick et al. have based their analyses on an evolutionary perspective that is not attuned to unique aspects of human evolution, their theory of motivation is animalcentric rather than anthropocentric. Maslow (1943b) presented 13 propositions for a theory of human motivation, one of which was "motivation theory must be anthropocentric rather than animalcentric" (p.89). Maslow intended to build a theory of *human* motivation, not a theory of animal motivation. The point of departure for his theory was that most psychological theories of motivation at that time were too heavily influenced by animal experiments on drives and instincts (see Seward, 1939 for an earlier review of motivation theories). Although these early theories were empirically sound, they focused on hunger and sex drives, leading Maslow to criticize them for capturing only part of human motivation. Kenrick et al.'s theory is remarkable for its generalizability, but by removing the need for self-actualization and treating human uniqueness as an afterthought, they also dispensed with the human pillar of Maslow's pyramid. Their "new" theory feels strangely old to us, for it is reminiscent of the animal-centered theories of motivation popular in the 1930s and 1940s, albeit with much stronger foundations. In one sense, this new theory takes us back to McDougall's (1908/1921) very evolutionarily-minded instinct theory. Although this is not a negative move in and of itself, the renovated pyramid is not true to the original architect's spirit and we believe this to be a drawback.

**The case for a higher-order human need**

To address the limitations of earlier theories of motivation, Maslow (1943a) postulated the need for self-actualization as a uniquely human motivation. He described it as follows:

"Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualization (p. 382)."

Maslow's description of self-actualization recalls Aristotle's (350 BCE/1985) concept of *eudaimonia*, which is often translated as happiness, a well-lived life, and flourishing. Aristotle proposed the concept of *eudaimonia* in an attempt to understand what is truly and uniquely human (Thomson, 1953). If the goal of theorizing and research on motivation is to

gain insights into *human* nature, stripping off the very things that make humans uniquely human seems unadvised.

Both Maslow (1943a) and Murray (1938) based their need theories on the types of goals humans pursue, as opposed to animal drives and instincts. When Maslow created his hierarchy of needs, he intended the higher needs to capture higher-order goals. According to Maslow, the ultimate goal was self-actualization. In Kenrick et al.'s revised hierarchy of needs, parenting is now at the top of the hierarchy. Some researchers have argued against the idea of parenting as an innate human need, in light of findings that some people voluntarily forego parenthood and that couples without children are no less happy (and are possibly even happier) than couples with children at home (see Baumeister, 1991; Stevenson & Wolfers, in press; Veenhoven, 1974). Given the unreliability of birth control methods until very recently in human evolution, it is possible that the need for sex, not a need for parenting, ensured human procreation. Even if we leave the question of an innate parenting need aside, adopting Kenrick et al.'s developmental perspective in which parenting needs come after mating needs are met, it seems appropriate to us to go one step further. Erik Erikson (E. Erikson, J. Erikson, & Kivnick, 1986) postulated the life task of generativity, which is strongly associated with parenting and caring for children and grandchildren, arising after the life tasks of identity formation and the establishment of intimacy. After the life task of generativity, however, he postulated the life task of achieving wisdom: Parenting was not the final need to be fulfilled in this anthropocentric theory of lifespan development. Erikson's theory was based on his clinical observations, but since his time the prominent lifespan psychologist Paul Baltes and his colleagues have conducted numerous empirical studies on wisdom, demonstrating that wisdom is an integral part of optimal human development (see Baltes & Smith, 2008; Baltes & Staudinger, 2000 for reviews).

Besides the need for wisdom, the need for meaning is another candidate for an ultimate human need (Baumeister, 1991). Meaning in life is a significant predictor of happiness (Emmons, 2003; Steger et al., 2006), and loss of meaning in life is related to depression and suicide (Wang, Lightsey, Pietruszka, Uruk, & Wells, 2007; Wong & Fry, 1998). The human need for meaning can't simply be reduced to needs for belonging, status or mating. A person may have high status and a mate, but still suffer from a lack of meaning in life. Nor is the need for meaning tantamount to a need for belonging with other people. Meaning is derived from a sense of embeddedness, belonging, and relatedness (Nakamura & Csikszentmihalyi, 2002). People often find meaning in groups they belong to or their personal relationships, but people also derive meaning from being embedded in cultural meaning systems such as art, religion or scholarly pursuits. These cultural webs of meaning consist of not only communities, but also valued ways of being, knowing and doing. For these reasons, it seems reasonable to postulate the need for wisdom or meaning – if not the need for self-actualization, the cultural generalizability of which is suspect (Baumeister, 1986; Nevis, 1983) – at the top of the hierarchy of human needs.

### **Culture should be a central ingredient of a theory of human needs**

A major advantage of postulating a higher-order need at the top of the need hierarchy is that a need such as wisdom, or meaning, is broad enough to allow for individual and cultural variations in specific pathways and contents. Human reality is complex and full of

individual and cultural variations and a theory of human needs should capture this complexity. The postulation of a broad, high-order need at the top of the hierarchy provides theoretical flexibility, which we consider a strength rather than a weakness, for it allows the leeway to accommodate the complexities of individual and cultural variation.

Both Maslow (1943a) and Kenrick et al. seem to assume that a universal theory of motivation would be more sound than a theory that allows for individual and cultural variations. This, we believe, is because both Maslow and Kenrick et al. underestimate the power of culture in their theorizing of human motivation. Culture is implicated in human needs in multiple ways, and its exclusion weakens a theory of human motivation. For instance, meaning is culturally constructed on innate human foundations. People derive meaning from their cultures (Bruner, 1991; Heine, Proulx, & Vohs, 2006). Connections to cultural systems such as art, science, religion, or one's nation give the lives of many people meaning and purpose. Both meaning and wisdom are closely connected to values and although there is much commonality, different cultures also specialize in different human values (Schwartz, 1994; Shweder & Haidt, 1993). There are cross-cultural differences in the conceptualization of wisdom, too. For example Takahashi and Overton (2005) have noted that the Eastern mode of wisdom stresses the integration of affect with cognition and a reflective conscious experience, whereas the Western approach stresses cognitive capabilities and doesn't much differentiate wisdom from knowledge. Culture, thus, is a critical aspect of higher level human needs (see Heine, 2007; Morling & Kitayama, 2006 for review).

But the influence of culture is not limited to higher-order needs. All human needs are culturally malleable in their content, their strength and in the ways they are satisfied. In other words, humans show very high levels of motivational plasticity—a fact that the entire marketing industry depends upon. Even “basic” needs such as sleep, eating and sex show variability in their expression, as is apparent in cross-cultural differences in where people sleep and with whom (Shweder, Balle-Jensen, & Goldstein, 1995), what and how much people eat, (Rozin, 2002), and how sexual behavior is regulated (Baumeister & Twenge, 2002). Social needs such as affiliation/belonging show a similar variability across cultures. Different conceptualizations of the self across cultures seem to shape social-motivational systems, as is apparent in cross-culturally varying needs for self-enhancement (Heine & Hamamura, 2007), motivation for internal consistency (Heine & Lehman, 1997; Suh, 2002), need for personal control (Morling, Kitayama & Miyamoto, 2003), and motivation to pursue personal vs. relationally-given goals (Iyengar & Lepper, 1999).

All that variability certainly doesn't mean that human needs are infinitely malleable. Cultures that don't address basic aspects of the human motivational system get modified or die out, as exemplified by the extinction of many utopian experiments (Sosis, 2000). Baumeister (2005) has noted that the stronger a biological need, the less modifiable it is by culture. Therefore, female sexuality and fatherhood show more variation across cultures than male sexuality and motherhood (“erotic plasticity,” Baumeister, 2000), presumably because males have stronger sexual motivation and females a stronger motivation to take care of their children. Culture thus sculpts the human motivational landscape within the parameters set by the human material.

### **An evolutionary perspective isn't necessarily at odds with uniquely human needs**

Our emphasis on culture and uniquely human needs shouldn't be read as a negation of an evolutionary perspective. We do not doubt that a hierarchy of human needs should be informed and constrained by evolutionary theory and we fully agree that "no human need can be meaningfully separated from biology" (Kenrick et al., this issue). But we also think that postulating uniquely human needs is not at odds with an evolutionary perspective, if one takes the particularities of human evolution into account. Humans differ from other species in that culture has played a major role in their evolution (Richerson & Boyd, 2005). Moreover, culture is critical in the formation of human phenotypes. These unique aspects of human evolution, we believe, offer great value in explaining the origins of higher-level human needs.

Culture has profoundly shaped the evolution of human psychology by creating the environments that exert selection pressures on humans. Culture-gene co-evolution refers to the process whereby cultural environments change fitness criteria for humans, leading to selection of genes which are adapted better to those cultural environments, leading to further modification of the cultural environment and selection pressures, in a feedback loop (Durham, 1991; Lumsden & Wilson, 1981; Richerson & Boyd, 2005). This means that human needs have evolved in cultural environments. For example, the invention of fire may be responsible for the progressive reduction in the strength of human dentition, along with the availability of pounding, grinding and milling tools (Brace, Rosenberg & Hunt, 1987). These cultural inventions reduced the necessary amount of chewing, and relaxed selection pressures for larger teeth, presumably leading to a change in human physiology. Similarly, domestication of cows led to the evolution of lactose tolerance in some human cultures, and evidence suggests that this change happened independently in multiple populations in the last 7000 years (Tishkoff et al., 2007). Culture, in other words, is a force of human evolution and culture-driven changes in the human genome do not require millions of years, suggesting that many such changes may have become part of human biology in the last couple ten thousand years (also see Hawks et al., 2007 on the recent acceleration of human adaptive evolution).

Given that cultural environments have changed human physiology, they may also have given shape to human psychology. There are indeed various accounts of how culture-gene co-evolutionary processes may have changed aspects of human psychology (e.g. Boehm, 1999; Bowles, Choi & Hopfensitz, 2002; D. S. Wilson, 2002; Henrich, 2004). The final word on the evolutionary origins of many human traits – such as language, culture, arts, religion, and morality – has not been written. We believe that a better understanding of the evolutionary origins of these human traits will give us a more solid basis for a theory of human motivation, and co-evolutionary processes will be key to such an understanding. In the meantime, we don't see any good reason for dismissing higher-order needs as by-products of adaptive processes or automatically subsuming them under one of the needs shared with some other mammals, such as status or belonging, since such a strategy would unnecessarily limit our vision.

## **Conclusion**

Kenrick et al. (2009) make a compelling case for eliminating Maslow's "self-actualization" from the top of the pyramid and replacing it with three mating-related goals. This new hierarchy of needs has the added benefit of applying to most if not all mammals. The drawback, however, is that this hierarchy no longer uniquely captures *human* motivations, as well as the uniquely human malleability of the relative power of different needs at different times and places. We have tried to highlight this malleability by concentrating on the power of culture. An evolutionary perspective, we believe, is not at odds with a uniquely human theory of motivation, since humans are unique in the extent to which they are shaped by culture both phylogenetically, ontogenetically and at the proximate level. Culture-gene co-evolution may be a more promising lead to a theory of human motivation, and to any other efforts to integrate evolutionary theorizing with social sciences, than an evolutionary perspective that focuses on commonalities with other mammals (see Gintis, 2002; Laland & Brown, 2002 for a similar view).

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Author Note

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