

Eudaimonia in the Contemporary Science of Subjective Well-Being: Psychological Well-Being, Self-Determination, and Meaning in Life

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Abstract:

The human pursuit of well-being occupies space that extends beyond simply seeking pleasure, feeling good, and being satisfied. In philosophy, Aristotle introduced the concept of “eudaimonia” to reflect human flourishing as a reflection of virtue and the development of one’s full potential, in contrast to pleasure-centered hedonic well-being. Within psychological science, traditional conceptualizations of subjective well-being have also been expanded to include constructs that capture a more holistic version of well-being. The goal of this chapter is to provide a comprehensive overview of psychological theory and research regarding eudaimonic well-being. I will first briefly review the philosophical underpinnings of eudaimonia. I will then shift focus to the utilization of eudaimonia within modern psychology, first reviewing the ranging definitions and operationalizations of this concept used across the field. Next, I will review theoretical and empirical examinations of eudaimonic well-being in comparison to hedonic conceptualizations of well-being and discussions of limitations to the existing work in this area. In the next section of this chapter, I will provide an overview of the active debate in the field regarding the value vs. costs of maintaining a distinction between eudaimonic and hedonic well-being within psychological science. To end, I will highlight major areas of psychological research falling under the umbrella of eudaimonic well-being, including psychological well-being theory, self-determination theory, and meaning in life. Finally, I will discuss several areas of future research focusing on eudaimonic well-being.

Keywords: well-being, eudaimonia, psychological well-being, self-determination theory, meaning in life

While the pursuit of happiness is a near universal, the means to this happiness and the contours of attained happiness can differ widely across people and situations. While happiness can be conceptualized as the presence of positive feelings, the minimization of negative feelings, and a sense of satisfaction with one’s circumstances, the three pillars of *subjective well-being*, there seems to be more to it than this (Ryff, 1989). Engagement in important work, making valuable contributions to society, and living in alignment with a set of moral virtues, are a few among many features of a happy life that aren’t represented within the realm of positive affect and satisfaction. A holistic view of psychological well-being includes constructs that extend beyond affect and life satisfaction.

A eudaimonic perspective offers a class of constructs to paint an expanded and more complete picture of psychological well-being. In this chapter I will review early philosophical perspectives of eudaimonia before discussing the use of eudaimonia within modern psychological science. Then, I will review the ongoing debate regarding the use of a hedonic vs. eudaimonic distinction in the study of well-being. Finally, I will outline key research areas in psychological science that follow from the eudaimonic perspective including psychological well-being, self-determination theory, and meaning in life.

Philosophy of Eudaimonia, Briefly

The concept of eudaimonia pervades philosophical treatments of ethics, beginning with Aristotle’s

Nicomachean Ethics (4th century B.C.E./2001), in which he forwarded eudaimonia—“activity expressing virtue”—as an objectivist theory of happiness. Eudaimonia is most traditionally translated as “happiness,” though the alternate translation used in much of contemporary philosophy is “flourishing.” In modern philosophy many interpretations of, and commentaries on, Aristotle’s eudaimonia have been offered (Annas, 1993; Haybron, 2008; Kraut, 1979; Norton, 1976; Tiberius, 2013). Shared among these is the notion that eudaimonia is a reflection of virtue, excellence, and the development of one’s full potential (Huta & Waterman, 2014). Rooted in these philosophical origins, eudaimonia refers to that which is worth pursuing in life—an objective standard of goodness (Huta & Waterman, 2014).

Eudaimonia in Modern Psychology

In addition to spurring much philosophical discussion, Aristotle’s concept of eudaimonia has also been deeply impactful in the psychological study of well-being. Similar concepts began emerging in humanistic theories of personality including Maslow’s self-actualization (1968) and May’s daimon (1969). Such thinking developed over time and eudaimonia has now been adopted widely into the psychological science of well-being. Yet, in this transition, one key aspect of eudaimonia changed; in psychology, eudaimonia is now treated as a subjective state and this subjectivity is a central defining feature of this psychological construct. For example, early psychological treatments of eudaimonia position it as the subjective experiences related to doing what is worth doing and having what is worth having (Norton, 1976; Telfer, 1980).

Defining and operationalizing eudaimonia. Building on philosophical and early psychological thinking about eudaimonia, various conceptual definitions and operationalizations arose to describe the psychological experience of eudaimonic well-being. One definition suggests, “Eudaimonia, as a subjective state, refers to the feelings present when one is moving toward self-realization in terms of the developing one’s unique individual potentials and furthering one’s purposes in living” (Waterman, Schwartz, & Conti, 2008, p. 42). However, there is little agreement among scholars in this area regarding any one conceptual definition of eudaimonia, nor is there a shared methodological approach for its study (Huta & Waterman, 2014).

Huta and Waterman (2014) outline the basic conceptual and operational definitions of eudaimonia employed by a number of leading scholars in the field. For instance, Waterman (1993) uses self-realization and personal expressiveness as core, defining features of eudaimonia, and suggests that eudaimonia is “activity expressing virtue” (Waterman, 1990). Alternately, Ryff and colleagues conceive of eudaimonia in a broader, trait-like manner, suggesting that eudaimonia is to be fully functioning and successful despite the existential challenges of life (e.g., Ryff & Singer, 2008). Keyes (2002) integrates a component of social well-being into his conceptualization of eudaimonia, while Huta (2015) treats eudaimonia as a motive to develop the best in oneself. Bauer, McAdams and Pals (2008) study eudaimonia from a narrative perspective and consider it in terms of psychosocial integration, ego development, and personal growth. Ryan and Deci (2001) suggest that eudaimonia is living a life in full accord with one’s potential, Delle Fave, Brdar, Freire, Vella-Brodrick, and Wissing (2011) consider eudaimonia as flow experiences and long-term meaning-making, and Seligman (2002) claims that eudaimonia is a product of one’s characteristic personality traits or strengths.

To accompany these varied conceptualizations of eudaimonia, there are also many operationalizations used in studying these concepts. Eudaimonia can be measured at the trait level. For instance, Ryff’s (1989) Scales for Psychological Well-Being have been widely used in this area of study. Additional trait assessments of eudaimonia exist. The Questionnaire for Eudaimonic Well-Being (Waterman et al., 2010) taps six dimensions: self-discovery, perceived development of one’s best potentials, sense of purpose and meaning in life, investment of effort in pursuit of excellence, intense involvement in activities, and enjoyment of personally expressive activities. Alternately, Keyes’ (2002, 2006) Mental Health Continuum assesses psychological, social, and emotional well-being with a variety of subscales. Eudaimonia has also been measured at the state level using scales such as the Personally Expressive Activities Questionnaire (Waterman, 1993), which assesses engagement in self-defining activities.

These scales also vary in their specificity, each targeting a different theoretical conceptualization of eudaimonic well-being. In recent years, additional scales have been developed with an aim towards capturing the broad range of concepts included in psychological success. First, the Flourishing Scale is an 8-item scale capturing various aspects theorized to be important to eudaimonia, including positive relationships, feelings of competence, and meaning and purpose in life (Diener et al., 2010). An even broader measure of psychological well-being conceptualizations can be found in the Comprehensive Inventory of Thriving (Su, Tay, & Diener, 2014). This scale was developed in a theory-driven manner, first identifying seven core theoretical dimensions of psychological well-being based on prominent theories

throughout the literature. These include: subjective-well-being, supporting and enriching relationships, interest and engagement in activities, meaning and purpose in life, mastery and accomplishment, control and autonomy, and optimism (Diener, 1984; Ryan & Deci, 2000; Ryff, 1995; Scheier & Carver, 1985; Seligman, 2011), for a more holistic measurement approach towards well-being.

Comparing eudaimonic and hedonic well-being. One cross-cutting theme inherent in most definitions of eudaimonia is the exclusion of an affective, or hedonic, component (Disabato, Goodman, Kashdan, Short, & Jarden, 2016). Indeed, eudaimonic well-being is often discussed in contrast to hedonic well-being (e.g., Ryan & Deci, 2001; Waterman, 1993). Contrary to eudaimonia, the ideas of hedonic well-being philosophers such as Aristippus, Bentham, and Mill were centered on the notion that pleasure is the highest good (Tatarkiewicz, 1976). Early work examining happiness from a psychological perspective did not discuss a hedonia/eudaimonia distinction (e.g., Brickman & Campbell, 1971; Easterlin, 1974; Wilson, 1967). However, more recently, research in this area has begun to distinguish, and contrast, these two conceptualizations of happiness.

When comparisons are drawn between eudaimonic and hedonic well-being, the concept most frequently used to indicate hedonic well-being is subjective well-being. Subjective well-being consists of high levels of positive affect, low levels of negative affect, and the cognitive appraisal that one is satisfied with the conditions of his or her life (Diener, 1984). Certainly, subjective well-being encompasses a broader range of experiences than simple hedonic pleasure, including values, goals, and need fulfillment (e.g., Ryan & Deci, 2001). Yet, eudaimonia scholars most frequently invoke subjective well-being as the hedonic side of the dual-conceptualizations of well-being. Subjective well-being research has proliferated in recent decades (Diener et al., 2017; Diener, Suh, Lucas, & Smith, 1999). Noting subjective well-being's seeming domination of well-being research, Ryff (1989) countered with an argument for a more inclusive conceptualization of well-being that captured a broader range of what it meant to be well. As these two lines of well-being research have grown, they are often compared and contrasted.

Empirical examinations. The distinction between eudaimonic and hedonic well-being has been the focus of empirical investigation. First, there is a good amount of evidence that eudaimonic and hedonic well-being are strongly related, and experienced simultaneously. For example, Waterman (1993) found that the personal expressiveness reported for activities, an indicator of eudaimonia, related to the hedonic enjoyment of that activity, with correlations ranging from .71 to .86 across activities and studies. In three subsequent studies, similar relationships between feelings of personal expressiveness and hedonic enjoyment have been found, ranging from .83 to .87, indicating that these two state-level measures regarding one's experiences during specific activities share a large variance overlap of about 68% to 76% (Waterman et al., 2008).

While these concepts tend to be very closely related, factor analytic work has demonstrated a statistical separation between hedonic and eudaimonic measures. Most research examining the factor analytic separations of hedonic and eudaimonic constructs have utilized trait measures of each, diverging from the more state-oriented measures utilized in the correlational work noted previously. For instance, in a study including 18 trait-like mental health measures, separate, though correlated, subjective well-being and personal growth factors emerged (Compton, Smith, Cornish, & Qualls, 1996).

Additional studies have utilized factor-analytic techniques to examine hedonia, following Diener's (1984) model of subjective well-being introduced earlier in this chapter, and eudaimonia, following Ryff's model of psychological well-being, which will be examined further in a subsequent section of this chapter. First, Keyes, Shmotkin, & Ryff (2002) examined these relationships among U.S. adults. When forcing the loadings to fit a theoretical two-factor structure with correlated eudaimonic and hedonic well-being, these factors shared a very high correlation of .84. Furthermore, exploratory factor analyses revealed substantial cross-loadings for some subscales meant to indicate eudaimonic well-being, onto a hedonic well-being factor as well. These findings seem to indicate a lack of distinctiveness between these two versions of well-being, though the authors conclude confirmation of their hypotheses for "related but distinct conceptions of well-being" (Keyes et al., 2002, p. 1017). The two-factor structure with high correlations between latent eudaimonic and hedonic factors was also found in a similar U.S. adult sample, $r = .78$, and was even stronger in an undergraduate sample, $r = .92$ (Gallagher, Lopez, & Preacher, 2009). In similar analyses utilizing samples from the UK, Linley et al. (2009) found clean two-factor loadings for hedonic and eudaimonic measures of well-being in exploratory factor analyses. Furthermore, in a confirmatory model, they found a correlation of .76 between the two factors (Linley, Maltby, Wood, Osborne, & Hurling, 2009). A similar pattern pointing to the correlated distinction between measures of hedonic and eudaimonic well-being measures has been replicated (e.g., Robitschek & Keyes, 2009) including within a variety of populations including a South African sample (Keyes et al., 2008). Finally, Disabato et al. recently (2016) examined the dimensionality of well-being in an international study with participants spanning over 100 countries, including a number of metrics for both hedonic and eudaimonic well-being. They compared a

one-factor model, with all measures indicating a single factor, against a two-factor solution, with the hedonic measures indicating one factor and the eudaimonic measures indicating another. Both solutions fit equally well and furthermore, in the two-factor solution, the factors correlated at $r = .96$ indicating a shared variance of about 92% (Disabato et al., 2016). Clearly eudaimonia and hedonia are closely linked.

In developing the CIT measure discussed above to capture the breadth of the human experience of thriving, Su et al. (2014) identified 18 facets of psychological well-being, including constructs from both eudaimonic and hedonic traditions. They found excellent fit for a model with correlated latent factors for each well-being facet suggesting correlated, yet distinguishable, psychological well-being constructs. Furthermore, correlations among the facets were typically of moderate size, consistent with the conclusion that these construct scales are relative but distinct. Still the more eudaimonia-oriented facets of the CIT were highly correlated with subjective well-being measures, for instance, the CIT meaning facet shared a correlation of $r > .80$ with subjective well-being measures.

Using a more sophisticated analytic technique, Chen et al. (2012) utilized a bifactor model to capture the shared variance between measures of eudaimonic and hedonic well-being as well as their unique predictive contributions. They identified a strong general factor shared by the measures as well as two specific factors that each demonstrated predictive power independent of their shared, general factor variance (Chen, Jing, Hayes, & Lee, 2012).

Together, this body of work suggests that eudaimonic and hedonic well-being are strongly related to one another, yet can be potentially differentiated statistically. However, there is certainly substantial overlap between the two, leaving the discussion regarding their independence unresolved and indicating the necessity of additional research to build a more thorough understanding of these concepts themselves and together.

Beyond utilizing factor analytic techniques to examine the structure of happiness, this technique has also been employed to examine the relationships between eudaimonic and hedonic factors and other variables. In a series of studies, feelings of personal expressiveness in an activity, a eudaimonic indicator, were more strongly linked to finding that activity to provide opportunities for the development of one's potential, self-realization, and feelings of being challenged, competent, and assertive, for example, whereas hedonic enjoyment, on the other hand, was more strongly related to feeling relaxed, excited, content, happy, and interested (Waterman, 1993; Waterman et al., 2008). Across a series of daily diary studies, reported engagement in eudaimonic behaviors was more strongly and consistently related to feeling that life is meaningful and satisfying than engagement in hedonic behaviors (Steger, Kashdan, & Oishi, 2008).

In additional cross-sectional and experience sampling studies examining hedonic and eudaimonic pursuits both between and within persons, Huta and Ryan (2010) found hedonic pursuits to relate more strongly to positive affect and carefreeness, while eudaimonic pursuits related more to meaning. Furthermore, an experimental intervention study has been conducted in which participants were randomly assigned to complete hedonic or eudaimonic activities for 10 days. Those in the hedonic activities condition reported more well-being benefits immediately following the intervention, whereas those in the eudaimonic activities condition reported greater well-being in a follow-up assessment 3 months later (Huta & Ryan, 2010). It seems, then, that both hedonic and eudaimonic pursuits are important avenues to well-being, albeit different aspects and with different time frames.

There is also some evidence supporting Telfer's (1980) theoretical notion that eudaimonia is a sufficient, but not a necessary condition for experiencing hedonic enjoyment. Examining events that were rated as very high or very low on personal expressiveness and hedonic enjoyment, 4/5 of activities rated as providing a great sense of personal expressiveness were also rated as very hedonically enjoyable, whereas only about 1/3 of highly hedonically enjoyable activities were also associated with personal expressiveness (Waterman et al., 2008). From this asymmetric finding, which was consistent across three samples, the authors concluded that activities that bring about a sense of eudaimonia are a subset of those that lead to hedonic enjoyment (Waterman et al., 2008). Similarly, Keyes and Annas (2009) found that while 48.5% of individuals in the MIDUS sample reported high levels of hedonic well-being, only 18% were categorized as "flourishing," that is, expressing high levels of both hedonic and eudaimonic well-being. Furthermore, they found that those who were not flourishing, but experiencing high levels of hedonic well-being with only moderate or low levels of eudaimonic well-being, reported much greater rates of mental illness compared with those who were high on both types of well-being (Keyes & Annas, 2009).

Limitations. The inconsistencies within the literature regarding the roles of eudaimonia and hedonia in an individual's well-being stem from a number of different sources. First, as mentioned, the diverse array of conceptualizations of eudaimonia complicates comparisons with hedonic well-being and can account for some differences in findings. Without systematic evaluations of these findings that take into account the conceptualizations of each construct employed, these findings remain muddled. This is especially

problematic when comparisons are made between treating hedonia as a way of feeling and eudaimonia as a way of behaving (Huta & Ryan, 2010; Huta & Waterman, 2014). Similarly, as Huta and Waterman (2014) point out, some comparisons treat hedonia as cognitive-affective experiences while treating eudaimonia as mental functioning or trait level orientations (Compton et al., 1996; Gallagher et al., 2009; Keyes et al., 2002; McGregor & Little, 1998) and such asymmetrical treatments can make direct comparisons of their relationships with each other and predictors and outcomes difficult. Finally, the strong correlation between the two conceptualizations of well-being leaves questions regarding the nature of their differential relationships with outside variables as these seem to represent only the extreme ends of both the eudaimonic and hedonic sides of well-being, which seem to be poor representations of the concepts as they are experienced in daily life.

Eudaimonia in Psychology: A Misleading or Valuable Distinction?

The mixed evidence above regarding the divergence of eudaimonic well-being from hedonic well-being and plentiful discussions of the limitations within this area, preview an ongoing debate within the well-being literature regarding the utility of eudaimonia as a concept within the psychology of well-being. The critique of eudaimonia that has generated the most discussion regarding these concerns was published by Kashdan, Biswas-Diener, and King (2008).

In this piece, Kashdan and colleagues (2008) argue that the philosophical distinction between hedonic and eudaimonic well-being does not carry over well into the psychological science of well-being and present a number of critiques to support this argument. I have discussed a few of their criticisms previously in this chapter. Namely, that the field of eudaimonic well-being lacks concise conceptual and operational definitions and, furthermore, that the existing definitions and measurement strategies fail to fully capture the concept of eudaimonia forwarded by Aristotle. In similar critique, Kashdan et al. (2008) argue that the subfield of eudaimonia research suffers from not having a unifying theory to encompass its many arms, and they suggest that such a theory would be problematic anyway given the diversity of the field and the loss of information that would result from a single theory of eudaimonic well-being. This “looseness” or vagueness of definitions and lack of unification has been discussed elsewhere as well (e.g., Huta & Waterman, 2014; Waterman, 2008), yet adequate solutions to these problems remain to be seen.

Kashdan et al. (2008) raise additional concerns regarding the appropriateness of drawing comparisons between hedonic and eudaimonic well-being. First, they argue that this distinction promotes the notion that the two conceptualizations of well-being exist on a moral hierarchy with eudaimonic well-being claiming the superior position (Waterman, 2007). Narrowly, that subjective well-being, the most commonly used conceptualization of hedonic well-being, occupies the lower ranks of this hierarchy is questionable given the plentiful research pointing to the wide benefits of subjective well-being and success in a host of life domains (Lyubomirsky, King, & Diener, 2005). More broadly, this hierarchy is problematic if well-being is to be considered a subjective human experience. This highlights the stark distinction between the psychological study of subjective eudaimonia and its roots in objectivist philosophy. Arguments have been forwarded suggesting that the study of eudaimonic well-being is more about *why* someone is happy rather than an accurate subjective assessment of *whether* someone is happy, which conflates the experience of happiness with the common sources of this experience (Kashdan et al., 2008).

Kashdan et al.’s (2008) critique of eudaimonic well-being’s place within psychological science opened a lively discussion about the merits and problems of eudaimonia throughout the well-being field, even eliciting several direct responses (Delle Fave & Bassi, 2009; Keyes & Annas, 2009; Ryan & Huta, 2009; Waterman, 2008). For example, Keyes and Annas (2009) argued, “hedonism logically can’t be a *rival* to eudaimonism on its own level. It is one of the *options within* eudaimonism” (p. 198). Even more broadly, Waterman (2008) suggested that it is perhaps too early in the history of the psychological science of eudaimonia to engage in such pointed critiques regarding the shortcomings of this work in the first place.

Eudaimonic Concepts in the Science of Well-Being

Both sides of this debate do share some common ground in finding value in many of the constituent parts of the eudaimonic tradition. The concept of eudaimonia, regardless of its function within the study of well-being in and of itself, provides an umbrella under which to discuss aspects of psychological well-being that aren’t included in present psychological definitions of subjective well-being, or happiness, which include only affective feelings and satisfaction with life. Kashdan et al. (2008) recommended referring to specific constructs under this umbrella rather than discussing the broad categories of hedonia and eudaimonia. Here, I will examine three major areas of study that align with a eudaimonic approach to well-being: psychological well-being theory, self-determination theory, and the study of meaning in life. I will also briefly mention several other concepts that also occupy a space within this literature.

Psychological Well-Being Theory. In response to the seeming takeover of well-being field by

research focused on the concept of subjective well-being, Carol Ryff (1989) argued that the state of this area of study was suffering from a lack of theoretical grounding and definitional precision regarding the essential features of well-being. To supplant this limitation, Ryff (1989) proposed an alternate, wider, model of psychological well-being driven by diverse theoretical perspectives regarding positive human functioning. Drawing upon some of the most well-known theories from developmental, clinical, existential, and humanistic psychology (e.g., Allport, 1961; Erikson, 1959; Frankl, 1959; Jung, 1933; Maslow, 1968), Ryff's model of psychological well-being includes six central dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth.

To highlight the central features of each factor briefly: (1) self-acceptance refers to the awareness and acceptance of one's personal strengths and weaknesses; (2) positive relationships with others refers to deep connections with significant others; (3) autonomy is living in accordance to one's own convictions; (4) environmental mastery is managing life situations; (5) purpose in life is the extent to which one's life feels meaningful and purposefully directed; and (6) personal growth is achieved when one is using his or her personal talents and potential (Ryff, 1989, 2014; Ryff & Singer, 2006). Four of these six dimensions of well-being (positive relations, autonomy, purpose, and growth) had not been previously included in other measures of well-being, despite their role in theories of positive functioning, highlighting the novel contributions of this model (Ryff, 1989).

In the decades since the advent of this model of psychological well-being, much research has developed following this widened conceptualization of well-being (Ryff, 2014). First, research regarding its factor structure has been conducted, with numerous papers reporting replications of the theoretical six-factor structure of this model (e.g., Clarke, Marshall, Ryff, & Wheaton, 2001; Gallagher et al., 2009; Ryff & Keyes, 1995). Still, elsewhere, this six-factor model has been challenged and the factor structure has not always replicated (Kafka & Kozma, 2002; Springer & Hauser, 2006). More extensive discussions of the factor-structure replications can be found elsewhere (Ryff, 2014; Ryff & Singer, 2006; Springer & Hauser, 2006).

In addition, work following the psychological well-being tradition has focused on examining age and gender profiles in well-being (Ryff & Keyes, 1995; Springer, Pudrovska, & Hauser, 2011) and additional psychosocial and sociodemographic correlates of eudaimonia (Keyes et al., 2002; Ryff & Singer, 2008). For example, findings suggest that adults with higher psychological well-being than subjective well-being were younger, more educated, and were more open to experience (Keyes et al., 2002). Furthermore, research examining the biological underpinnings of psychological well-being and its importance for health has been growing in recent years (Ryff, 2013). Some initial findings point to connections between eudaimonic well-being and lower salivary cortisol, decreased cardiovascular risk, and better sleep (Ryff, Singer, & Love, 2004). Subsequent work has identified relationships between some factors of eudaimonic well-being and important inflammation indicators (Friedman & Ryff, 2012; Morozink, Friedman, Coe, & Ryff, 2010).

Much of the work highlighting the empirical comparisons of hedonic and eudaimonic well-being utilized Ryff's conceptualization of psychological well-being as an indicator of eudaimonia and note small, yet predictive, differences compared to subjective well-being. Overall, research in this area highlights the advancements made following a well-conceptualized theoretical approach to eudaimonic well-being.

Self-Determination Theory. Another broad theory that embraces a eudaimonic conceptualization of well-being is self-determination theory. Self-determination theory considers self-realization, or eudaimonia, as the key defining feature of well-being and focuses on specifying the processes through which self-actualization can be achieved (Ryan & Deci, 2001). Ryan and Deci (2000) inductively identified three basic psychological needs—autonomy, relatedness, and competence—essential for optimal growth and integration and constructive social development (Ryan & Deci, 2000). As such, the satisfaction of these three needs fosters eudaimonic well-being. Note that unlike psychological well-being theory reviewed previously, which defines eudaimonic well-being in terms of principle factors similar to autonomy, relatedness, and competence, self-determination theory posits that these needs foster, rather than define, well-being (Ryan & Deci, 2001).

The extent to which the basic self-determination needs are satisfied also determines variability in intrinsic motivation (Ryan & Deci, 2000), another concept central to self-determination theory and closely tied to eudaimonic conceptualizations of well-being. Intrinsic motivation reflects positive human potential and represents the inherent tendency to pursue novelty and challenge, explore, learn, develop, and grow (Ryan & Deci, 2000), all central to well-being from a eudaimonic perspective. According to self-determination theory, the satisfaction of the three basic needs and intrinsic motivation across the lifespan are necessary for human thriving (Ryan & Deci, 2000).

Supporting these claims tying needs satisfaction and intrinsic motivation to the fulfillment of human

potential, researchers working within the self-determination theory framework have found that the pursuit of some, but not all goals, satisfy these basic needs and, subsequently, enhance eudaimonic well-being (Ryan, Sheldon, Kasser, & Deci, 1996). First, whereas intrinsically driven goals, such as affiliation, growth, and community, satisfy these three basic needs directly, other more extrinsically motivated goals, like wealth, fame, and image do not (Ryan et al., 1996). Additionally, focusing on intrinsic aspirations relates positively to indicators of well-being central to the eudaimonic tradition, such as self-actualization, or the fulfillment of one's potential, while focusing on extrinsic aspirations shares an opposite, negative, relationship (Kasser & Ryan, 1993, 1996; Ryan et al., 1999).

While self-determination theory has always aligned with eudaimonic thinking (Ryan & Deci, 2001), this connection was taken a step further more recently, with the introduction of a formalized model of eudaimonia based in self-determination theory (Ryan, Huta, & Deci, 2008). From a self-determination theory perspective, this model categorizes eudaimonic living into four central motivational concepts: (1) pursuing intrinsic, rather than extrinsic, goals and values, (2) behaving in an autonomous and volitional, rather than controlled, manner, (3) being mindful and acting with awareness and (4) behaving in need satisfying ways (Ryan et al., 2008).

Much research in the area of self-determination theory has focused on the relationship between goals, needs, and conceptualizations of well-being beyond the eudaimonic tradition, including, as well, more hedonically oriented conceptualizations of well-being (Ryan & Deci, 2001). For instance, the attainment of intrinsic goals was found to enhance hedonic well-being, measured with four items: happy, joyful, pleased, and enjoyment/fun, while succeeding at extrinsically oriented goals does not (Sheldon & Kasser, 1998). Similarly, goals that satisfy the three basic psychological needs, autonomy, competence, and relatedness, contribute to hedonic well-being more than other goals (Sheldon & Elliot, 1999). Furthermore, daily fluctuations in the satisfaction of the basic self-determination needs predicted daily fluctuations in mood (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Sheldon, Ryan, & Reis, 1996). This work suggests that psychological needs satisfaction is not only relevant for living a eudaimonic life, but also for concepts within the realm of hedonic well-being. Still, leading self-determination theory scholars maintain the distinction between hedonic and eudaimonic well-being (Ryan and Deci, 2001), noting that there some conditions that foster hedonic well-being that don't promote eudaimonic well-being (Nix, Ryan, Manly, & Deci, 1999).

Meaning in Life. A third large area of research under the umbrella of eudaimonic well-being focuses on the experience of meaning in life. Feeling that one's life is meaningful is a fundamental human motivation (Baumeister, 1991; Frankl, 1984; Klinger, 1977; Maslow, 1968) that has been theorized to be an essential indicator of eudaimonic well-being. While meaning and purpose in life are included as a factor in Ryff's psychological well-being model, an extensive body of work on this topic now exists independent of that framework.

Like other eudaimonic concepts, meaning in life is somewhat difficult to define (e.g., Heintzelman & King, 2013). Yet recent strides have been made in this literature towards a consensus definition of meaning in life. One representative definition of meaning in life states that, "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" (King, Hicks, Krull, & Del Gaiso, 2006, p. 180). This definition highlights three central aspects of the experience of meaning in life: purpose, significance, and coherence (George & Park, 2016a, 2016b; Heintzelman & King, 2013; 2014a, 2014b; Martela & Steger, 2016). Purpose refers to engagement in goal directed pursuits: Striving towards personally significant goals is related to feelings that life is worth living (Battista & Almond, 1973; Emmons, 2003; McGregor & Little, 1998; McKnight & Kashdan, 2009; Vallerand, 2008). Significance is the feeling of mattering or making an impact, and building a legacy that will transcend the self (George & Park, 2016a). Coherence is the degree to which stimuli, events, and one's life make sense and fit with expectations (Antonovsky, 1993; Battista & Almond, 1973; Baumeister & Vohs, 2002; Heine, Proulx, & Vohs, 2006; Heintzelman, Trent, & King, 2013).

Meaning in life research has focused, in large part, on the antecedents and consequences of reporting that one's life is meaningful. Many aspects of life relate to, or causally lead to, feeling like that life is meaningful. These sources of meaning in life include, but are not limited to, social relationships such as family and friends (Lambert, Clark, Durtschi, Fincham, & Graham, 2010; Lambert, Stillman, Kamble, Baumeister, & Fincham, 2013), religion (Hicks & King, 2008; Steger & Frazier, 2005), and regularities (Heintzelman et al., 2013). In terms of consequences, high levels of meaning in life are associated with a number of beneficial outcomes across a host of life domains, for example better physical health (for review, see Roepke, Jayawickreme, & Riffle, 2014), mental health (Heisel & Flett, 2004; Mascaro & Rosen, 2005; Owens, Steger, Whitesell, & Herrera, 2009; Steger & Kashdan, 2009), and social functioning (Stavrova & Luhmann, 2016; Stillman, Lambert, Fincham, & Baumeister, 2011).

Some recent meaning in life research highlights some inconsistencies that emerge when maintaining a traditional hedonic/eudaimonic distinction. First, a strong relationship ($r \approx .65$) between meaning in life and positive affect is consistently replicated across this literature, and furthermore, inducing a positive mood also enhances meaning in life, suggesting positive affect is another source of meaning (King et al., 2006). In addition, eudaimonic well-being is often situated as the morally superior form of well-being, in part, because it is thought to be more difficult to attain than its hedonic counterpart. However, recent research suggests that meaning in life is a very common human experience across populations (Heintzelman & King, 2014a) that responds to momentary experience (Machell, Kashdan, Short, & Nezlek, 2015) and is related to automatic, default, intuitive cognitive processing systems (Heintzelman & King, 2016).

Additional eudaimonic concepts. In addition to growing research following each of the three traditions elaborated above, there is also an abundance of other psychological concepts following a eudaimonic approach to well-being. I will review four such concepts, selecting those that have comparatively larger surrounding research literatures among the battery of existing eudaimonic concepts.

First, well-being theorizing and research has engaged in efforts to conceptualize “the good life.” King and Napa (1998) found that folk concepts of the good life nearly always include both happiness and meaning in life, and additional work demonstrated the necessity of fulfilling personal relationships for a “good life” (Twenge & King, 2005). Finally, effort also seems to play a role in beliefs about the good life as participants rated a meaningful and effortful life as most morally good, while rating a happy and effortful life as most desirable, happy, and meaningful (Scollon & King, 2004).

Another subarea of research within the domain of eudaimonic well-being is Csikszentmihalyi’s (1975) concept of “flow” experiences. Namely, flow occurs when one exerts “voluntary effort to accomplish something difficult and worthwhile,” typically at the intersection of task challenges and one’s skill level (Csikszentmihalyi, 1990). Flow states are characterized by intense focus and a loss of reflective self-consciousness and temporal awareness in which activity engagement is itself rewarding (Nakamura & Csikszentmihalyi, 2014). The concept of flow has even merged into larger areas of study within the eudaimonic tradition, namely self-determination theory research (e.g., Schüler, Brandstätter & Sheldon, 2013).

Still another concept within the psychological science of eudaimonia is the human propensity for growth, or ego development (Loevinger, 1976). Growth is often studied by examining the narrative accounts people produce about their own lives and experiences, reconstructing the past and imagining the future (McAdams, 2001). People who have high levels of eudaimonic well-being tend to emphasize personal growth in their narratives and tend to frame difficult experiences as transformative (Bauer et al., 2008). As such, growth seems to be another important aspect of eudaimonia.

Lastly, character strengths also occupy space in the realm of eudaimonic well-being concepts. Character strengths can be defined simply as “positive traits reflected in thoughts, feelings, and behaviors” (Park, Peterson, & Seligman, 2004, p. 603). Peterson and Seligman (2004) identified 24 ubiquitously acknowledged strengths of character by examining core virtues shared by world cultures throughout history. These strengths fit into six categories: wisdom, courage, humanity, justice, temperance, and transcendence. In research regarding positive intervention activities, participants who identified their character strengths and used them in new ways reported improvements in happiness, measured with items tapping the pleasant life, the engaged life, and the meaningful life, that lasted over a six-month period (Seligman, Steen, Park, & Peterson, 2005).

Conclusions & Future Directions

Recent decades of psychological science have certainly contributed much to the centuries-old concept of eudaimonia. This approach has widened the scope of well-being research to include concepts beyond simple pleasure seeking to encompass, as well, those parts of life that are virtuous and meaningful. Still, examining eudaimonic well-being from a psychological science perspective as a subjective experience is a fairly new area of study (Waterman, 2008). As such, many critiques remain yet to be fully overcome (e.g., Huta & Waterman, 2014; Kashdan et al., 2008). Within the study of eudaimonia, more conceptual clarity is needed to move the field forward in a unified manner (Huta & Waterman, 2014).

There remain many doors open for further research following the eudaimonic tradition. Of course, research is currently thriving within subtopic areas in this field, including psychological well-being, self-determination theory, and meaning in life, and the momentum within these areas will continue to propel them forward in their own interesting and informative directions. In addition to research within these subareas, there are also many lingering questions broadly regarding the roles of hedonia and eudaimonia for overall human well-being. There now exists strong support that both hedonic and eudaimonic pursuits

lead to well-being (McGregor & Little, 1998; Ryan & Deci, 2001; Seligman, 2002). However, more work is needed to understand how hedonic and eudaimonic variables affect one another (Kashdan et al., 2008). Su et al. (2014, p. 4) stated, “Enrichment of other dimensions of psychological well-being (e.g. mastery or social relations) can, through a dynamic and reciprocal relationship, enhance [subjective well-being].” The question remains, however: Is eudaimonia a means to more hedonic states such as those captured by subjective well-being, or is it, itself, an end? Perhaps this question and others like it are strictly philosophical. However, psychological science now offers insight into a countless number of big questions that were also once deemed too lofty to study empirically. Currently researchers from hedonic and eudaimonic traditions limit their examinations the opposite conceptualization of happiness when trying to distinguish their own ideas as unique (or superior). In order to make forward progress on such deep questions, it will be important, and even necessary, for research to take a balanced approach to these perspectives simultaneously.

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