

Individual Perceptions of Self-Actualization: What Functional Motives Are Linked to Fulfilling One's Full Potential?

Personality and Social
Psychology Bulletin
2017, Vol. 43(9) 1337–1352
© 2017 by the Society for Personality
and Social Psychology, Inc
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0146167217713191
journals.sagepub.com/home/pspb


Jaimie Arona Krems¹, Douglas T. Kenrick¹, and Rebecca Neel²

Abstract

Maslow's self-actualization remains a popular notion in academic research as well as popular culture. The notion that life's highest calling is fulfilling one's own unique potential has been widely appealing. But what do people believe they are doing when they pursue the realization of their full, unique potentials? Here, we examine lay perceptions of self-actualization. Self-actualizing, like any drive, is unlikely to operate without regard to biological and social costs and benefits. We examine which functional outcomes (e.g., gaining status, making friends, finding mates, caring for kin) people perceive as central to their individual self-actualizing. Three studies suggest that people most frequently link self-actualization to seeking status, and, concordant with life history theory, what people regard as self-actualizing varies in predictable ways across the life span and across individuals. Contrasting with self-actualization, people do not view other types of well-being—eudaimonic, hedonic, subjective—as furthering status-linked functional outcomes.

Keywords

motivation/goals, social cognition, self-actualization, fundamental motives, evolution

Received August 16, 2016; revision accepted May 8, 2017

What would you be doing if you were realizing your highest potential? Would the answer differ if you were a 35-year-old father or a 19-year-old single woman? And would you be doing different activities if you were trying to find meaning in life, seeking pure pleasure, or pursuing happiness and satisfaction?

Maslow's (1943) universal hierarchy of human needs, and specifically the focus on self-actualization (realizing one's full, unique potential) as the pinnacle of human motives, has been a highly appealing and robust cultural meme. Although Maslow's classic paper was published nearly 80 years ago, it has had lasting impact (e.g., Ackerman & Bargh, 2010; Myers, 2009). Since the year 2000, over 350 scholarly books and articles have been published with the term *self-actualization* in the title, and many more discuss self-actualization in the text (e.g., Diener & Lucas, 2000; Kenrick, Neuberg, Griskevicius, Becker, & Schaller, 2010; Peterson, Park, & Seligman, 2005). Self-actualization remains popular with the general public as well; well over 50 *New York Times* articles published in the last 5 years contain the term.

Despite widespread public interest in becoming actualized, little research has explored people's perceptions of what exactly they would find self-actualizing. That is, what do people believe they would be doing if they were realizing their own, unique potentials? Whereas the traditional view of self-actualization is that it is “above” or divorced from

“baser” biological and social needs, a modern functional take on self-actualization would begin with the assumption that few, if any, universal drives are truly independent from such needs. Rather, if self-actualizing is a universal drive, it may promote fitness-relevant biological and/or social motivations (e.g., functional, fundamental motives such as seeking status, finding mates, caring for kin). Here, we examine lay perceptions of self-actualization, while also testing specific predictions about self-actualization derived from a functional perspective. We ask the following questions: (a) What functional outcomes might the pursuit of self-actualization be furthering? (b) Might the functional motives that people link to their self-actualizing vary systematically, concordant with predictions from life history theory? (c) Is self-actualization uniquely linked to particular functional motives, or do people view other types of personal fulfillment (i.e., eudaimonic, hedonic, and subjective, well-being) as also connected to those very same functional motives?

¹Arizona State University, Tempe, USA

²University of Iowa, Iowa City, USA

Corresponding Author:

Jaimie Arona Krems, Department of Psychology, Arizona State University, 950 S. McAllister St., Tempe, AZ 85287-1104, USA.

Email: jaimie.krems@asu.edu

What Is Self-Actualization?

In a classic paper in *Psychological Review*, Abraham Maslow (1943) developed the idea of a universal hierarchy of human needs. Maslow's theory was influenced by comparative psychologists, such as his advisor Harry Harlow (cf. Harlow, 1953), and Maslow's theory was, as Maslow himself put it: ". . . in the functionalist tradition of [William] James and [John] Dewey . . ." (p. 371). Maslow took issue with contemporary behaviorist notions, explicitly disagreeing with the prevailing tendency to view "the hunger drive (or any other physiological drive) . . . as a centering point or model for a definitive theory of motivation" (p. 370). Instead, Maslow held that humans had multiple, distinct motives, and that human motives were different from those of rats (which were the primary subjects in many contemporary experiments on learning and motivation). Maslow proposed that human needs could be arranged into a "hierarchy of prepotency," with basic physiological needs (such as thirst and hunger) taking priority over safety needs, which, in turn, took priority over social needs (for affection and then esteem from other people). Once all of these physiological and social needs were met, Maslow proposed that people would focus on "self-actualization," a term borrowed from biopsychologist Kurt Goldstein (1939).

Maslow (1943) used the term "self-actualization" to refer to "the desire to become more and more what one is, to become everything that one is capable of becoming" (p. 382). He wrote,

Even if all these [physiological, safety, and social] 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. (Maslow, 1943, pp. 382-383)

In the intervening years, self-actualizing has remained a popular topic—both within psychological research and also within the wider culture (e.g., Ackerman & Bargh, 2010; Kenrick et al., 2010). Although Maslow's (1943) self-actualization has proved difficult to operationalize (e.g., Jones & Crandall, 1986), scholars have offered operationalizations of self-actualization as having a profound sense of commitment (Gowan, 1972), challenging one's intellectual limits (Kerr, 1985), and having earned recognition in one's field of endeavor (Reis & Callahan, 1989; Walker, Reis, & Leonard, 1992). Still others have attempted to link self-actualization to physical self-efficacy, integrated personality, and self-esteem (e.g., Fitts, 1971; Gowan, 1972).

Less attention has been paid to lay perceptions of self-actualization. That is, what do people believe would realize their own, unique potentials? In the spirit of Diener, Sapyta, and Suh (1998), we believe researchers have much to gain from letting people describe what they are doing when they believe that they are self-actualizing. Understanding which

activities people view as self-actualizing can inform the question of whether pursuing self-actualization is a drive above and divorced from baser biological and social needs, or is actually connected to those biologically and socially relevant needs in potentially fitness-promoting ways.

A Modern Functional Perspective on Motivation and Maslow

Modern functional approaches to behavior integrate theories from evolutionary biology, anthropology, and psychology (e.g., Neuberg, Kenrick, & Schaller, 2010). At the broadest level, such an approach presumes that natural selection has given rise to suites of psychological adaptations that, in turn, drive human goals and behaviors in ways that facilitate reproductive fitness. An evolutionary biologist, for example, presumes that an organism's behavior is neither purely random nor simply formed by its environment alone but is shaped by inherited tendencies that would have facilitated its ancestors' inclusive fitness (i.e., its relative success at passing genes into successive generations via direct reproduction and/or helping kin reproduce and, in turn, helping resultant offspring survive to reproduce).

On this view, no universal human drive can be meaningfully separated from biology; rather, human behaviors and desires arise from universal psychological adaptations, which arose in response to the recurrent challenges humans faced throughout ancestral history. Furthermore, different recurrent challenges would often have required different kinds of solutions, leading humans to develop multiple distinct motivational systems, each tailored to manage these particular kinds of recurrent challenges. In line with Maslow's (1943) contemporary functional approach, recent theory and research support the presumptions of (a) multiple independent motivational systems, that (b) are hierarchical in nature, such that some motives take cognitive priority over others, and that (c) the motives an individual prioritizes shift throughout the life span (e.g., Tooby & Cosmides, 1992; Sherry & Schacter, 1987).

Implications for Self-Actualization

Taking a functional approach to understanding self-actualization means asking what distinct adaptive benefit(s) the pursuit of self-actualization might have facilitated. That is, in what ways might self-actualizing translate into fitness? Drawing on work in the evolutionary social sciences since Maslow's time, Kenrick and colleagues (2010) proposed a "renovated" motivational pyramid, including a hierarchy of fundamental social motives: self-protection (protecting oneself from physical harm), disease avoidance (avoiding disease and staying healthy), affiliation (finding friends and allies), status-seeking (creating esteem and seeking status), mate acquisition (finding and attracting potential mates), mate retention (retaining those mates), and kin care (caring for offspring and other relatives). This "fundamental motives framework" posits a set of

motivational systems arising from the main challenges humans consistently faced throughout ancestral history. In other words, it recasts those needs identified by Maslow (1943) into distinct, functionally relevant motivational drives. Notably, self-actualization was not present in Kenrick and colleagues' renovated pyramid; self-actualization was subsumed under the drive to seek status and esteem.

Implication 1a: Self-actualization is not necessarily a distinct, nonfunctional drive; rather when people pursue self-actualization, they may actually be pursuing the fundamental motive of status-seeking.

Maslow (1943) originally separated a drive to gain status and esteem from self-actualizing. But a functional reading of Maslow's descriptions of self-actualization might suggest that many of the behaviors involved in pursuing one's full potential are linked to status, both directly and indirectly (Kenrick et al., 2010). For example, those behaviors that Maslow commonly offered as self-actualizing—playing a musical instrument, painting a canvas, writing a poem—can be seen as displays of talent and creativity. Such displays may well increase reproductive success, although this linkage need not be conscious. Consider male bowerbirds, who arrange colorful beetle wings and flower petals in ways that entice mates; the birds need not consciously link the desire to decorate a bower to reproductive fitness. Similarly, although a creative human might consciously focus on the intrinsic pleasure associated with producing artistic works, nailing a physically challenging feat, or solving complex scientific problems, the outcome of these endeavors can result in external rewards that facilitate fitness (e.g., respect, fame, riches, reproductive opportunities; Griskevicius, Cialdini, & Kenrick, 2006; Miller, 2000). In line with previous psychological suggestions (e.g., Kenrick et al., 2010; Kerr, 1985), we predict that lay perceptions of self-actualization are linked to functional outcomes—specifically the pursuit of status. We test this prediction in Studies 1 to 3.

Implication 1b: Unlike the pursuit of self-actualization, people may view the pursuits of other types of well-being as furthering alternative fundamental motives.

We would not necessarily predict *a priori* that people would associate status as similarly linked to eudaimonic (finding meaning in life), hedonic (maximizing pleasure and minimizing pain), or subjective (attaining happiness and satisfaction) well-being. For example, for some, finding meaning in life may imply an occupational calling, for which they incidentally gain status in the process, but research on meaning in life has implicated pursuits linked to social relationships (e.g., parenting) rather than status (e.g., Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2012). Rather, the activities that people report doing in pursuit of these distinct types of well-being may be linked to alternative fundamental motives. People's beliefs about what would make their lives meaningful (eudaimonic

well-being) might be more closely linked to caring for children and maintaining social relationships than to the pursuit of status. Likewise, caring for children and seeking status would not seem purely pleasurable pursuits; certainly pursuing status is not without its pains and pitfalls. Hedonic well-being might be more closely associated with mate acquisition (which includes seeking pleasure) and self-protection (which includes avoiding physical pain) than it is with status-seeking. We test these predictions in Study 3.

Implication 2: The fundamental motives potentially furthered by self-actualizing are different for different people; concordant with life history theory, the drive to self-actualize may promote the pursuit of life-stage-relevant fundamental motives.

Maslow (1943) suggested that there are individualized pathways to self-actualization. We draw on life history theory to explore how and why self-actualizing may lead different people to pursue behavior linked to different fundamental motives, and we derive specific predictions about which people may be most likely to view their self-actualizing as tied to which fundamental motives.

From the perspective of life history theory, some individual differences in realizing one's full, unique potential may be linked to life-stage-relevant challenges and opportunities. The life history framework presumes that one's priorities change with development in ways that might facilitate reproductive success (e.g., Kaplan & Gangestad, 2005; Stearns, 1992). This theory assumes that there is a limited amount of time and energy an organism can allocate to tasks such as growth, mating, and investment in offspring or other kin. These limits require trade-offs, which are influenced by multiple factors, including ecological pressures, inherited predispositions, and, importantly, the current developmental stage of the organism. Across individuals, there is great similarity in developmental trajectories (e.g., growth before reproduction, reproduction before parental investment), even as individuals differ in the ways that they allocate resources across their life spans. For example, for most 18-year-olds, attracting mates is typically a more psychologically pressing task than is caring for younger siblings. For individuals who are older, for individuals in established relationships and/or for those individuals who have children of their own, the goal of attracting new mates may be less psychologically pressing than is the goal of maintaining a romantic relationship and/or caring for offspring. And, of course one has to acquire a mate before one can invest effort in either keeping that mate or caring for offspring; acquiring a mate implies previous investment in finding friends and allies and, particularly for men, having gained some status (e.g., Kenrick et al., 2010).

This approach to self-actualization would thus suggest that, because individuals focus on accomplishing different fitness-relevant tasks at different life stages, the particular activities people perceive as self-actualizing are also likely to vary as a function of life stage. In other words, the

fundamental motives that are furthered by self-actualizing might vary as a function of how old the person is, what sex the person is, whether the person is in a committed romantic relationship (vs. seeking one), and whether the person has children (as well as whether those children are younger and thus require more time and parenting effort). For example, for a happily married new father, engaging in activities geared toward finding novel mates is unlikely to feel as self-actualizing as those same activities would be for an unmarried, childless man. Engaging in life-stage-relevant activities that are likely to promote his inclusive fitness (e.g., caring for his young offspring) may feel more self-actualizing. Below, we outline specific predictions as to how life history features might systematically shape which motives people view as being linked to their self-actualizing (i.e., what they would be doing if they were self-actualizing), and we test these predictions in Studies 1 to 3.

Life History Predictions

Age. Age is a ready proxy for life stage, and we examine the extent to which people across a range of ages view the different fundamental motives as being reflected in their self-actualizing. Certain fundamental motives—particularly pursuing status and seeking mates—may be more functionally relevant during adolescence and earlier adulthood. For example, finding a romantic partner is likely to be a highly salient motivation for a typical young adult. Thus, we expect that these motivations will be emphasized more strongly in the anticipated self-actualizing of younger people as opposed to older people.

Sex. Although males and females face many similar challenges and opportunities across the life span, life history demands are sometimes different for the two sexes (e.g., Neel, Kenrick, White, & Neuberg, 2016). In particular, we predict that males would be especially likely to link their self-actualizing to pursuing status. As noted above, particularly for males, achieving status might at once further the distinct motive of acquiring mates (e.g., Griskevicius et al., 2006; Miller, 2000). These emphases on seeking status and acquiring mates might especially be the case for younger males.

Relationship status, presence of children. More direct life-stage markers than age and sex—such as whether one is in a committed romantic relationship and whether one has (young) children—might also affect which fundamental motives could be promoted by pursuing self-actualization. For example, on average, younger people might be more concerned with achieving mate acquisition, but this would not be the case for those young people who are already in committed relationships. Thus, we would expect that people in committed relationships might view mate retention (but not acquisition) as reflected in their self-actualizing, whereas single people might view mate acquisition (but not retention)

as reflected in their self-actualizing. Likewise, we would also expect people who have children to view kin care as reflected in their self-actualizing, and we expect that this will especially be the case for those with younger children, whose care requires greater time and parenting effort.

The Present Research

As widely discussed as self-actualization may be—both within and outside of the academy—there remains some confusion over what exactly people perceive self-actualization to involve. We are unaware of existing empirical work examining lay perceptions of self-actualization. Thus, a first goal of the present work is to examine these lay perceptions. A second goal is to explore whether people view their self-actualization as being linked to outcomes that a modern evolutionary approach would consider functional motives.¹ In this vein, we assess several specific predictions derived from the implications of a functional take on self-actualization. Studies 1 to 3 test whether people view their self-actualizing as linked to the fundamental motive of status-seeking, whereas Study 3 examines whether this proposed link is unique to self-actualization (vs. other types of well-being). Studies 1 to 3 explore the specific predictions implied by life history theory, examining whether the fundamental motives people see as reflected in their self-actualizing vary systematically as a function of their own life history features (age, sex, relationship status, presence of children).

Studies 1 and 2

Method

Participants

Study 1. To assess the broad ideas outlined above, we first recruited undergraduates enrolled at a large Southwestern university. We computed an a priori required sample size to observe effects in mixed-factors ANOVAs across two groups, $f = .20$, $\alpha = .05$, and power = .80, yielding a sample size of 116 participants. We collected data until the end of the given term, yielding 208 undergraduate participants (101 female, 10 gave no sex information). Participants' mean age was 19.45 ($SD = 2.21$), and the range of ages was from 18 to 36 years old. Of participants reporting their ethnic backgrounds, 61% were Caucasian, 14% were Hispanic/Latina, 8% were African American, 6% were Biracial/Multicultural, 2% were Indian, and 1% were American Indian.

Study 2. To include participants ranging in life history features (e.g., parents, older participants), we recruited U.S. participants from Amazon's Mechanical Turk (MTurk). Given effect size information from Study 1, and that we would be testing a larger range of life history features, we sought to double our sample size for Study 2, yielding 517 participants (282 female, two gave no sex information). Participants' mean age was 34.75 ($SD = 12.74$), and the range of ages was from 18 to 74 years old. Of participants reporting their ethnic

backgrounds, 80% were Caucasian, 8% were African American, 7% were Asian American, and 5% were Hispanic/Latina.

Procedure. Participants responded to questions assessing their self-actualizing activities, as well as a number of common demographic and individual difference measures.

Self-actualizing response. We asked participants to write down what the term “self-actualization” meant to them, in their own words. Then we noted that, in psychology, the term “self-actualization” has been used to mean “realizing fully your own potential.” Participants were then instructed to think about this point in their lives—not about their lives 10 or 20 years from now—and to describe, “if you were self-actualizing (i.e., realizing fully your own potential) right now, what would you be doing?” Participants freely responded to this prompt.

Demographic and individual difference variables. Participants then answered demographic questions (sex, age, relationship status, the presence of children, and whether the youngest child was aged 5 and under or 6 and over).

Fundamental motive ratings of self-actualization. After responding to demographic questions, individual difference measures, and various filler questions, participants were asked to view their responses to the first question (i.e., what they would be doing if they were fully realizing their potential) and rate the extent to which each of the fundamental motives was reflected in their previous answer. To this end, participants were shown both their own earlier self-actualization response and also the seven fundamental motivations (with corresponding short definitions, following Kenrick et al., 2010): self-protection (“keeping oneself safe from physical harm”), disease avoidance (“keeping oneself healthy, avoiding illnesses”), affiliation (“making friends and allies, maintaining friendships, being accepted, being part of a group”), status-seeking (“pursuing prestige and/or dominance, being well-regarded by one’s peers”), mate acquisition (“finding one or more persons to have romantic relationships [and/or sexual intercourse] with”), mate retention (“maintaining a romantic relationship with your partner, holding on to your romantic partner”), and kin care (“taking care of your own children [or perhaps nieces, nephews, family in general], spending time with family”). They were asked to rate the extent to which each motivation was reflected in their self-actualization response using a 7-point Likert-type scale (1 = *not at all reflected*, 7 = *strongly reflected*).

Results

Do people view status-seeking as being strongly reflected in their self-actualization?

Study 1. A 7 (fundamental motives) \times 2 (participant sex) mixed-factors ANOVA indicated that not all fundamental

motives were similarly represented in participants’ self-actualization examples. Specifically, analyses revealed a significant main effect of fundamental motives, $F(6, 1122) = 43.40$, $p < .001$, $\eta_p^2 = .188$, but not of participant sex or the interaction of participant sex and fundamental motives ($ps > .38$).

Participants reported that status-seeking ($M = 4.95$; $SE = .14$) was reflected in responses more than any other motivation; this mean was significantly higher than those for any other fundamental motive ($ps < .005$, 95% confidence intervals [CIs] > 0). According to self-ratings, status-seeking is the highest rated fundamental motive, and affiliation was the second highest. There were no significant sex differences in the extent to which any fundamental motive was reflected in self-actualizing responses ($ps > .16$; see Figure 1a).

Study 2. We largely replicate this pattern of results in our larger adult sample. We again conducted a 7 (fundamental motivation) \times 2 (participant sex) mixed-factors ANOVA. There were significant main effects of fundamental motives, $F(6, 3036) = 62.83$, $p < .001$, $\eta_p^2 = .11$, and participant sex, $F(1, 506) = 11.89$, $p = .001$, $\eta_p^2 = .023$, as well as a marginally significant Motive \times Sex interaction, $F(6, 3036) = 2.02$, $p = .060$, $\eta_p^2 = .004$ (see Figure 1b).

As in our undergraduate sample, participants generally reported that status-seeking ($M = 4.23$; $SE = .09$) was more strongly reflected in their responses than any other fundamental motive ($ps < .010$, 95% CIs > 0). Both the relatively high mean and the fact that this mean was significantly higher than those for any other fundamental motive again suggest that individuals link status-seeking to their self-actualization (see examples of individual responses in Table 1).

Unlike in Study 1, there was a sex difference in status-seeking: Men, compared with women, were more likely to rate status-seeking as the primary motive reflected in their responses ($M = 4.47$; $SE = .14$; $ps < .015$, 95% CIs > 0). Women in this sample reported that status-seeking ($M = 4.00$; $SE = .12$) was no more reflected in their anticipated self-actualization than were affiliation ($M = 3.84$; $SE = .12$; $p = .244$, 95% CI = $[-0.11, 0.43]$) and kin care ($M = 3.70$; $SE = .14$; $p = .118$, 95% CI = $[-0.08, 0.67]$) motives.

Taken together, these results provide some support for the hypothesis that people’s pursuits of self-actualization might further the biologically and socially relevant functional goal of gaining status and esteem. These findings also provide support for Kenrick et al.’s (2010) prediction and for other status-linked conceptualizations of self-actualization (e.g., Kerr, 1985; Walker et al., 1992).

Are the fundamental motives people see as reflected in their self-actualization systematically predicted by people’s life history features (age, sex, relationship status, presence of children)?

Do the fundamental motives reflected in self-actualizing vary as a function of participant age and/or sex? Recall that we made several specific predictions regarding age, notably that we expected that, with increasing age, people would report

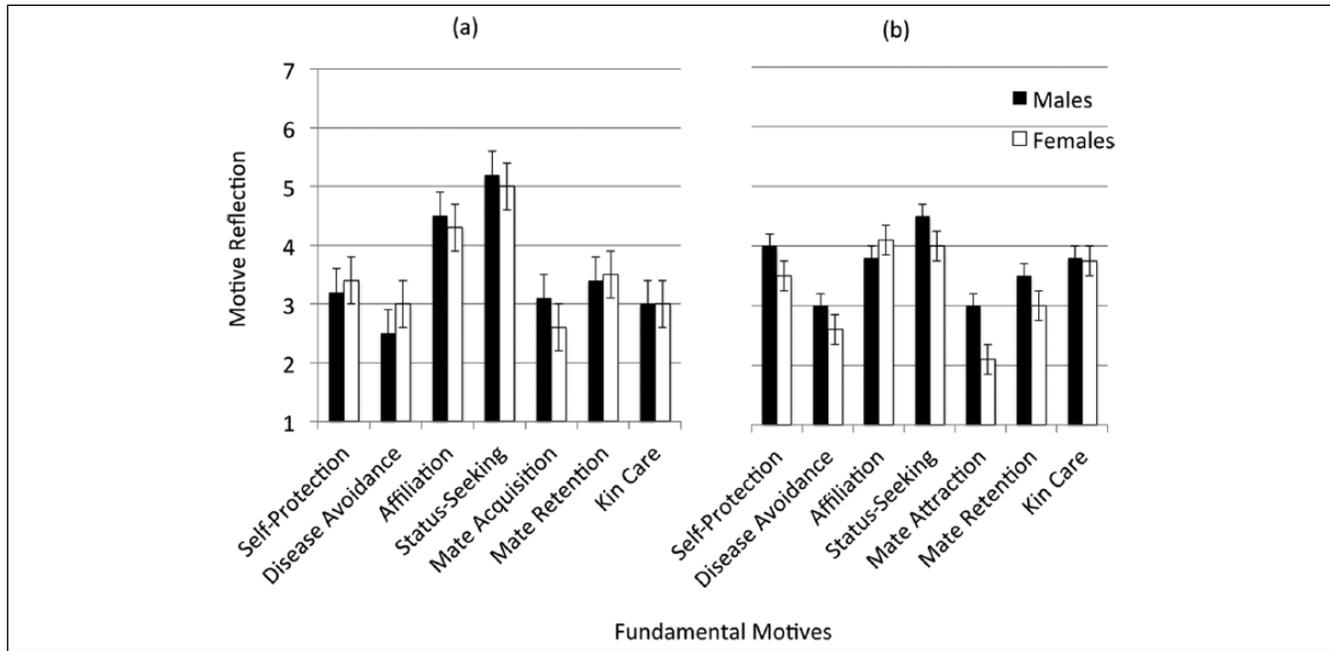


Figure 1. The extent to which men and women report each motive as being reflected in their pursuit of self-actualization in (a) Study 1 (college students) and (b) Study 2 (MTurk sample). Note. Error bars represent 95% confidence intervals. MTurk = Mechanical Turk.

Table 1. A Sample of Representative Responses Scoring Highly on Status-Seeking.

Sample	Representative response
Study 1	“Getting at 4.0 and studying for my exams.”
Study 1	“If it were up to me, I’d be making seven figures and living comfortably without having to go into work every day. I feel that I have the potential to do this later on in life. As of right now I am just trying to reach that full potential by continuing school and staying active in campus life.”
Study 2	“If I were self-actualizing right now, I would have a job in performance—probably theater. I would be a successful, admired, wealthy stage actor, maybe on Broadway. I would also have many strong, close friendships.”
Study 2	“I would just be named CEO of Microsoft.”
Study 2	“Working on my PhD in biology.”
Study 3	“I would be working at Wall Street and making tons of money.”
Study 3	“I would be working in a big corporation making websites and making lots of money. I would be very active in my community people would be looking up to me.”
Study 3	“I’d be writing the great American novel.”

Table 2. Life History Features and the Fundamental Motives Reflected in Self-Actualization.

Life history feature	Selected findings
Age	Status-seeking and mate acquisition motives waned with increasing age (Studies 2 and 3)
Sex	Males emphasize status-seeking more than females did (Studies 2 and 3) Females tend to emphasize affiliation alongside status-seeking (Studies 1-3)
Relationship status	Compared with partnered participants, single participants reported more mate acquisition reflected in their anticipated self-actualization (Studies 1-3)
Presence of children	Compared with those without children, those with children reported that kin care was more strongly reflected in their anticipated self-actualization (Studies 2 and 3)

less emphasis on fundamental motives likely more salient in youth—status-seeking and mate acquisition. We also made a specific prediction about sex (and age)—that men (and par-

ticularly younger men) would be especially likely to report status-seeking and mate acquisition as being reflected in their self-actualization. These predictions receive some support

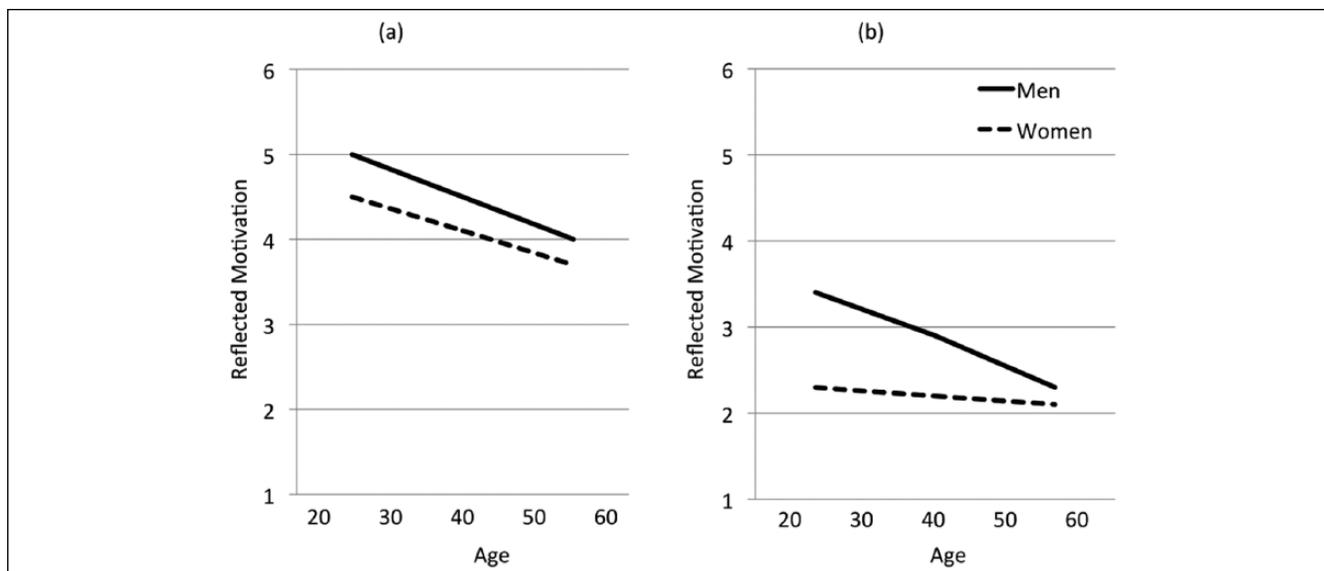


Figure 2. Age and sex differences reflected in (a) status-seeking and (b) mate acquisition across age.

(see Table 2). (We also largely replicate these results in Study 3, discussed in the Supplementary Materials available online.)

Because we have a restricted age range in our undergraduate sample, we explore the effects of age in Study 2. We regressed participant reports for each motive onto age, participant sex, and the resultant interactions of sex with each age term; as some age effects may be nonlinear, we also entered a quadratic term for age and the quadratic age by sex interaction. Age effects were found for affiliation, status-seeking, mate acquisition, and mate retention, but not for self-protection, disease avoidance, or kin care.

Affiliation. There was a significant quadratic effect of age, $t(507) = 2.23, p = .026, \beta = .18, 95\% \text{ CI} = [0.00, 0.001]$, such that younger and older participants, compared with those in middle age, reported that the desire to seek out friendships was more strongly reflected in their self-actualizing. There were no other significant effects ($ps > .12$).

Status-seeking. There were main effects of age, $t(509) = -2.89, p = .004, \beta = -.23, 95\% \text{ CI} = [-0.06, -0.01]$, and sex, $t(509) = 2.04, p = .042, \beta = .12, 95\% \text{ CI} = [0.02, 0.04]$. Results indicate that (a) participant reports of the extent to which status-seeking is reflected in their responses decreased with age, and (b) men reported status-seeking as being more strongly reflected in their self-actualization responses than did women (see Figure 2a).

Mate acquisition. There was a significant effect of sex, such that men reported mate acquisition as more strongly reflected in their responses than did women, $t(509) = 2.12, p = .034, \beta = .12, 95\% \text{ CI} = [0.04, 0.97]$, consistent with sex differences in obligate parental investment (e.g., Kenrick, Sadalla, Groth, & Trost, 1990). There was also a marginally significant in-

teraction between age and sex, $t(509) = -1.89, p = .059, \beta = -.14, 95\% \text{ CI} = [-0.07, 0.001]$ (see Figure 2b). We probed this interaction at one standard deviation below (~ 20 years old) and above (~ 50 years old) the mean age (~ 35 years old). Because this analysis left out the oldest portion of our sample, we also looked at the results at three standard deviations above the mean age (~ 70 years old). As expected, there was a significant sex difference for younger adults, $t(509) = 3.83, p < .001, \beta = .23, 95\% \text{ CI} = [0.46, 1.43]$: Young men ($M_{\text{predicted}} = 3.27$) reported a greater reflection of mate acquisition than did young women ($M_{\text{predicted}} = 2.24$). This same pattern held for middle-aged participants (~ 50 years old), $t(509) = 3.48, p = .001, \beta = .31, 95\% \text{ CI} = [0.50, 1.87]$, but was no longer significant for older adults (~ 70 years old; $p = .158$).

Mate retention. These data echo those for mate acquisition. Entering all variables into the model revealed a marginally significant interaction between participant sex and age, $t(506) = -1.75, p = .081, \beta = -.13, 95\% \text{ CI} = [-0.08, 0.00]$. Younger participants show a sex difference in mate retention, $t(506) = 2.75, p = .006, \beta = .17, 95\% \text{ CI} = [0.23, 1.35]$, with men ($M = 3.89, SE = .29$) reporting it as reflected more than did women ($M = 3.11, SE = .20$). This difference is no longer present in middle-aged adults ($p = .74$).

Do the fundamental motives reflected in self-actualizing vary as a function of relationship status? Recall that we predicted that, whereas people in committed relationships would report a greater reflection of mate retention (but not acquisition) in their self-actualization, single people would report a greater reflection of mate acquisition (but not retention) in their self-actualization. These predictions received mixed support. (We largely replicate these results in Study 3, discussed in the Supplementary Materials available online.)

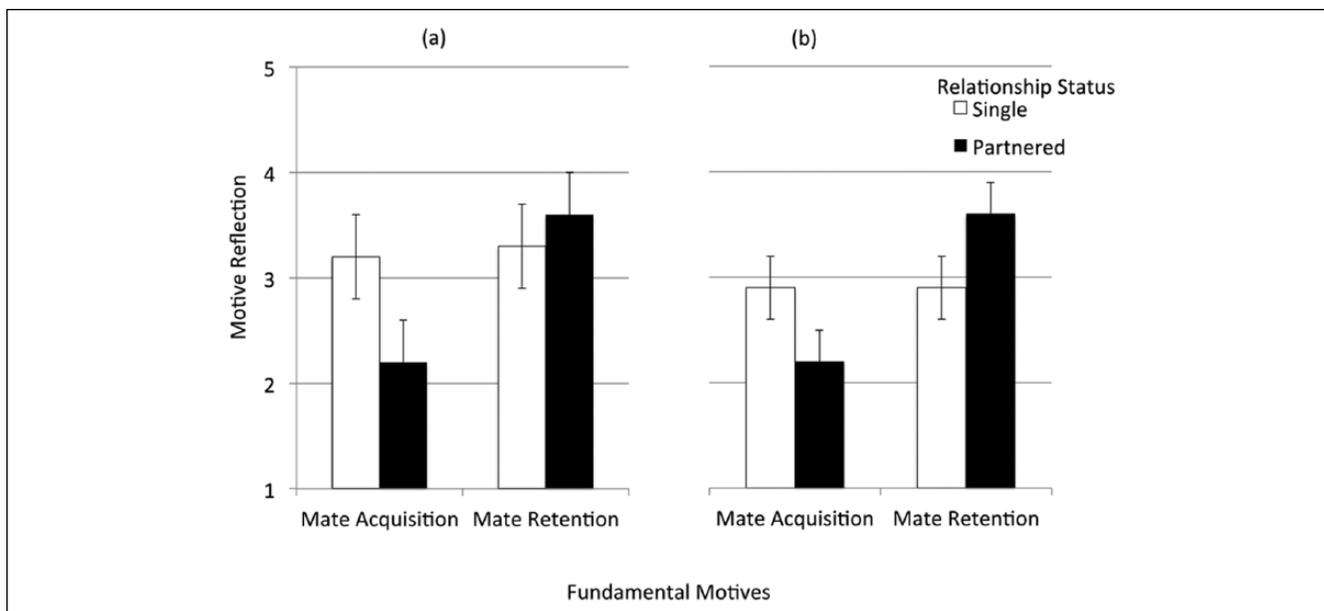


Figure 3. Participant self-ratings as a function of relationship status in (a) Study 1 and (b) Study 2. Note. Error bars represent 95% confidence intervals.

Study 1. To test the influence of relationship status, we first aggregated participants into two relationship status categories—*single* ($n = 137$) or *partnered* ($n = 52$)—based on whether participants were in an exclusive romantic relationship. We then conducted a 2 (relationship status) \times 2 (participant sex) \times 7 (fundamental motives) mixed-factors ANOVA. There was a significant main effect of fundamental motives, $F(6, 1122) = 38.93, p < .001, \eta_p^2 = .172$, as well as a significant interaction of the fundamental motives and relationship status, $F(6, 1122) = 2.96, p = .007, \eta_p^2 = .016$.

As expected, single participants indicated that the desire to attract mates was more strongly reflected in their responses ($M = 3.21; SE = .18$) than did partnered participants ($M = 2.15; SE = .29$), $F(1, 187) = 9.46, p = .002, \eta_p^2 = .048$, 95% CI = [0.40, 1.74]. Surprisingly, single participants did not report less reflection of mate retention than did partnered participants. Indeed, other than mate acquisition, no other fundamental motive showed a difference as a function of participant relationship status ($ps > .15$). The pattern of means may suggest that, in the minds of single participants, mate acquisition and retention are both facets of self-actualization. That is, perhaps participants anticipate their self-actualizing to involve not only finding a desirable mate but also retaining him or her (see Figure 3a).

Study 2. We again divided participants into single ($n = 229$) or partnered ($n = 278$) groups, and ran a 2 (relationship status) \times 2 (participant sex) \times 7 (fundamental motives) mixed-factors ANOVA. We found significant main effects of fundamental motives, $F(6, 3018) = 64.14, p < .001, \eta_p^2 = .113$, and sex, $F(1, 503) = 11.98, p = .001, \eta_p^2 = .023$, and significant interactions between sex and motives, $F(6, 3018) = 2.17, p = .043, \eta_p^2 =$

.004, between relationship status and motives, $F(6, 3018) = 8.45, p < .001, \eta_p^2 = .017$, and with sex, relationship status, and motives, $F(6, 3018) = 2.39, p = .26, \eta_p^2 = .005$.

Looking first at the relationship status by motives interaction, we replicate the pattern of data seen in Study 1: Single participants reported that mate acquisition was reflected more in their responses ($M = 2.85; SE = .13$) than did partnered participants ($M = 2.23; SE = .12$), $F(1, 503) = 12.33, p < .001, \eta_p^2 = .024$, 95% CI = [0.27, 0.97]. Unlike in Study 1, these partnered participants reported mate retention as being reflected more in their responses ($M = 3.63; SE = .14$) than did single participants ($M = 2.88; SE = .15$), $F(1, 503) = 13.69, p < .001, \eta_p^2 = .026$, 95% CI = [0.35, 1.15]² (see Figure 3b). Thus, whereas the overall pattern of these data is substantially similar to that from Study 1, it is possible that, in this older sample, partnered peoples' current (vs. single peoples' prospective) mate retention concerns are simply more salient—perhaps, for example, because existing relationships may be relatively longer lived.

Furthermore, this pattern seems differentiated by sex. Simple comparisons show that single men reported mate acquisition was reflected more in their responses ($M = 3.41; SE = .18$) than did partnered men ($M = 2.43; SE = .19$), $F(1, 503) = 14.05, p < .001, \eta_p^2 = .027$, 95% CI = [0.46, 1.48], but single women did not report that mate acquisition was reflected significantly more in their responses ($M = 2.29; SE = .21$) than did partnered women ($M = 2.02; SE = .15; p = .264$). Furthermore, partnered men ($M = 3.85; SE = .21$) did not report that mate retention was reflected significantly more in their responses than did single men ($M = 3.36; SE = .21; p = .103$), but partnered women reported that mate retention was reflected significantly more in their responses ($M = 2.40; SE = .21$)

than did single women ($M = 3.41$; $SE = .18$), $F(1, 503) = 13.56, p < .001, \eta_p^2 = .026, 95\% CI = [0.47, 1.56]$.

Do the fundamental motives reflected in self-actualizing vary as a function of having children? Recall that we predicted that people who had children, compared with those without, would report kin care as being more strongly reflected in their self-actualization. We expected that this pattern would be exaggerated for people with younger children (aged 5 and younger), whose care requires more time and parenting effort. These predictions were supported. (We largely replicate these results in Study 3, discussed in the Supplementary Materials available online.)

Because only four individuals in the Study 1 sample reported having children, we explored the effect of children in only Study 2's sample. Therein, we segmented participants into those with children ($n = 174$) and those without ($n = 333$). A 2 (having children or not) \times 2 (participant sex) \times 7 (fundamental motives) mixed-factors ANOVA revealed significant main effects of fundamental motives, $F(6, 3018) = 65.41, p < .001, \eta_p^2 = .115$, and participant sex, $F(1, 503) = 8.00, p = .005, \eta_p^2 = .016$, as well as a significant fundamental motives \times children interaction, $F(6, 3018) = 14.11, p < .001, \eta_p^2 = .027$, and a significant three-way interaction, $F(6, 3018) = 2.94, p = .012, \eta_p^2 = .006$.

As expected, kin care was reflected more in responses from those with children ($M = 4.07$; $SE = .17$) than those without ($M = 3.87$; $SE = .12$), $F(1, 503) = 39.49, p < .001, \eta_p^2 = .073, 95\% CI = [0.94, 1.79]$. Participants with children reported that kin care was more strongly reflected in their responses than any other motive ($ps < .020$). By contrast, participants without children reported that a status-seeking motive ($M = 4.39$; $SE = .12$) was more strongly reflected in their responses than any other motive ($ps < .005$).

Also as implied by life history strategy's explicit trade-offs between mating and parenting efforts, mate acquisition was reflected *less* in responses of those with children ($M = 2.68$; $SE = .11$) than those without ($M = 2.12$; $SE = .16$), $F(1, 503) = 8.84, p = .003, \eta_p^2 = .017, 95\% CI = [0.19, 0.93]$. In addition, status-seeking was also reflected marginally *less* in responses of those with children ($M = 4.37$; $SE = .11$) than those without ($M = 4.00$; $SE = .16$), $F(1, 503) = 3.35, p = .068, \eta_p^2 = .007, 95\% CI = [-0.03, 0.76]$ (see Figure 4).

Exploring that three-way interaction, we find that both men and women with children emphasized kin care ($M_{men} = 4.57$; $SE_{men} = .29$; $M_{women} = 4.73$; $SE_{women} = .21$) more than did same-sex individuals without children ($M_{men} = 3.56$; $SE_{men} = .18$; $M_{women} = 3.02$; $SE_{women} = .17$), $F_{men}(1, 503) = 9.19, p = .003, \eta_p^2 = .018, 95\% CI = [-1.67, -0.36]$, and $F_{women}(1, 503) = 38.41, p < .001, \eta_p^2 = .071, 95\% CI = [-2.26, -1.17]$.

Whereas both men and women without children tended to report that status-seeking was reflected more than any other motive ($ps < .020$ for men, $ps \leq .095$ for women), men with children tended to rate kin care above all other motives ($ps \leq .065$), except status-seeking ($p = .591$) and affiliation ($p =$

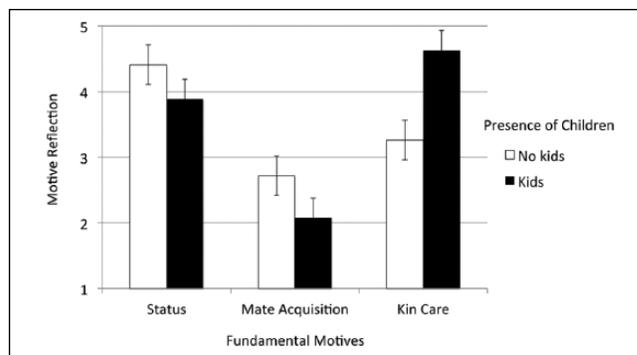


Figure 4. Participant ratings as a function of having children. Note. Error bars represent 95% confidence intervals.

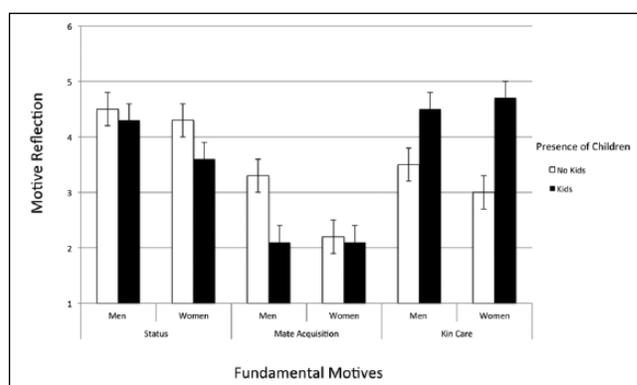


Figure 5. Men's and women's ratings, showing the sex difference in possible trade-offs for heavier investment in kin care. Note. Error bars represent 95% confidence intervals.

.149). By contrast, women with children reported that a kin care motive was reflected significantly more than any other motive ($ps < .001$).

Finally, men with children report a diminished reflection of mate acquisition (compared with men without children), whereas women with children report a diminished reflection of status-seeking (compared with women without children): Men with children reported that mate acquisition was less strongly reflected in their responses ($M = 3.22$; $SE = .15$) than did men without children ($M = 2.11$; $SE = .25$), $F(1, 503) = 14.51, p < .001, \eta_p^2 = .028, 95\% CI = [-1.68, -0.54]$. Women with children reported status-seeking was less strongly reflected in their responses ($M = 3.64$; $SE = .20$) than did women without children ($M = 4.23$; $SE = .16$), $F(1, 503) = 5.44, p = .020, \eta_p^2 = .011, 95\% CI = [-1.09, -0.09]$ (see Figure 5).

Young children. We examined kin care reflections for those with altricial children (i.e., young and highly dependent), who typically require the highest investment. On the basis of participants' responses to whether they had children and, if they did, whether the youngest of those children was aged 0 to 5 or was 6 years old and up, we divided participants

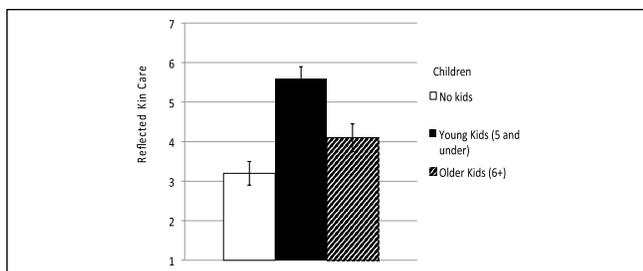


Figure 6. Participant ratings of importance of kin care to self-actualization as a function of children's presence and ages. Note. Error bars represent 95% confidence intervals.

into three groups: those with at least one child 5 years old or under ($n = 64$), those whose children were 6 years old or above ($n = 120$), and those without children ($n = 320$). A 3 (children) \times 2 (participant sex) \times 7 (fundamental motives) mixed-factors ANOVA revealed significant main effect of fundamental motives, $F(6, 2988) = 55.32, p < .001, \eta_p^2 = .100$, and of sex, $F(1, 498) = 3.91, p = .049, \eta_p^2 = .008$, as well as a marginally significant Fundamental Motives \times Sex interaction, $F(6, 2988) = 2.00, p = .062, \eta_p^2 = .004$, and a significant Fundamental Motives \times Children interaction, $F(12, 2988) = 9.83, p < .001, \eta_p^2 = .038$. These were qualified by a significant three-way interaction, $F(12, 2988) = 2.58, p < .001, \eta_p^2 = .010$.

Among those without children, status-seeking was more prominent than any other motive ($M = 4.39; SE = .12; ps < .005$), whereas among those with young children, kin care was more strongly reflected than any other motive ($M = 5.63; SE = .28; ps < .001$). For those with older children, no single motive was statistically different from the others ($ps > .200$). Furthermore, those with young children reported kin care as being more strongly reflected in their responses than both those without children ($M = 3.23; SE = .12, p < .001, 95\% CI = [1.81, 3.00]$), and also those with older children ($M = 4.13; SE = .21, p < .001, 95\% CI = [0.82, 2.19]$) (see Figure 6).

This same pattern was echoed in both men and women. Men without children again emphasized status-seeking ($M = 4.51; SE = .17$) more than any other motive ($ps < .025$), whereas men with young children emphasized kin care ($M = 5.27; SE = .40$) more than any other motive ($ps < .050$) except status-seeking ($p = .465$). Likewise, women without children again emphasized status-seeking ($M = 4.27; SE = .16$) more than any other motive ($ps < .001$), except affiliation ($M = 3.95; SE = .16; p = .075$), whereas women with younger children again emphasized kin care ($M = 6.00; SE = .38$) more than any other motive ($ps < .001$). In men and in women with older children, no single motive was statistically more prominent than others ($ps > .200$).

Discussion

Results from Studies 1 and 2 support Implications 1a and 2, as derived from a functional take on self-actualization, suggesting that self-actualizing might further functional outcomes.

Specifically, we find support for our first prediction—that lay perceptions of realizing one's full potential are linked to the fundamental motive of achieving status and esteem. This particular finding supports the proposition made by Kenrick and colleagues (2010) in their renovation of Maslow's (1943) pyramid and is also in line with other psychological research linking self-actualization to achievements (e.g., Kerr, 1985; Walker et al., 1992).

We also found some support for our second implication, involving life history theory (see Table 2). For example, status-seeking and mate acquisition were especially emphasized by young males, as we predicted. To some extent, these two motives may be tightly linked—again especially for young males—insofar as achieving status can lead to increased mating opportunities. Additional results also suggest that single people view their anticipated self-actualization as reflecting mate acquisition more strongly than did partnered people, also as we predicted; however, single people reported a somewhat higher than expected reflection of mate retention (especially in Study 1's college student sample), casting doubt onto whether partnered people view their anticipated self-actualization as reflecting mate retention more strongly than do single people. Finally, having children did affect which motives people saw as being reflected in their anticipated self-actualization; as predicted, people with children—and especially younger, altricial children—reported a stronger reflection of kin care in their anticipated self-actualization than did participants with older children or without children.

Study 3

Studies 1 and 2 imply that the activities people believe they would be doing if they were realizing their full, unique potentials are activities that would garner status. For example, college students often reported that, if they were self-actualizing at this point in their lives, they would be getting all As in their classes, whereas those in the MTurk community sample often reported that they would be achieving fame and/or fortune in their chosen fields of endeavor. Are people in these two samples merely preoccupied with achieving status, in general, or is the emphasis on status specific to lay perceptions of self-actualization?

Study 3 aims to tackle this question by examining lay perceptions of alternative types of well-being. Specifically, we explore lay perceptions of eudaimonic, hedonic, and subjective well-being, as well as which fundamental motives people view as being reflected in their pursuits of each of these types of well-being. Whereas well-being and self-actualization have been centrally discussed in research on human happiness, meaning, and life satisfaction (e.g., Diener, Sapyta, & Suh, 1998; Ryan & Deci, 2001; Ryff & Singer, 1998), we would make differential predictions about which specific functional outcomes (i.e., which fundamental motives) the pursuit of each type of well-being might promote. Indeed,

those activities that give us pleasure might be different from those that make our lives meaningful, just as those activities that make our lives meaningful might not be the same activities that make our lives happy and/or satisfying (e.g., Baumeister, Vohs, Aaker, & Garbinsky, 2013).

Eudaimonic well-being is “about” realizing one’s potential, as well as finding or making meaning and purpose in one’s life (e.g., Ryff & Singer, 1998). Research on what makes life meaningful might suggest that getting good grades, high-paying jobs, and other status-related recognition might not make life meaningful, per se; rather pursuing fulfilling relationships with others, particularly with one’s children, might make life feel meaningful (e.g., Nelson et al., 2012). By contrast, hedonic well-being, which is “about” maximizing pleasure and avoiding pain, might be linked to the fundamental motives of mate acquisition (which includes pursuing pleasure) and/or self-protection (which includes avoiding pain)—but not caring for kin or seeking status. For example, some mothers found parenting to be less pleasurable than watching TV, shopping, or making meals (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). Likewise, although actually having status might be pleasurable, the sometimes grueling process of attaining status can be unpleasant. Finally, subjective well-being is “about” maximizing the extent to which one’s life, work, health, and social relationships are desirable, enjoyable, and valuable (Deiner et al., 1998; Deiner & Lucas, 2000; E. Diener, personal communication, May, 2016). Given that this type of well-being is more global in its scope, it is possible that multiple fundamental motives might be strongly reflected in lay perceptions of subjective well-being.

Study 3 tests our prediction that status-seeking will be the motive most strongly reflected in people’s self-actualizing (but not eudaimonic, hedonic, or subjective well-being). In other words, whereas people might perceive pursuing self-actualization as being linked to pursuing status and esteem, people probably do not view pursuing status and esteem as making their lives meaningful, pleasurable (or not painful), or subjectively happy and satisfying. (Study 3 also tests the replicability of some of the life history effects examined in Studies 1 and 2; for those analyses, see the Supplementary Material available online.)

Method

Participants. We recruited participants, all residing in the United States, from Amazon’s MTurk. Given the effect size information from Study 2, in light of our within-subject design, we sought to maintain a similar sample size as Study 2, yielding 565 participants (326 female, five gave no sex information) who completed all focal responses to what they would be doing if they were pursuing various outcomes and whose answers were comprehensible. Participants’ mean age was 37.97 ($SD = 13.00$), and the range of ages was from 19 to 87 years old. Of participants reporting their ethnic

backgrounds, 80% were Caucasian, 6.4% were African American, 4.1% were Asian American, and 4.8% were Hispanic/Latina.

Procedure. Participants were first instructed that we were interested in four related concepts and that we would be asking them each about all four concepts. Concepts (self-actualization, eudaimonic, hedonic, subjective well-being) and corresponding colloquial descriptions of them were all presented on one page. Then, as in Studies 1 and 2, participants responded to questions assessing their actualizing or well-being-related activities. Here, we also asked participants to freely respond to what they would be doing if they were pursuing (a) “self-actualization, which is about fully realizing your own potential”; (b) “eudaimonic well-being, which is about finding meaning and purpose in life”; (c) “hedonic well-being, which is about maximizing the amount of pleasure in your life (and minimizing the amount of pain)”; and (d) “subjective well-being, which is about maximizing the extent to which your life, work, health, and social relationships are desirable, enjoyable, and valuable.” All four concepts were presented to participants in randomized order. After responding to common demographic and individual difference measures, participants then viewed each of their answers (i.e., “If you were [self-actualizing] right now, you wrote that you would be [participant response]”), again in randomized order. While viewing each response, participants rated that response for how strongly each fundamental motive was reflected in it, as in Studies 1 and 2.

Results

Are lay perceptions of self-actualization distinct from lay perceptions of other forms of well-being? To determine whether the motives reflected in self-actualization were distinct from the other forms of well-being, we ran a 2 (participant sex: male, female) \times 4 (type of well-being: self-actualizing, eudaimonic, hedonic, subjective well-being) \times 7 (fundamental motive: self-protection, disease avoidance, affiliation, status-seeking, mate attraction, mate retention, kin care) mixed-factors ANOVA. We found significant main effects of participant sex, $F(1, 558) = 20.09, p < .001, \eta_p^2 = .035$; type of well-being, $F(3, 1674) = 62.95, p < .001, \eta_p^2 = .101$; and fundamental motive, $F(6, 3348) = 59.23, p < .001, \eta_p^2 = .096$. These effects were qualified by significant interactions of participant sex and fundamental motive, $F(6, 3348) = 11.51, p < .001, \eta_p^2 = .020$, and type of well-being and fundamental motive, $F(18, 10044) = 32.52, p < .001, \eta_p^2 = .055$, as well as a significant three-way interaction, $F(18, 10044) = 2.74, p < .001, \eta_p^2 = .005$. To explore whether the motives reflected in each type of well-being were different, we first explored the type of well-being by fundamental motive interaction.

Self-actualization. Replicating results from Studies 1 and 2, people reported that status-seeking ($M = 4.07; SE = .09$)

was the fundamental motive most strongly reflected in their self-actualizing ($ps < .035$). To further underscore the differences across pursuits, status-seeking was more strongly reflected in self-actualizing than it was in any other type of well-being ($ps < .001$), again suggesting that peoples' perceptions of what it means to realize their full potentials are linked—uniquely so—to achieving status and esteem.

Eudaimonic well-being. By contrast, for eudaimonic well-being (meaning in life), affiliation ($M = 4.07$; $SE = .09$) was more strongly reflected than any other fundamental motive ($ps < .001$), with the exception of kin care ($M = 3.92$; $SE = .11$; $p = .248$, 95% CI = $[-0.10, 0.40]$). Affiliation was also more strongly reflected in eudaimonic well-being than it was in any other concept ($ps < .001$), suggesting that people perceive finding meaning in life to be strongly linked to forming and maintaining social relationships.

Hedonic well-being. Unlike either self-actualization or eudaimonic well-being, self-protection ($M = 3.77$; $SE = .10$) was the fundamental motive most strongly reflected in participants' hedonic well-being ($ps < .002$), which fits hedonic well-being's focus on avoiding pain. As expected, mate attraction was significantly more strongly reflected in hedonic well-being than in it was in self-actualization or in eudaimonic well-being ($ps < .001$), and more—but not significantly so ($p = .111$)—than it was in subjective well-being.

Subjective well-being. Affiliation ($M = 4.62$; $SE = .09$) was the fundamental motive most strongly reflected in subjective well-being ($ps < .001$).

Sex and self-actualization. In light of the three-way interaction, we also explore these differences separately within men and women (see Figure 7). Similar to the results of Studies 1 and 2, whereas men reported that status-seeking ($M = 4.32$; $SE = .14$) was the fundamental motive most strongly reflected in their self-actualizing than any other motive ($ps < .042$), women reported that status-seeking ($M = 3.80$; $SE = .12$), affiliation ($M = 3.72$; $SE = .12$), and self-protection ($M = 3.67$; $SE = .13$) were equally reflected ($ps > .381$), with status-seeking being reflected more than the remaining fundamental motives ($ps < .001$) (see Table 3 for all means).

Sex and eudaimonic well-being. For eudaimonic well-being, men reported that affiliation ($M = 4.02$; $SE = .14$) and kin care ($M = 4.02$; $SE = .16$) were equally reflected ($p = .999$), with these motives being more strongly reflected than the others ($ps < .058$). Women reported that affiliation ($M = 4.64$; $SE = .11$) was more strongly reflected in eudaimonic well-being than any other motive ($ps < .001$), except kin care ($M = 4.07$; $SE = .13$; $p = .074$, 95% CI = $[0.03, -0.62]$).

Sex and hedonic well-being. For hedonic well-being, men reported equally strong reflections of self-protection ($M =$

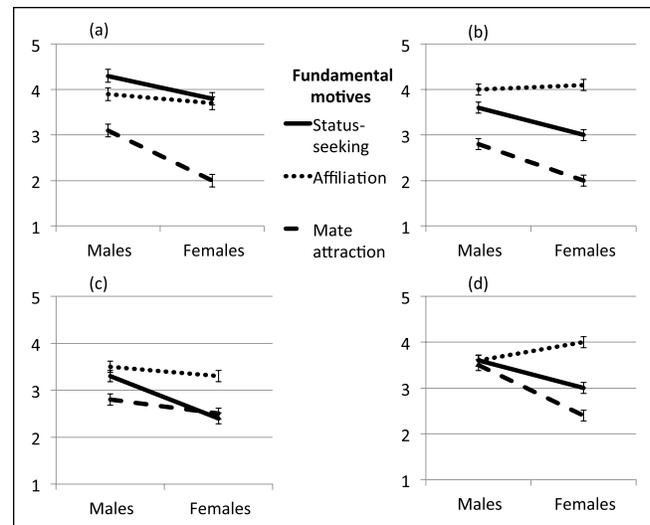


Figure 7. Males' and females' ratings of selected fundamental motives (status-seeking, affiliation, and mate attraction) reflected in their (a) self-actualization, (b) eudaimonic well-being, (c) hedonic well-being, and (d) subjective well-being. Note. Error bars represent standard errors.

4.64; $SE = .11$) and mate acquisition ($M = 4.64$; $SE = .11$; $p = .659$), with these motives being only marginally more strongly reflected than affiliation ($M = 4.64$; $SE = .11$; $p = .089$, 95% CI = $[-0.05, 0.66]$) and mate retention ($M = 4.64$; $SE = .11$; $p = .059$, 95% CI = $[-0.01, 0.72]$), whereas women rated self-protection ($M = 3.72$; $SE = .13$) as being more strongly reflected than any other motive ($ps < .001$).

Sex and subjective well-being. For subjective well-being, men rated self-protection ($M = 4.11$; $SE = .15$), mate retention ($M = 4.07$; $SE = .15$), and kin care ($M = 4.07$; $SE = .16$) equally highly ($ps > .800$), whereas women rated affiliation ($M = 4.64$; $SE = .11$) more highly than any other motive ($ps < .001$).

Discussion

Replicating our findings from Studies 1 and 2, people view status-seeking as being the fundamental motive most strongly reflected in self-actualization. (Also largely replicating findings from Study 2, peoples' life history features seem to shape their anticipated self-actualizing. For these results, see Table 2 and the Supplementary Material available online.) Extending these findings, this emphasis on status-seeking was unique to self-actualization, as opposed to the other types of well-being assessed. (Life history features also differently affect individual perceptions of these types of well-being. See the Supplementary Material available online.) Lay perceptions of eudaimonic well-being (meaning in life) emphasized the fundamental motives of affiliation and kin care (but not status-seeking), lay perceptions of hedonic well-being (maximizing

Table 3. Means (SEs) of Fundamental Motives Reflected in Phenomena.

Phenomenon	Fundamental motive	Males	Females
Self-actualization	Self-protection	3.94 (.15)	3.67 (.13)
	Disease avoidance	3.15 (.14)	2.72 (.12)
	Affiliation	3.94 (.14)	3.73 (.12)
	Status-seeking	4.33 (.14)	3.81 (.12)
	Mate acquisition	3.06 (.12)	2.02 (.11)
	Mate retention	3.19 (.14)	2.41 (.12)
	Kin care	3.32 (.15)	2.94 (.13)
Eudaimonic well-being	Self-protection	3.70 (.14)	3.09 (.12)
	Disease avoidance	3.23 (.14)	2.40 (.12)
	Affiliation	4.02 (.14)	4.11 (.12)
	Status-seeking	4.02 (.14)	3.02 (.12)
	Mate acquisition	2.84 (.12)	2.03 (.12)
	Mate retention	3.42 (.14)	2.42 (.12)
	Kin care	4.02 (.16)	3.82 (.14)
Hedonic well-being	Self-protection	3.81 (.15)	3.72 (.13)
	Disease avoidance	3.26 (.15)	3.21 (.13)
	Affiliation	3.50 (.14)	3.26 (.12)
	Status-seeking	3.30 (.13)	2.41 (.11)
	Mate acquisition	3.72 (.15)	2.52 (.13)
	Mate retention	3.46 (.15)	2.83 (.13)
	Kin care	3.00 (.15)	3.00 (.13)
Subjective well-being	Self-protection	4.12 (.15)	3.48 (.13)
	Disease avoidance	3.70 (.15)	3.65 (.13)
	Affiliation	4.60 (.13)	4.64 (.11)
	Status-seeking	3.60 (.14)	3.00 (.12)
	Mate acquisition	3.53 (.13)	2.40 (.11)
	Mate retention	4.07 (.15)	3.39 (.13)
	Kin care	4.07 (.16)	4.07 (.13)

pleasure and avoiding pain) emphasized self-protection (but not status-seeking)—and, as predicted, mate acquisition was also endorsed more for hedonic well-being than it was for any other type of well-being—and lay perceptions of subjective well-being (global happiness and life satisfaction) also emphasized affiliation (but not status-seeking).

General Discussion

What do people say that they would be doing if they were realizing their full, unique potentials, and might these activities further functionally relevant goals? We examined lay perceptions of self-actualization; in doing so, we identified implications of taking a functional approach to self-actualization and generated specific predictions derived from those implications. First, we predicted—and found—that people view the fundamental motive of status-seeking as being strongly reflected in their anticipated self-actualization. That is, when asked which motives were linked to the behaviors they generated as being self-actualizing, participants generally rated status-seeking as the motive most strongly reflected in their generated responses. This was unique to self-actualization. Lay perceptions of other types of well-being—eudaimonic

(meaning in life), hedonic (maximizing pleasure and avoiding pain), and subjective (global happiness and life satisfaction)—see them as reflecting alternative, distinct fundamental motives.

That status-seeking is seen as linked to self-actualization fits with other conceptualizations of self-actualization, which have operationalized the construct in status-related ways, such as academic achievement and success in recognized fields of endeavor (Kerr, 1985; Reis & Callahan, 1989; Walker et al., 1992). Although perhaps phenomenologically distinct, the pursuit of self-actualization and the pursuit of status may be rooted in a common motivational system and may produce functionally similar outcomes. In this light, the pursuit of self-actualization may provide an alternative pathway to biological and social payoffs associated with the attainment of status, including perhaps the often-related acquisition of mates (e.g., Miller, 2000). Moreover, these findings would seem to support one implication of taking a functional approach here—specifically that self-actualization may not necessarily be a distinct, nonfunctional drive. In turn, this lends further support to our broader hypothesis that even these lofty outcomes (i.e., pursuing self-actualization) may be linked to biologically and socially relevant payoffs.

Table 4. Maslow's Exemplars of Self-Actualization.

Abraham Lincoln (President of the United States)
Albert Einstein (winner of the Nobel Prize in Physics and <i>Time's</i> "Person of the Century")
Thomas Jefferson (principal author of the Declaration of Independence, third president of the United States)
Eleanor Roosevelt (longest serving and most celebrated First Lady of the United States, highly celebrated member of the United Nations)
William James (prominent philosopher and author of the classic psychology textbook)
Frederick Douglass (famous author, leading abolitionist, eminent public speaker)
Jane Addams (Nobel Peace Prize winner)
Albert Schweitzer (world-renowned philanthropist and winner of the Nobel Peace Prize)
Benedict Spinoza (prolific writer and highly esteemed philosopher)
Aldous Huxley (prolific writer, author of <i>Brave New World</i>)
Ruth Benedict (one of the most famous and influential anthropologists of the 20th century)
Max Wertheimer (pioneering psychologist, founder of Gestalt school in psychology)
Helen Keller (prolific author and social activist)
Henry David Thoreau (author of <i>Walden</i> , leader of Transcendental School of Philosophy)
Mahatma Gandhi (leader of the Indian independence movement, which overthrew British rule)
Mother Theresa (Nobel Laureate and candidate for Sainthood)
John Muir (prominent author and activist, founder of Sierra Club)
Walt Whitman (considered by many to be America's preeminent poet)

Also supporting a functional take on self-actualization, life history features seem able to systematically predict which motives people see as reflected in their self-actualizing. Multiple predictions derived from life history theory found support across Studies 1 to 3: Age, sex, and relationship and parenting statuses each affect lay perceptions of self-actualization in sensible ways. In other words, what people view as self-actualizing may differ, depending on their life history features (see Table 2). For example, men, but not women, tended to report that the pursuit of status was more strongly reflected in their responses than every other motive—and this was especially true for younger men. Indeed, young men were especially likely to emphasize both status- and mating-related motives. This accords with expectations from a modern functional perspective, as seeking status is a primary means for men to attract romantic partners and thereby increase their reproductive fitness (e.g., Griskevicius et al., 2006). However, status-seeking was relatively highly reflected in self-actualizing in both men and women in the college student sample (Study 1)—perhaps because university students are actively engaged in furthering their education, often for the explicit purpose of attaining higher paying jobs.

Also across samples, single (vs. partnered) participants emphasized mate acquisition relatively more in their responses. Results from the adult samples further suggest that single men (vs. women) are relatively more likely to emphasize mate acquisition, whereas partnered women (vs. men) are more likely to emphasize mate retention, which is consistent with research demonstrating high fitness benefits of mate acquisition for men and high fitness benefits of mate retention (and high fitness costs of mate loss) for women (e.g., Buss, Larsen, Westen, & Semmelroth, 1992). Similarly, the existence of children (and those children's developmental stages) also influenced reported motive reflection: Participants without children emphasized

status-seeking, whereas participants with children—especially those with young children—emphasized kin care.

In sum, these results suggest support for Implication 2—that life history features may explain how and why self-actualization differs across individuals. This finding makes sense in a functional view; behaviors that make us feel as if we are realizing our full potential are shaped by our life history features, likely in such a way as to promote the pursuit of those behaviors that would increase our inclusive fitness given our life history features (e.g., parenting for parents, gaining status for young men, finding mates for single people, and keeping mates for partnered people). In a related vein, this finding may also begin to elucidate Maslow's (1943) assertion that self-actualization takes different forms for different people: for example, parents via parenting, painters via painting, and athletes via sports. Life history strategy provides one functionally relevant framework in which to understand how and why these different pathways might take shape.

Limitations and Implications

These findings suggest that there are sensible links between the pursuit of self-actualization and other functional motivations. But that should not be taken to imply that people interested in self-actualization ought to be encouraged to pursue status on a moment-to-moment basis. Indeed, some research suggests that creative individuals do better work when they are not obsessing over external rewards (Amabile, 1983), and other work suggests that attaining status is not a guarantee of feeling actualized (Kasser & Ryan, 1993). Nor do these findings imply that the experiences inherent in realizing one's full potential are necessarily less authentic, enjoyable, or satisfying just because they may lead to eventual social rewards or reproductive fitness.

But, one might ask: When individuals report what they would be doing if they were realizing their full potentials, is this linked to “true” self-actualization? Maslow’s original and romantically appealing idea has often been taken to mean that “true” self-actualization is divorced from social and biological motives. From that perspective, a reasonable objection to our findings is that the individuals in these samples are not, after all, truly pursuing self-actualization; if they were, they would not link the realization of their full potentials with status-seeking and other so-called “lower tier” motives. As others have previously implied, maintaining self-actualization as the exclusive realm of “the very few who have satisfied all their other needs” could be considered unnecessarily exclusive (e.g., Peterson & Park, 2010, p. 322; Peterson et al., 2005; Sumerlin & Norman, 1992).

It is perhaps relevant to this argument to consider some of those individuals Maslow (1954, 1970) himself saw as self-actualized (listed in Table 4). Many achieved levels of status well beyond those aspired to by most mortals. One might argue that their social status was a completely incidental by-product of their striving to do what they were fitted for (e.g., Peterson & Park, 2010; but see conceptualizations of self-actualization by Kerr, 1985; Reis & Callahan, 1989; Walker et al., 1992). Importantly, a functional approach is agnostic about whether these exemplars consciously pursued status or achieved it as a by-product of self-actualizing. Our data suggest that, upon reflection, people may consciously link the everyday pursuit of self-realization with social payoffs.

A final implication of our findings is that people make clear distinctions between realizing their unique potentials and finding meaning and purpose in life (eudaimonic well-being), maximizing pleasure and minimizing pain (hedonic well-being), and maximizing the extent to which one’s life, work, health, and social relationships are desirable, enjoyable, and valuable (subjective well-being). These results also imply that our (Western) participants are not merely driven by status. Put differently, people may perceive that pursuing status and esteem helps them to realize their potential, but they also perceive that pursuing social relationships and caring for family are pathways to eudaimonic well-being (meaning); that thwarting threats to physical safety and acquiring mates are primary means to hedonic well-being (maximizing pleasure, minimizing pain); and that pursuing close affiliative relationships is a key to subjective well-being (global happiness and satisfaction). This makes some intuitive sense; for example, for most people, the sort of single-minded behavior required to achieve high-level success in many domains (e.g., scholarship, politics, the arts) might not necessarily feel meaningful or even pleasurable in the moment.

People engage in many different kinds of behavior to pursue self-actualization and other forms of well-being. Yet our data suggest that, despite the different paths people might take to the good life, these pursuits may remain linked to

basic, fundamental social motives, which, in turn, underpin and shape these pursuits.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Note that, whereas we are questioning whether people view their self-actualization as being linked to functional outcomes, we are not implying that people consciously link their self-actualization to functional outcomes.
2. Partnered participants ($M = 3.94$; $SE = .14$) reported that kin care was reflected marginally more in their responses than did single participants ($M = 3.57$; $SE = .16$), $F(1, 503) = 3.09$, $p = .079$, $\eta_p^2 = .006$, 95% confidence interval [CI] = $[-.79, .04]$. Conducting these analyses among only participants without children, as having children and being partnered are often concomitant, there is no longer a significant difference between single and partnered participants on kin care ($p = .65$).

Supplemental Material

Supplementary material is available online with this article.

References

- Ackerman, J. M., & Bargh, J. A. (2010). The purpose-driven life. Commentary on Kenrick et al. (2010). *Perspectives on Psychological Science*, 5, 323-326.
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45, 357-376.
- Baumeister, R. F., Vohs, K. D., Aaker, J. L., & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. *The Journal of Positive Psychology*, 8, 505-516.
- Buss, D. M., Larsen, R. J., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science*, 3, 251-255.
- Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies*, 1, 41-78.
- Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, 9, 33-37.
- Fitts, W. H. (1971). *The self-concept and self-actualization* (Monograph No. 3). Nashville, TN: Nashville Mental Health Center.
- Goldstein, K. (1939). *The organism*. New York, NY: American Books.
- Gowan, J. C. (1972). *Development of the creative individual*. San Diego, CA: Robert R. Knapp.
- Griskevicius, V., Cialdini, R. B., & Kenrick, D. T. (2006). Peacocks, Picasso, and parental investment: The effects of

- romantic motives on creativity. *Journal of Personality and Social Psychology*, 91, 63-76.
- Harlow, H. F. (1953). Mice, monkeys, men, and motives. *Psychological Review*, 60, 23-32.
- Jones, A., & Crandall, R. (1986). Validation of a short index of self-actualization. *Personality and Social Psychology Bulletin*, 12, 63-73.
- Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science*, 306, 1776-1780. doi:10.1126/science.1103572
- Kaplan, H. S., & Gangestad, S. W. (2005). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 68-95). Hoboken, NJ: John Wiley.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422.
- Kenrick, D. T., Neuberg, S. L., Griskevicius, V., Becker, D. V., & Schaller, M. (2010). Goal-driven cognition and functional behavior: The fundamental-motives framework. *Current Directions in Psychological Science*, 19, 63-67.
- Kenrick, D. T., Sadalla, E. K., Groth, G., & Trost, M. R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. *Journal of Personality*, 58, 97-116.
- Kerr, B. A. (1985). *Smart girls, gifted women*. Dayton: Ohio Psychology Press.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of Personality*, 22(3), 326-347.
- Maslow, A. H. (1970). *Motivation and personality*. New York, NY: Harper & Row.
- Miller, G. F. (2000). *The mating mind: How sexual choice shaped the evolution of human nature*. New York, NY: Doubleday.
- Myers, D. G. (2009). *Psychology in everyday life*. New York, NY: Macmillan.
- Nelson, S. K., Kushlev, K., English, T., Dunn, E. W., & Lyubomirsky, S. (2013). In defense of parenthood: Children are associated with more joy than misery. *Psychological Science*, 24(1), 3-10.
- Neuberg S. L., Kenrick D. T., Schaller M. (2010). Evolutionary social psychology. In S. T. Fiske, D. T. Gilbert, G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 761-796). New York, NY: Wiley.
- Neel, R., Kenrick, D. T., White, A. E., & Neuberg, S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology*, 110, 887-907. doi:10.1037/pspp0000068
- Peterson, C., & Park, N. (2010). What happened to self-actualization? Commentary on Kenrick et al. (2010). *Perspectives on Psychological Science*, 5, 320-322.
- Peterson, C., Park, N., & Seligman, M. E. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies*, 6, 25-41.
- Reis, S. M., & Callahan, C. (1989). Gifted females: They've come a long way—Or have they? *Journal for the Education of the Gifted*, 12, 99-117.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.
- Ryff, C. D., & Singer, B. (1998). *The role of purpose in life and personal growth in positive human health*. Mahwah, NJ: Lawrence Erlbaum.
- Sherry, D. F., & Schacter, D. L. (1987). The evolution of multiple memory systems. *Psychological Review*, 94, 439-454.
- Stearns, S. C. (1992). *The evolution of life histories*. Oxford, UK: Oxford University Press.
- Sumerlin, J. R., & Norman, R. L. (1992). Self-actualization and homeless men: A known-groups examination of Maslow's hierarchy of needs. *Journal of Social Behavior and Personality*, 77, 295-314.
- Tooby, J., & Cosmides, L. (1992). The psychological foundations of culture. In J. H. Barkow, L. Cosmides, & J. Tooby (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 19-136). New York, NY: Oxford University Press.
- Walker, B. A., Reis, S. M., & Leonard, J. S. (1992). A developmental investigation of the lives of women. *Gifted Child Quarterly*, 36, 201-206.