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Life is Pretty Meaningful

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Abstract

The human experience of meaning in life is widely viewed as a cornerstone of well-being and a central human motivation. Self-reports of meaning in life relate to a host of important functional outcomes. Psychologists have portrayed meaning in life as simultaneously chronically lacking in human life as well as playing an important role in survival. Examining the growing literature on meaning in life, we address the question, "How meaningful is life, in general?" We review possible answers from various psychological sources, some of which anticipate that meaning in life should be low, and others high. Summaries of epidemiological data and research using two self-report measures of meaning in life suggest that life is pretty meaningful. Diverse samples rate themselves significantly above the midpoint on self-reports of meaning in life. We suggest that if meaning in life plays a role in adaptation, it must be commonplace, as our analysis suggests.

Keywords: meaning in life, well-being, Positive Psychology

Life is Pretty Meaningful

Considering one's life to be meaningful is associated with a multitude of very good things. Self-reports of meaning in life are associated with higher quality of life, especially with age (Krause, 2007), superior self-reported health (Steger, Mann, Michels, & Cooper, 2009), and decreased mortality (Boyle, Barnes, Buchman, & Bennett, 2009; Krause, 2009). Meaning in life predicts slower age-related cognitive decline and decreased risk for Alzheimer disease (Boyle, Buchman, Barnes, & Bennett, 2010). Meaning in life is associated with lower incidence of psychological disorders (Mascaro & Rosen, 2005; Owens, Steger, Whitesell, & Herrerra, 2009; Steger & Kashdan, 2009) and suicidal ideation, even within the context of depression (Heisel & Flett, 2004). Those who report their lives as meaningful are more likely to rely on adaptive coping strategies (Thompson, Coker, Krause, & Henry, 2003). In the work domain, meaning in life is related to heightened occupational adjustment (Littman-Ovadia & Steger, 2010). In the social domain, those who rate their lives as quite meaningful are rated by others as more socially appealing (Stillman, Lambert, Fincham, & Baumeister, 2011).

Yet, as clearly important as the experience of meaning in life is to human existence, it remains, in some ways, a construct and experience shrouded in mystery. At times, meaning in life would appear to be hotly sought after and, potentially, chronically lacking in people's lives. Even the briefest skim of the best seller list or a casual walk down the self-help aisle of a bookstore suggests that people will spend a great deal of money in search of a meaningful or purposeful life. Psychological perspectives on meaning in life reveal a paradox: Meaning in life bears the unlikely distinction of being recognized as, at once, a necessity of life *but also* an increasingly rare commodity (e.g., Frankl, 1964/1984; Maslow, 1968; Wong & Fry, 1998). Obviously, both of these characterizations cannot be accurate. Nothing that human beings *require* to survive can be next to impossible to obtain. If meaning in life is thought to play a role in survival, then it must be commonplace (Halusic & King, 2013). So, which is it? Is meaning in life commonplace (as any necessity of life must be) or is it, instead, a rare experience? Answering this question is our goal in this article.

First, we briefly define meaning in life and then review various psychological perspectives on the potential answer to our central question. Then, drawing on research on meaning in life we suggest that the answer to the question, "How meaningful is life?" as anticipated in our title, is a potentially surprising, "Pretty meaningful." We then address some likely critiques of our analysis. Finally, we suggest important implications of the conclusion that, for all its apparent mystery, meaning in life is relatively commonplace.

Conceptually and Operationally Defining Meaning in Life

To begin we must, of course, define what we mean by meaning in life.[1] A number of diverse definitions of meaning in life have been suggested. Importantly, though differing in various ways, these definitions do share at least three common themes. Two of these are motivational or existential in nature: First, a meaningful life is one that has a sense of *purpose* and, second, a meaningful life is one that matters or possesses *significance* (e.g., Baumeister, 1991). A final shared theme is more cognitive: The meaningful life makes sense to the person living it, it is comprehensible, and characterized by regularity, predictability, or reliable connections (e.g., Antonovsky, 1993; Baumeister, 1991; Baumeister & Vohs, 2002). Definitions of meaning in life tend to include these aspects of the experience, though they may vary in terms of which component is emphasized. Consider, as an example, the following definition proffered by King and colleagues (King, Hicks, Krull, & Del Gaiso, 2006, p. 180), "Lives may be experienced as meaningful when they are felt to have a significance beyond the trivial or momentary, to have purpose, or to have a coherence that transcends chaos."

Or another offered by Steger (2012, p. 65), "Meaning is the web of connections, understandings, and interpretations that help us comprehend our experience and formulate plans

directing our energies to the achievement of our desired future. Meaning provides us with the sense that our lives matter, that they make sense, and that they are more than the sum of our seconds, days, and years."

These rather lofty conceptual definitions notwithstanding, research on meaning in life, including the many studies cited in our opening paragraph, has used self-report questionnaires that ask individuals to rate how purposeful and meaningful their lives are. We will address the tension between scholarly definitions of meaning in life and these more humble self-ratings that rely on an intuitive understanding of the meaning of the words "purposeful" and "meaningful" (Hicks & King, 2009a) later in this article. With these conceptual and operational definitions in place, we now briefly review perspectives on meaning in life that suggest different answers to the question, "How meaningful is life?"

Potential Answers

Theorists and researchers have weighed in on meaning in life in various ways. Although rarely (if ever) have they attempted to quantify the amount of meaning that is likely to be experienced in human life, *on average*, there are indications in these diverse perspectives with regard to the how meaningful human life is likely to be. The notion that meaning in life is chronically lacking is well-represented in scholarly treatments of the topic. From an existential perspective, the lack of meaning in human existence is the central and enduring problem of that existence. Frankl (1964/1984) pointed to the dangerous "existential vacuum" increasingly faced by modern humans. Yalom (1980) listed meaninglessness as one of four essential "givens" of human existence. So, we might tally one vote for life being rather less meaningful than otherwise.

The notion that the meaningful life is relatively rare is also reflected in the science of psychological well-being. Meaning in life is typically considered emblematic of eudaimonic well-being. Eudaimonia has been described variously as happiness that emerges as a function of the satisfaction of organismic needs (Ryan & Deci, 2001), self-realization (Waterman, 1993) or actualizing one's potentials (Ryff, 2012; Ryff & Singer, 2008). In a sense, eudaimonia is conceived of as something greater than plain old happiness (Kashdan, Biswas-Diener, & King, 2008). As part of eudaimonia, then, the meaningful life would seem to be a true (and potentially rare) human accomplishment. Certainly, compared to say, the happy life, the meaningful life has been characterized as relatively scarce (Seligman, 2002, 2011). Research has shown that most people rate their levels of happiness or satisfaction to be above the midpoint on self-report rating scales (Diener & Diener, 1996). Thus, from the eudaimonic perspective, we might expect meaning in life to be at least less common than happiness, so we might tally a vote for relatively low levels of meaning in life.

Although most research on meaning in life is correlational, increasingly, researchers have examined the ways that self-reports of meaning in life are influenced by various laboratory manipulations. We note three strands of experimental research that provide a reason to expect that meaning in life might not be quite so rare after all.

Social Exclusion

Social relationships are a foundational source of meaning in life (e.g., Hicks & King, 2009b). Individuals who are lonely, socially excluded, ignored, or ostracized are worse off on a number of psychological outcomes, including reporting lower meaning in life, than those who are included (see Williams, 2007 for review). More surprisingly, even very superficial laboratory manipulations affect the experience of meaning in life (King & Geise, 2011). Participants who received a single instance of rejecting feedback from a confederate rated their lives as less meaningful than those who received neutral or accepting feedback (Stillman et al., 2009, Study 1). Further, participants who were excluded in an interactive ball-tossing computer game (Cyberball) rated their lives as more meaningless and less meaningful than control participants (Stillman et al., 2009, Study 2; Zadro, Williams, & Richardson, 2004). Essentially, social exclusion reliably leads to lower ratings on meaningful existence (Williams, 2012) even when this exclusion is momentary, impersonal (i.e., when it was done by a computer; Zadro, Williams, & Richardson, 2004) or when the excluder is a member of a

despised outgroup (Gonsalkorale & Williams, 2007). In sum, this research suggests that when we are socially excluded life feels less meaningful. When we are socially connected, life feels more meaningful.

Positive Mood

Positive mood or positive affect refers to the experience of mild pleasant feelings: The extent to which a person is happy, pleased, cheerful, or experiencing enjoyment. Meaning in life is consistently positively correlated with positive affect (e.g., Hicks & King, 2009a; King et al., 2006). In addition, and most importantly, experimental research has shown that induced positive mood leads to higher meaning in life, using a variety of mood induction techniques, examining college students (Hicks & King, 2009b; King et al., 2006) and community adults (Hicks, Schlegel, & King, 2010; Hicks, Trent, Davis, & King, 2012). These studies show that even mild experiences that enhance positive affect (e.g., listening to happy music or reading the funnies) can promote a sense of meaning in life. Thus, positive mood is not simply an outcome of meaning in life, the causal arrow goes in the other direction as well. When we are in good mood, then, life feels more meaningful.

Environmental Pattern and Coherence

More recently, our research has shown that meaning in life reports are sensitive to the presence of reliable pattern or coherence in environmental stimuli. Drawing on the cognitive component of meaning in life noted above, we hypothesized that meaning in life would be higher after an experience with stimuli characterized by pattern or coherence compared to experiences lacking such pattern or coherence. Put simply, we predicted that when stimuli make sense, life should be more meaningful (Heintzelman, Trent, & King, 2013).

In one study, participants viewed a series of pictures of trees. The 16 photos included 4 for each of the 4 seasons. The participants thought their job was to evaluate the contrast in the pictures. Unbeknownst to them, the order in which the pictures were shown was systematically varied. In one group, the 16 pictures appeared in a random order. In another, they were arranged so that they followed the change in seasons, over 4 cycles (conforming to Spring, Summer, Fall, and Winter). After completing the rating task, all participants rated their meaning in life. We found that meaning in life was rated significantly higher in the seasonal pattern group than in the random group (Heintzelman et al., 2013, Study 1). In subsequent studies, we found that meaning in life was rated higher after exposure to the same pictures presented in a *novel* pattern (vs. random order; Study 2) and after reading words triads arranged so that they possessed a fourth common associate (vs. the same words not so arranged; Study 4). These findings support the hypothesis that encounters with regularity, pattern, and overlearned associations (i.e., those word triads, see Kahneman & Klein, 2009) can influence evaluations of life's meaning. When the world makes sense, life feels more meaningful.

These experimental results, documenting the influence of momentary social exclusion, positive mood, and stimulus coherence on ratings of life's meaning, have at least one intriguing implication for the question, "How meaningful is life?" Consider that social exclusion is, fortunately, the exception to our everyday existence. More often, for most people, we are *in*cluded (see, for instance, Leary & Cox, 2008). Likewise, positive mood is often considered the default state (Cacioppo, Gardner, & Berntsen, 1997) and, as noted above, most people are pretty happy (Diener & Diener, 1996). Finally, we live in a world that generally is characterized by natural regularity. We have sunrises, sunsets, and seasons. We overlay these natural patterns with constructed routines, rituals, regular appointments, morning coffee, and our typical commute (King, 2012). Given the commonplace nature of these variables that have been shown to affect, enhance, and support meaning in life, it seems that life might be fairly *brimming* with meaning. So, these experimental results would seem to provide a vote for rather high levels of meaning in life.

Is it possible that meaning in life, a focus of much human longing, is actually more commonplace than that longing might suggest? The answer to this question is contained in descriptive large scale surveys as well as nearly every article published in the science of meaning in life. Namely, it is in the descriptive statistics. Thus, we examined the levels of meaning in life

reported in representative samples as well as in a host of studies on the construct.

On Average, How Meaningful is Life?

To answer to this seemingly lofty question, we first examined several large-scale surveys of representative samples and, second, gathered descriptive statistics from published research using two well-established meaning in life measures. Each of these sources of information comes with its own strengths and weaknesses. Large-scale surveys possess greater generalizability but often suffer in terms of measurement, relying on single, few, or ad hoc items. Though more vulnerable to potential sampling biases, research studies typically use well-established measures of known reliability. Examining these complementary sources of evidence allows us to triangulate on an approximate answer to the question, how meaningful is life?

An Epidemiology of Meaning in Life

Measures of meaning in life have been included in six nationally representative U.S. surveys and one worldwide poll. These descriptive data strongly support two conclusions: First, that life is meaningful and second, that the level of meaning in life experienced is pretty high.

Two surveys using dichotomous response options show that *most people* find their lives to be meaningful. First, in the 2002 wave of data collection, The Health and Retirement Study (Juster & Suzman, 1995), a longitudinal study of Americans over age 50, included, for some participants (N = 1,062), two items regarding the meaningfulness of their lives during the past 12 months. In response to the question, "Did you feel that your life has meaning?" 95% answered, "Yes." For the item, "Did you feel that there's not enough purpose in your life?" 84% said, "No." Second, Oishi and Diener (2013) recently reported on data collected from 132 nations (N = 137,678) in 2007 by Gallup Global Polls. This assessment included the item, "Do you feel your life has an important purpose or meaning?" Averaging across the 132 nations, the percentage responding in the affirmative was 91%. Life was considered to be meaningful by 90% or more of those surveyed in nations as diverse as Cuba, Kosovo, Malawi, Sierra Leone, Sri Lanka, and the United States. Even among the nations defining the lowest levels of endorsement (e.g., Hong Kong, Slovenia, Japan, and France), the percentage of individuals doing so was over 60% (Oishi & Diener).

These data strongly indicate that, generally, life is judged to be meaningful but not *how* meaningful it is considered to be. To examine this issue, we turn to five representative U.S. surveys employing interval level scales. In the 2007 Baylor Religion Survey, conducted by Gallup, respondents (N = 1,648) rated the single item, "My life has a real purpose," on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Just 1.1% strongly disagreed, 9.1% disagreed, and 6.1 % were undecided. The remaining respondents (over 83%) agreed (54.9%) or strongly agreed (28.7%) that their lives had "a real purpose" (Stroope, Draper, & Whitehead, 2013). Although the mean for the rating is not provided in the original article, the extrapolated mean, based on these percentages is 4.01 (above 3, the scale midpoint).

In the Americans' Changing Lives survey (House, 1986, 2008), respondents (N = 1,660) rated two items relevant to meaning in life on a scale from 1(*strongly agr*ee) to 4 (*strongly disagree*). The items included, "I have a sense of direction and purpose in life" and "In the final analysis, I'm not sure that my life adds up to much." Reverse coding so that higher scores indicate higher meaning in life, the means were 3.50 (SD = 0.76) and 3.44 (SD = 0.86), respectively. (Recall that the scale maximum was 4). Both values are significantly higher than the scale midpoint, $t(1659) = 53.96$, $p < .001$, $d = 1.32$ for the purpose item, and $t(1654) = 44.41$, $p < .001$, $d = 1.09$, for the final analysis item. The distributions of the ratings show that these means are not driven by a few extreme cases. For the "purpose" item, 90.4% somewhat agreed (27%) or strongly agreed (63%); for the "final analysis" item, 84.4% somewhat disagreed (20.2%) or strongly disagreed (64.2%) (House, 2008).

Two representative U.S. surveys included the 3-item purpose subscale of the Psychological Well-being Scales (Ryff, 1989). Unlike the other scales included in this analysis, none of these items explicitly mention meaning or purpose in life. A sample item is, "Some

people wander aimlessly through life, but I am not one of them." Items are rated on a 1 to 6 scale. The means for both samples suggest that life is pretty purposeful. In one sample (N = 1,108) the mean sum (α = .33) of the items was 14.4 (SD = 3.2; Ryff & Keyes, 1995). Converting this value to the average rating over the three items, the mean is 4.8 (above the scale midpoint, d = 1.22). For the Midlife in the United States (MIDUS) dataset (N = 3,032), the sample weighted mean for the sum (α = .37) was 16.2 (SD = 3.7; Keyes, Shmotkin, & Ryff, 2002). On a 6-point scale, the mean is 5.4 (again, above the scale midpoint, d = 1.54).

Finally, in 2008, the Centers for Disease Control administered three items from the Meaning in Life Questionnaire presence of meaning subscale (Steger et al., 2006) to a large national sample (N = 5,399; Kobau, Sniezek, Zack, Lucas, & Burns, 2010). The items included, "My life has a clear sense of purpose;" "I have a good sense of what makes my life meaningful;" and "I have discovered a satisfying life purpose." Items were rated on a scale from 1 (*not at all true*) to 5 (*completely true*). Averaging over the three items (α = .89), the mean was 3.80 (over 3, the scale midpoint). For comparison, for a measure of life satisfaction using the same rating scale, the mean was 3.35 (Kobau et al., 2010). Clearly, meaning in life is *not* less common than life satisfaction. The distributions of the ratings are informative. For the item with *the lowest* level of endorsement, "My life has a clear sense of purpose," 3.3% selected 1 (*not at all true*), 6% selected 2; 38.5% selected 4 and 20.7% selected 5 (*completely true*) (Kobau et al., 2010).

In sum, based on these large-scale, representative samples, for most people, life is meaningful. From those surveys including interval scales, the majority of participants agreed or strongly agreed that their lives were meaningful. Comparatively few felt that their lives lacked meaning. Means for various measures of meaning in life were consistently above the midpoint of the rating scales. Certainly, these data bear the strength of generalizability. However, reports of the data did not always include relevant information (e.g., the means and standard deviations) and none of these assessments used complete, well-validated, and highly reliable measures specifically designed to assess meaning in life. Further, these assessments are limited as, with the exception of one, they represent United States samples exclusively. To examine our question in the context of such measures and across a wider variety of sample characteristics, we turned to the research literature on meaning in life.

Meaning in Life in Research Samples

We conducted an extensive literature review in which we collected means reported for two established measures of meaning in life, the Purpose in Life Test (PIL; Crumbaugh & Maholick, 1964) and the MLQ (Steger et al., 2006). We selected these two scales because they have been used extensively in research and their item content is typical of meaning in life measures. In addition, they represent an older and newer measure of the construct, allowing us to focus on a scale that represents the culmination of current knowledge in the assessment of meaning in life (the MLQ) but still include papers published prior to 2006.

Introduced 50 years ago and inspired by Frankl's approach to existential meaning, the PIL is a 20-item measure in which participants respond to statements by choosing among varying degrees of two opposite responses. For example, given the statement "In life, I have:" participants select a response from 1 (*no goals or desires*) to 7 (*very clear goals and desires*) and when presented with the statement "My personal existence is:" participants select a response from 1 (*meaningless, without purpose*) to 7 (*purposeful, meaningful*). The MLQ was constructed to address a number of concerns with the psychometric properties of older measures of meaning in life (Steger et al., 2006), especially the purity of item content. The scale contains two 5-item subscales measuring the presence of and search for meaning respectively. Examples of items from the presence of meaning subscale are given above. Items are rated on a scale from 1 (*not at all true*) to 7 (*very true*).

To locate articles using the two scales, we searched *PsycInfo* for all articles citing the scale development papers for each. We found that, as of December 2012, the PIL article was cited 200 times and the MLQ article 208. From these publications, we narrowed our search,

focusing on articles presenting studies that used the scales and that were available via the database or through brief correspondence with the authors. Clearly, this strategy would be insufficient for a meta-analysis examining effect sizes. However, we were not interested in *effects* at all, simply *descriptive statistics*. Because descriptive statistics for measures play no role in the chances of a paper being published or not (which, for better or worse, generally depend on the *inferential* statistics), the file drawer problem associated with this selection technique is not particularly concerning. In correlational studies of meaning in life, reporting such means is standard operating procedure. In experimental or intervention studies, the means are reported, at times for a premeasure (in within participant designs) or as outcome measures. For studies reporting the relevant statistics for the scale of interest, we recorded the means (separated by condition or group when applicable) and details regarding the sample and any manipulation used.

The Purpose in Life Test

For the PIL, we identified 73 means from 33 articles. We included only studies using the full 20 item scale and the standard 1 to 7 rating scale. The complete list of these articles can be found in the online supplementary materials. The scale was reliable across studies (α's reported ranged from .50 to .95, mean = .87). Traditional scoring of this scale involves summing the item ratings. To make our analysis of these values comparable to the means for the MLQ presence scale, we converted each total into the average rating, dividing over the 20 items. Thus, the means reported indicate this average on a scale from 1 to 7. We computed two-tailed, one-sample *t*-tests, comparing the means to 4, to get a sense of the extent to which life's meaningfulness differed from the scale midpoint (*SD*s for these tests were the average reported *SD*s weighted by sample size).

Figure 1, Panel a shows the frequency distribution of the means, by study. As can be seen, means ranged from 3.65 to 6.24. Clearly, most studies reported means between 5.0 and 5.5. Only one study reported a mean below the midpoint. Overall, the mean PIL (weighted by sample size) for the 8,069 participants in these studies was 5.14, $SD = 0.39$, significantly higher than the midpoint of the scale, $t(8068) = 124.88$, $p < .0001$, $d = 2.78$.

Next, we subdivided the studies by sample characteristics. First, we looked exclusively at studies without specific participant inclusion criteria that did not utilize any sort of manipulation. For these participants, weighted PIL scores were uniformly high: For undergraduate samples, $M = 5.40$, $SD = 0.17$, $N = 2632$; adult samples, $M = 5.12$, $SD = 0.11$, $N = 477$; and older adult samples (60 and older), $M = 5.39$, $SD = 0.18$, $N = 607$. All means were significantly above the midpoint (all t's > 29, all d's > 2.70).

What about individuals who are facing challenging life experiences? We next selected studies that were comprised of samples in such contexts, including, among other things, alcohol or drug abuse and dependence, other severe psychological disorders, physical illness, or disability. The sample size weighted mean PIL for the 1,967 participants in these 29 studies was 4.78 ($SD = 0.34$), significantly higher than the midpoint of the scale, $t(1966) = 42.19$, $p = .001$, $d = 1.90$.

Before leaving the PIL, it may be of interest to note specific studies that suggest the degree to which life is apparently felt to be purposeful and meaningful. In the initial validation paper, Crumbaugh and Maholick (1964, Study 5) measured meaning in life in 21 hospitalized alcoholics. The mean in that study was 4.47. In a study of 154 patients in a 30-day residential substance abuse program for cocaine abuse the mean was 4.49 (Martin, MacKinnon, Johnson, & Rohsenow, 2011). In a sample of 40 elderly (aged 85+) individuals *with depression*, in Northern Sweden, the mean was 4.95 (Hedberg, Gustafson, Alex, & Brulin, 2010, Time 1). Among 25 critically ill hospital patients the mean was 5.73 (Thomas & Weiner, 1974). Scores on this measure were fairly high for non-westerners as well. In a sample of 336 Japanese adults the mean was 5.13 (Steger, Kawabata, Shimai, & Otake, 2008). In sum, at least with regard to the PIL, individuals from many different walks of life judge their lives to be quite purposeful and meaningful.

Two potential concerns with the PIL are the extremity of some items and the conflation of purpose in life with positive affect,

enjoyment, vitality or zest. First, some items on the PIL are quite extreme. For instance, "Regarding suicide I have: thought of it seriously as a way out vs. never given it a second thought." Such items may naturally contribute to high scores. In addition, this scale includes items like, "Facing my daily tasks is: a painful and boring experience vs. a source of pleasure and satisfaction" and "My life is: empty, filled with despair vs. running over with exciting things." These means, then, might be inflated by momentary positive mood or general positive emotionality (McGregor & Little, 1998). In order to have some confidence that the levels of meaning in life espoused on the PIL are not due to these or some other idiosyncrasy of the scale, we turned to the MLQ. The presence of meaning subscale of the MLQ does not include any extreme items and though generally correlated with positive affect (e.g., r = .39, Hicks & King, 2009b), none of the items mention positive emotion.

The Presence of Meaning Subscale of the Meaning in Life Questionnaire

For the MLQ presence of meaning subscale, we identified 122 means from 62 articles. Again, this scale is scored from 1 to 7 and we report the average rating of the five items. The scale was reliable across studies (α's reported ranged from .64 to .95, mean = .86).The articles included are listed in the online supplementary materials. Figure 1, Panel b shows the frequency distribution of the means by study which ranged from 2.94 to 6.08. The modal means fell between 4.51 and 4.99, with a number of studies reporting means between 5 and 5.55. Of the 122 means, just 10 fell below the midpoint. The sample size weighted mean on this scale for the 27,635 participants included in these studies was 4.56, SD = 0.59, which differs significantly from the midpoint of the scale, $t(27634) = 83.87$, $p < .0001$, $d = 1.0$.

As we did for the PIL, we subdivided the studies based on sample characteristics. For studies not targeting specific clinical populations, means were significantly above the midpoint for undergraduate, $M = 4.70$, $SD = .46$, $N = 4913$, $t(4912) = 44.20$, $d = 1.26$, and adult samples, $M = 4.86$, $SD = .43$, $N = 3808$, $t(3807) = 47.81$, $d = 1.55$. Next, we selected those studies in which participants were facing life challenges such as those described above as well as bereavement, trauma, and social exclusion. Participants in these samples still reported that their lives were more meaningful than not, $M = 4.80$, $SD = .54$, $N = 1761$, and significantly above the midpoint of the scale, $t(1760) = 30.24$, $p < .0001$, $d = 1.44$.

A brief perusal of individual studies is informative. "At or above the midpoint" means are not unique to American samples. In a study of Australian adults, Cohen and Cairns (2012; N = 500) reported a mean of 4.88. In a study of Spanish college students following a terrorist attack in Madrid (Steger, Frazier, & Zacchanini, 2008; N = 46), the mean was 4.23. Further, these means were around or above the midpoint in samples from eastern cultures as well. Among Indian college students (Dogra, Basu, & Das, 2008; N = 320), the mean was 5.23. In a sample of 34 Japanese adults whose grandparents were exposed to the nuclear attack during World War II, the mean was 4.06; among 88 not so exposed the mean was 4.14 (Palgi et al., 2012). In a Japanese sample (n = 982), the mean was 3.94 (Steger, Kawabata, Shimai, & Otake, 2008). Further, to illustrate the robustness of reports that lives are quite meaningful even for individuals facing dire circumstances, consider two specific samples. In a study examining the effects of an intervention on meaning in life in women coping with breast cancer, the means were 4.66 and 5.22, *prior to the intervention* (Hsiao et al., 2012; n's = 18 for each group). In a sample of adults diagnosed with serious psychological disorders for at least one year (Schulenberg, Strack, & Buchanan, 2011; N = 96), the mean was 5.63.

In sum, evidence from large representative samples and the body of research using an older and a newer measure of meaning in life strongly point the same conclusion: Life is pretty meaningful.[2]

Criticisms and Concerns

Considering the high place that meaning in life enjoys in the pantheon of psychological functioning, the conclusion that human life is pretty meaningful may be provocative, heretical, or even outrageous. Where is the *existential vacuum*? Where is the *given meaninglessness* of existence? Where, indeed, are the French

existentialists? Here we consider a number of likely objections to our conclusion.

Self-reports of Meaning in Life ≠ Meaning in Life

Of course, our analysis is based on self-reports and as such, the conclusion here might be somewhat more circumscribed: Perhaps not that human life *is* pretty meaningful, but that most people *rate* their lives as pretty meaningful. Some might dismiss these findings outright because they rely entirely on self-report measures. Of course, no scale is truly the thing itself, and questionnaire measures of meaning in life are no different. They provide an approximation of an experience, a gauge that allows us to measure what we cannot operationalize in any other way.

Alternatively we might call for measures of meaning in life that do not require self-report. It is notable that self-reports on the MLQ-presence scale are significantly related to informant reports (*r*'s = .28 to .39, Steger et al., 2006, Study 4). Even so, as with other aspects of well-being, the subjective nature of these ratings is, in some ways, inevitable. Meaning in life is, by definition, a subjective state. As Klinger (1977, p. 10) elegantly noted, "The meaningfulness of someone's life cannot be inferred just from knowing his or her objective circumstances. Meaningfulness is something very subjective, a pervasive quality of a person's inner life. It is experienced both as ideas and as emotions. It is clear, then, that when we ask about the meaningfulness of someone's life we are asking about the qualities of his or her inner experience." In this sense, self-report might be the *best* way to measure meaning in life (Heintzelman & King, 2013; Kashdan, Biswas-Diener, & King, 2008).

Finally, some might balk at the notion that self-report questionnaires measuring meaning in life have been shown, as reviewed above, to be influenced by subtle experimental manipulations. Perhaps they would contend that if these measures of meaning in life were "real" they would be impervious to these manipulations. Certainly, self-reports of meaning in life are generally characterized by a high degree of temporal stability (Steger et al., 2006). Moreover, we believe that this responsiveness to situational factors is required for meaning in life to play a functional role in self-regulation and adaptation, a point we review in more detail below.

Response Biases

Meaning in life is clearly a desirable commodity so it is possible that, as a general rule, meaning in life ratings are inflated by desirability biases. Moderate correlations (*r*'s = .33, .37) exist between the PIL and a social desirability scale (Ebersole & Quiring, 1989). In its initial validation paper, the MLQ presence of meaning subscale, in contrast, was not related to a questionnaire measure of social desirability (*r* = -.08, Steger et al., 2006). The consistency of relatively high scores, even in samples where might one fully expect low levels of meaning in life or among individuals for whom social desirability might not be a pressing concern (i.e., anonymous respondents) suggests that meaning in life is pretty high.

Positive Illusions

Another way to view these relatively high levels of meaning in life is through the lens of positive illusions. Certainly, individuals often adopt overly rosy views of themselves (e.g., Alicke & Sedikides, 2009; Taylor & Brown, 1998). Moreover, at least sometimes, viewing oneself and one's life in unrealistically positive terms can be adaptive (e.g., Dunfer et al., 2012; Taylor et al., 2003). So, perhaps these many individuals are simply kidding themselves, reporting high meaning in life when in fact their lives lack actual meaning. Positive illusions might well be relevant to all aspects of well-being but they are, (arguably) especially, *perhaps essentially*, relevant to the issue of meaning in life. From an existentialist perspective, human life has no inherent meaning. Examining one's life objectively, the absurdity, the "ridiculous character," of everyday existence is difficult to ignore (Camus, 1955). Thus, *all meaning in life is illusory*. If such is the case, then, the present data suggest that this illusion is rampant. We leave it to others to consider whether, given association between meaning in life and many positive outcomes, it would be a good idea to dispel these individuals of this particular illusion.

People rate their lives as meaningful because they don't know what meaning is

Perhaps the problem with self-reports of meaning in life lies in the difference between lay notions of this experience and scholarly definitions of the construct. Self-reports of meaning in life do share a central ambiguity. All measures of meaning in life include items that refer specifically to "meaning" in items like those used in the scales on which we have focused. As already noted, such measures rely on participants' intuitive sense of what meaning in life means (Heintzelman & King, 2013; Hicks & King, 2009a). People may hold varying beliefs about what makes a life meaningful and these beliefs may not align with abstract scholarly conceptualizations of this experience. For example, participants prioritize family and friends as foundational sources of meaning above notions of purpose, significance, and coherence (Lambert, Stillman, Baumeister, Fincham, Hicks, & Graham, 2010; see also Ebersole, 1998). Which definition of meaning in life, the one used by people answering questions about meaning in life or the one created by psychologists, is the "right" one? Perhaps the answer to this question requires that we remind ourselves why psychologists proposed such definitions in the first place: To capture an experience that people have, not one that psychologists invented.

Pretty high is not high enough

Another potential concern with our conclusion might be that a pretty meaningful life is not the desired end. Rather, perhaps, people are driven towards a very or extremely meaningful life. It is interesting to draw a parallel to the conclusion that "most people are happy," as shown by Diener and Diener (1996) in a similar analysis focusing on the prevalence of happiness. Their conclusion was based on the finding that self-reports of happiness and satisfaction are generally above the midpoint of rating scales. Must meaning in life reach a higher threshold, in comparison to happiness, before it can be considered widespread?

Media portrayals of happiness and meaning in life certainly reveal a double standard. In a recent article published in *The Atlantic*, identical descriptive statistics regarding the prevalence of meaning and happiness were interpreted through very different lenses.

> "According to Gallup, the happiness levels of Americans are at a four-year high…At this writing, Gallup also reports that nearly *60 percent* all Americans today feel happy, without a lot of stress or worry. *On the other hand*, according to the Center for Disease Control, about 4 out of 10 Americans have not discovered a satisfying life purpose. *Forty percent* either *do not* think their lives have a clear sense of purpose or are neutral about whether their lives have purpose. Nearly a quarter of Americans feel neutral or do not have a strong sense of what makes their lives meaningful." (Smith, 2013; emphases added).

Notice the values provided are mathematically equivalent. That 60 percent of people are happy leads to the conclusion that happiness is abundant; that 60 percent of people rate their lives meaningful is taken to indicate alarmingly *low* levels of meaning in life. Interestingly, the authors of the article presenting the Center for Disease Control data reached a very different conclusion: That "most adults perceive that life has a sense of meaning and purpose" (Kobau et al., 2010, p. 289).

The Bottom Line

We suspect that at the heart of these criticisms is the feeling that these data are simply wrong not because they come from self-reports, not because like other self-reports they are vulnerable to biases or illusions, nor even because they represent potentially trivial self-reports about a topic that is generally thought of as one of life's greatest mysteries. Rather, these means are unacceptable because, frankly, they are *too high*.

Consider the reaction to these very same self-report data if the means were significantly different from the midpoint *in the other direction*. Would showing that life is, actually quite meaningless, be somehow less troublesome, and the self-report questionnaires somehow, magically, more valid? Even further, imagine that over 90% of respondents in a representative survey said "Yes" to a question about being depressed or hopeless. Would such reports be more credible? Indeed, consider Figure 1 stripped of its labels on the *x*-axes.

Surely, such scores would warrant the conclusion that the phenomenon of interest was, indeed, widely prevalent, suggesting perhaps an epidemic of the variable of interest.

Of course, research using self-report measures is the science that supports the notion that meaning in life is, in fact, important. If self-report measures of meaning in life are patently inadequate, we would be disingenuous not to dismiss, as well, the body of science demonstrating that meaning in life predicts crucial outcomes. We cannot accept and celebrate inferential statistics when they tell us that meaning in life is important but deny the homely reality of descriptive statistics when they tell us that it is also common. Even as they seem to contradict the mystique of meaning in life as an unattainable human goal, we cannot help but suggest a more credulous take on these statistics. Shouldn't we, at least, *entertain* the notion that these ratings in fact represent the meaning in life that these many individuals experience? If true, the conclusion that life is pretty meaningful has important implications for the science of well-being and our understanding of meaning in life.

Implications

Recognizing the commonplace existence of the experience of meaning in life suggests novel directions for future research. First, the prevalence of meaningful lives might suggest additional sources of meaning that have previously been ignored. In addition to traditionally recognized "deep" sources of meaning in life, such as religion, worldviews, and close relationships, meaning in life may also be drawn from more mundane daily functions (e.g., habitual activities; everyday experiences of pleasure) and a person's immediate environment. These alternative sources of meaning may be foundational to human functioning and therefore more universal. (Such a possibility suggests, of course, the importance of continued cross-cultural research on meaning in life). Finally, it might be important for researchers to turn to the question of whether it matters where meaning in life comes from. Rather than focusing on whether life is meaningful, we might begin to examine how the origins of all this meaning influence the relations of meaning in life to important outcomes.

Further, to help us understand meaning in life, conceptual treatments of the construct must account for the fact that meaning in life is relatively commonplace. Conceptualizations of meaning in life that place it outside the grasp of the average person in his or her everyday life may be a good way to sell books and motivational tapes but they do not reflect the apparent reality of meaning in life. The feeling that life is meaningful is *not* a rare experience enjoyed by only a few fortunate souls who have dedicated themselves to the right goals (or read the right book or attended the right workshop).

The commonplace nature of meaning in life might also call into question the notion that meaning is always a constructed experience (King, 2012). If the meaning in life that we experience is actively constructed, created, crafted, and laid over the reality of meaninglessness, then it would seem to be the case that humans are natural and expert meaning-makers, indeed. We might compare meaning in life to happiness in this regard: Yes, we can make ourselves happy and happier but not all of our happiness comes from our efforts. Perhaps the feeling that life is meaningful shares this feature with happiness. Some of the meaning we experience we create, but perhaps some of the meaning we experience comes from our interactions with a world whose features can promote a feeling of meaningfulness (Heintzelman et al., 2013). Inspired by this possibility, we suggest a way to think about meaning in life that takes seriously the notion that, just as scholars of meaning have proposed, the experience of meaning in life is adaptive.

The Adaptive Function of Meaning in Life

How might psychologists make meaning out of the findings reported here? How can so many people in so many different contexts and circumstances report their lives to be meaningful? Consider the stance of participants rating items like those in the questionnaires reviewed here. In answer to these questions, they have told us, essentially, "What I do has purpose. What I do has significance. My life matters in a way that will outlast my physical existence." The experimental evidence reviewed above suggests that when we feel connected to others, when we are in a good mood, when the world around us makes sense,

life feels this way. And the data reviewed here suggest that life feels this way quite a lot. Most of the time, even during difficult times, life feels pretty meaningful to the persons living it. Acknowledging that meaning in life is relatively common does not somehow reduce the value of this central aspect of the Good Life. Rather, its prevalence positions meaning in life among other necessities for survival.

The Necessity of Meaning in Life

Scholars have long asserted that the experience of meaning in life is essential. Consider the following from Abraham Maslow (1968, p. 206), "The human needs a framework of values, a philosophy of life…in about the same sense that he needs sunlight, calcium, and love." Similarly, Frankl (1964/1984 p. 126) asserted, "There is nothing in the world…that would so effectively help one survive even the worst conditions as the knowledge that there is meaning in one's life."

What if we took these sentiments seriously? What if we considered the possibility that meaning in life is not simply nice to have but is, in fact, crucial to survival and adaptation? Any psychological experience that is suggested to play a role in adaptation must be responsive changing environmental circumstances. Thus, research demonstrating the effects of manipulations on meaning in life reports ought to be recognized not as trivializing this experience but, quite the contrary, highlighting its potential role in adaptive functioning (Heintzelman et al., 2013). Consider the types of manipulations that seem to matter very much to meaning in life: social relationships, the experience of pleasure, and the detection of reliable pattern or coherence in the environment. Though potentially trivial-seeming, from an adaptive perspective these three factors are anything but. Human beings need the social group to survive (Baumeister & Leary, 1995). In addition, pairing pleasure with adaptive behaviors is evolution's way of getting us to do the things we must to survive (e.g., Kringelbach & Berridge, 2010). Finally, extracting reliable associations in the environment is a survival-relevant capacity for all species (e.g., Geary, 2004). Experimental research on the experience of meaning in life provides important evidence that this experience is deeply intertwined with the kinds of activities and experiences that human beings need to survive.

This perspective has implications for our understanding of meaninglessness as well. If meaning in life is a necessity, experiences with meaninglessness should captivate our attention and direct our activities in ways that seek to restore this vital experience. In this sense, this experience we call meaning in life might well help to solve adaptive problems, directing attention and behavior toward survival relevant ends. That this experience is also deeply embedded in potentially mundane aspects of existence is required for it to serve in this regard. Moreover, although the meaningless life would seem to be the exception to the rule, lives experienced as meaningless present a truly dire (though thankfully unusual) situation: The absence of a basic necessity of life.

Considering meaning in life a necessity helps to explain the persistence of the human longing for meaning. If meaning in life is commonplace, why then do we continue to strive so mightily for it? This continual striving after meaning is, of course, an expression of powerful motivation and many have recognized meaning in life as a basic human need (e.g., Frankl, 1964/1984; Heine, Proulx, & Vohs, 2006; Maslow, 1968; Park, Edmondson, & Hale-Smith, 2013). Consider other basic human needs. The things we need to survive are enduring longings that cannot be satisfied in a "once and for all" way. Even when satisfied momentarily, they remain crucial goals that inform our interaction with the world. We will not soon get over our need for oxygen or water. No amount of oxygen or water will persuade us way from our energetic dedication to these necessities. This analysis suggests that meaning in life can be high even as the pursuit of meaning continues, in the service of self-regulation and adaptation. If meaning in life is a central human motivation, then even in the presence of meaning, the desire for meaning might persist. Does it? Research on meaning in life provides an answer to this question.

As we noted earlier, the MLQ includes a subscale measuring the degree to which a person is *searching* for meaning. Items include, "I am seeking a purpose or mission for my life," and "I am searching for meaning in my life." We

conducted a literature review on the MLQ-search subscale, collecting 66 sample means from 29 different articles (total $N = 17{,}282$). The average mean, weighted by sample size, for the MLQ-search subscale was 4.32, $SD = 1.18$, significantly higher than the scale midpoint, $t(17281) = 35.65$, $p < .001$, $d = 0.27$. The coexistence of high levels of both the presence of and the search for meaning implies that these two constructs are not mutually exclusive. Interestingly, the presence and search subscales were found to be modestly negatively correlated in a U.S. sample (e.g., $r = -.24$) but modestly *positively* correlated in a Japanese sample ($r = .20$; Steger, et al., 2008). It seems, then, that even when life is pretty meaningful, the pursuit of meaning might continue. Just because we are often looking for meaning does not imply that meaning, itself, is chronically lacking or lost.

Conclusion

At the beginning of this article we noted the paradox that characterizes psychological approaches to meaning in life: It is portrayed simultaneously as a necessity of life *and* as something that is next to impossible to obtain. It simply cannot be both of these things. If meaning in life is essential to our survival "in about the same sense" as sunlight, or calcium, then it must be available to us. Otherwise, human beings would have long since been rendered extinct. If we take seriously the notion that meaning in life is a human necessity then we must tolerate an understanding of meaning in life as a relatively common experience. Large scale representative surveys and numerous studies of meaning in life suggest that meaning in life is widespread and relatively high. Life is pretty meaningful. If we truly need meaning in life to survive, it cannot be otherwise.

Footnotes

[1]Within the scholarly literature, meaning in life and purpose in life are often used interchangeably. Most measures of purpose in life include the word meaning, and all measures of meaning in life include the word purpose. We refer to meaning in life throughout this paper, although some of the scales and studies we cite label this experience purpose in life.

[2] Note that these average means from these studies do not preclude variance around these means. Certainly, there are important individual differences in meaning in life.

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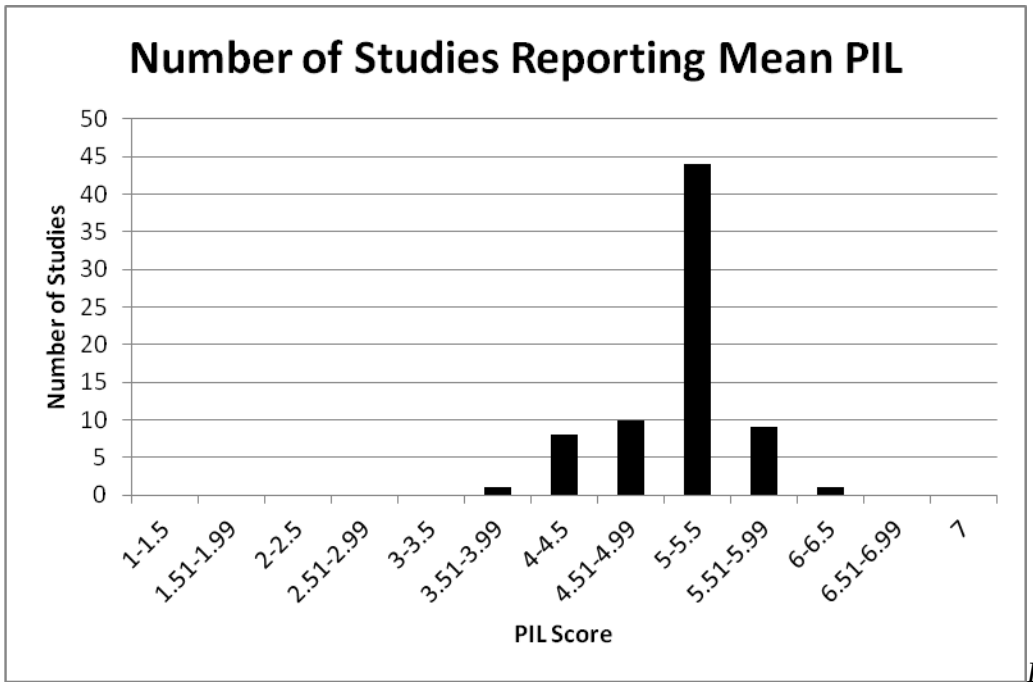
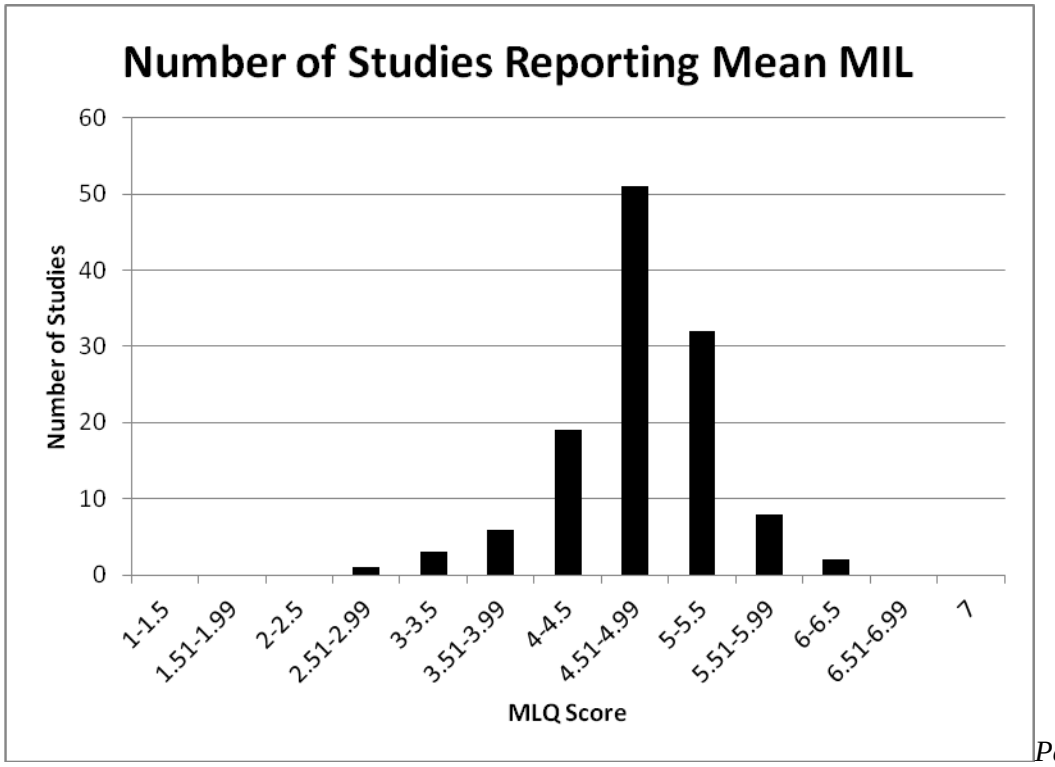
Figure Caption

Figure 1. Panel a, *N* = 73 studies. PIL = Purpose in Life test. Panel b, *N* = 122 studies. MLQ = Meaning in Life Questionnaire presence of meaning subscale.

Figure 1. Distribution of the Purpose in Life Test Means.



Panel a.



Panel b.

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