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Clarifying the Concept of Well-Being: Psychological Need Satisfaction as the Common Core Connecting Eudaimonic and Subjective Well-Being

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Abstract

Interest in the experience of well-being, as both a research topic and as a policy goal, has significantly increased in recent decades. Although subjective well-being (SWB)—composed of positive affect, low negative affect, and life satisfaction—is the most commonly used measure of well-being, many experts have argued that another important dimension of well-being, often referred to as eudaimonic well-being (EWB), should be measured alongside SWB. EWB, however, has been operationalized in at least 45 different ways, using measures of at least 63 different constructs. These diverse measurement strategies often have little overlap, leading to discrepant results and making the findings of different studies difficult to compare. Building on the Eudaimonic Activity Model, we propose a tripartite conception of well-being, distinguishing between eudaimonic motives/activities, psychological need satisfaction, and SWB, arguing that the needs category provides a parsimonious set of elements at the core of the well-being construct. Based on the self-determination theory claim that all human beings share evolved psychological needs for autonomy, competence, and relatedness, we show that satisfaction of all three needs directly affect SWB and other health and wellness outcomes, can efficiently explain the effects of various behaviors and conditions upon well-being outcomes, and are universally impactful across cultures. We conclude that routinely measuring psychological needs alongside SWB within national and international surveys would give policymakers a parsimonious way to assess eudaimonic dimensions of wellness and provide powerful mediator variables for explaining how various cultural, economic, and social factors concretely affect citizens' well-being and health.

Keywords

eudaimonic well-being, positive functioning, psychological needs, self-determination theory, subjective well-being

Experienced well-being is used as a key outcome in several fields of psychology ranging from clinical psychology, health psychology, developmental psychology, and geriatric psychology to educational psychology, organizational psychology, community psychology, and social psychology more generally. No matter the field, in examining key differences between various populations and in evaluating the effectiveness of various interventions, how much well-being people experience tends to be a key measure. Accordingly, how we conceptualize and measure well-being matters a great deal for the whole field of psychology, as research has shown that different indicators of well-being react differently to various conditions and interventions (e.g., Diener, Ng, Harter, & Arora, 2010; Dolan, Kudrna, & Stone, 2017; Kahneman & Deaton, 2010).

Beyond psychology, also sociologists, economists, and policy researchers have increasingly started to use measures of experienced well-being in their research. In these fields and in politics more generally, recent decades have witnessed a broadening recognition that the traditional economic measures of societal success should be complemented with measures of subjectively experienced well-being, to truly tap into citizen wellness (Diener, Oishi, & Lucas, 2015; Di Tella & MacCulloch, 2006; Organization for Economic Co-operation and Development [OECD], 2013; Stiglitz, Sen, & Fitoussi, 2009; Veenhoven, 2002) and to enable a psychological analysis of public policies (Oishi, Kushlev, & Schimmack, 2018).

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This shift is reflected in global cross-national well-being surveys such as the World Values Survey and Gallup World Poll, and the many policy initiatives to measure experienced well-being as part of nationally representative surveys, such as the well-being module in 2013 wave of Eurostat's Statistics on Income and Living Conditions, and the initiatives by national statistics agencies in countries ranging from Australia and New Zealand to France, Italy, Canada, and Mexico (Dolan, Layard, & Metcalfe, 2011; Legatum Institute, 2014; OECD, 2013). Although diverse cultures might have different ways of understanding well-being that need to be acknowledged (e.g., Delle Fave & Bassi, 2009; Joshanloo, 2014), in an increasingly globalized world shared yardsticks are needed and well-being might serve that role better than purely economic metrics.

Given that the importance of experienced well-being as a key outcome in behavioral sciences has become widely recognized, it is unfortunate that the research community has yet to reach a consensus on how it should be measured (Clark, 2016; Jayawickreme, Forgeard, & Seligman, 2012). The three elements of subjective well-being (SWB)—life satisfaction, positive affect, and a lack of negative affect—are the most commonly used indicators of experienced well-being (Busseri, 2015; Diener, Suh, Lucas, & Smith, 1999), and especially life satisfaction has been used as a proxy for experienced well-being in many international surveys (e.g., Deaton, 2008; Helliwell, Layard, & Sachs, 2018). However, researchers within psychology (Delle Fave, 2016), mental health (Steptoe, Deaton, & Stone, 2015; Tennant et al., 2007), economics (Clark, 2016), economic policy (Dolan et al., 2011; National Research Council, 2013; OECD, 2013), and developmental studies (Graham & Nikolova, 2015) have advocated for examining dimensions of well-being that go beyond SWB. They argue that SWB is too narrow, leading us to "neglect important aspects of positive psychological functioning" (Ryff, 1989, p. 1070). More particularly, it is argued that "eudaimonia, which captures functional aspects of well-being, plays a separate role to the hedonic part of well-being" (Clark, Frijters, & Shields, 2008, p. 122), and thus indicators of SWB should be complemented with indicators of eudaimonic well-being (EWB) and psychological functioning (Keyes, 2007).[1] These authors insist that life is not only about hedonic issues of enjoyment and satisfaction but involve also dimensions such as personal fulfillment, fundamental need satisfaction, and realization of one's potential. In other words, one should not only measure whether people are "feeling good" but also whether people are "doing well" (New Economics Foundation, 2008), that is, whether they are fully functioning people (Ryan & Deci, 2001). Indeed, nationally representative survey initiatives such as the well-being module in EU-SILC and UK's Office of National Statistics have recently included indicators to capture aspects of well-being that go beyond SWB, which in this article will be referred to as *EWB*.

Unfortunately, when compared with SWB, the conceptual structure of EWB is still "less well fleshed out" (OECD, 2013, p. 32). Typically, EWB is conceptualized and measured in terms of some set or combination of psychological elements (such as autonomy, purpose, meaning, or social connectedness). However, there is no consensus about what the key elements or sets of elements are. Cooke, Melchert, and Connor (2016) reviewed five commonly used multi-element instruments to measure EWB and discovered that not a single element could be found in common across all five of them. More generally, as we show below, there are (currently) at least 45 different ways of conceptualizing or measuring EWB. In the worst case when studies use different measures of EWB that have no overlap at all, research results become essentially incomparable (Sheldon, 2016). Accordingly, many commentators have complained about the "looseness" and "vagueness" of the EWB concept, and "lack of unification" as regards its operationalizations (e.g., Heintzelman, 2018; Huta & Waterman, 2014; Kashdan, Biswas-Diener, & King, 2008).

To reduce this conceptual plurality and to rectify the increasingly incoherent concept of EWB, this article makes four arguments: (a) the field would benefit from settling on a more precise way of defining the category of EWB, which provides explicit criteria for making decisions about what constructs to include as part of EWB; (b) the path toward such definition starts with splitting well-being into three clearly defined sub-categories, namely, eudaimonic motives and activities, psychological need satisfaction, and SWB, with the first two representing the eudaimonic dimensions of well-being; (c) the psychological need satisfaction category holds the most promise as a "common core" of the EWB construct, mediating the link between salubrious activities and conditions on one hand and SWB on the other hand; and (d) self-determination theory (SDT) currently provides the best-validated and most parsimonious set of fundamentally satisfying psychosocial experiences, by making a strong empirical case for the existence of three basic psychological needs, the fulfillment of which is essential for human wellness: namely, autonomy (the sense of volition and being the owner of one's behavior), competence (the sense of mastery, efficacy, and accomplishment in behavior), and relatedness (the sense of being in mutually caring relationships with others). These needs (discussed in more detail below) are not only important as such but also explain a large proportion of the variance in SWB, by mediating the effects of more distal behavioral and contextual factors upon SWB (Ryan & Deci, 2000, 2017).

We address each of our four arguments in sequence, below. Our overall goal is to offer a theoretical framework delineating the key categories of EWB, while also distinguishing EWB from SWB. We believe this will catalyze new empirical research to determine which proposed elements of EWB empirically fulfill the criteria for inclusion within the EWB category, and which elements do not. The

Table 1. The elements of EWB as posited by several influential theories.

Psychological Well-Being (Ryff, 1989)	*Flourishing Scale* (Diener, Wirtz, et al., 2010)
Self-acceptance	Purpose and meaning
Positive relations	Supportive relationships
Autonomy	Engagement
Environmental mastery	Contribution to others
Purpose in life	Competence
Personal growth	Optimism
	Being respected
Basic needs from Self-Determination Theory (Deci & Ryan, 2000)	Being a good person
Autonomy	
Competence	*PERMA theory of well-being* (Seligman, 2011)
Relatedness	Positive emotions
	Engagement
Psychological functioning in Warwick–Edinburgh mental well-being scale (Tennant et al., 2007)	Meaning
	Accomplishment
Energy	Relationships
Clear thinking	
Self-acceptance	*Mental Health as Flourishing* (Huppert & So, 2013)
Personal development	Positive emotion
Competence	Emotional stability
Autonomy	Vitality
	Optimism
Positive functioning (New Economic Foundation, 2008)	Resilience
Competence	Self-esteem
Autonomy	Engagement
Engagement	Competence
Meaning and purpose	Meaning
	Positive relationships
The Questionnaire for Eudaimonic Well-Being (Waterman et al., 2010)	
Self-discovery	
Development of best potentials	
Purpose and meaning in life	
Effort in pursuing excellence	
Intense involvement in activities	
Activities as personally expressive	

Note. EWB = eudaimonic well-being.

article thus aims not to provide a final theory of EWB, but rather to suggest a categorical approach to EWB that allows for a more constrained way of constructing such a theory in the future.

The Expanding Number of Elements of EWB

Although well-being is most typically conceptualized as SWB, a category that most commonly includes positive affect, negative affect, and life satisfaction (Busseri, 2018; Diener, 2012; Diener et al., 1999), again, many researchers have argued that life satisfaction and affect should be complemented with a third separate dimension, namely, EWB (Dolan et al., 2011; National Research Council, 2013; OECD, 2013; Steptoe et al., 2015; Tennant et al., 2007). Theories of EWB tend to identify multiple distinct elements of the fully functioning state they envision. This is clearly visible even if we look only at eight of the more popular meta-conceptualizations of EWB (Table 1).

Taking these in turn, Carol Ryff (1989) proposed, based on a qualitative analysis of the theoretical literature on positive psychological functioning, that there are six core elements of *psychological well-being (PWB)* that must be present in a well-lived life: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Her PWB scales have been widely used in research and they have provided a healthy challenge to prior tendencies to conceptualize well-being primarily as SWB (Diener, 1984, 1994). SDT has postulated *three basic psychological needs*—autonomy, competence, and relatedness—as key psychosocial conditions for

well-being, integrity, and growth, claims that are now well established empirically (Ryan & Deci, 2000, 2017). Diener, Wirtz, et al. (2010) generated a model of *psychosocial flourishing* that aimed to capture the essential elements from a number of previous theories including purpose, supportive relationships, engagement, contribution to others, competence, optimism, being respected, and being a good person. Waterman et al. (2010) attempted to return to the roots of Aristotelian philosophy, defining and operationalizing *EWB* as having six elements: self-discovery, perceived development of one's best potentials, a sense of purpose and meaning in life, investment of significant effort in pursuit of excellence, intense involvement in activities, and enjoyment of activities as personally expressive. Huppert and So (2013) generated their list of *flourishing* elements by looking at the symptoms of generalized anxiety and depression and identifying mirror opposites of each symptom. Their 10 elements include positive emotion, emotional stability, vitality, optimism, resilience, self-esteem, engagement, competence, meaning, and positive relationships. Seligman's *PERMA* model includes five different elements of well-being: positive emotions, engagement, relationships, meaning, and accomplishments (Kern, Waters, Adler, & White, 2015; Seligman, 2011). Finally, the New Economic Foundation (2008) proposed that positive functioning is about competence, autonomy, engagement, and meaning and purpose, whereas the Warwick–Edinburgh Mental Well-being approach measures *psychological functioning* using the elements of: energy, clear thinking, self-acceptance, personal development, competence and autonomy (Tennant et al., 2007).

Besides the more widely used sets of EWB constructs shown in Table 1, the EWB meta-construct has been operationalized in many other ways as well. Building on four recent reviews (Cooke et al., 2016; Heintzelman, 2018; Huta & Waterman, 2014; Sheldon, 2018) and a keyword search on PsycINFO, we were able to identify, beyond the eight more influential models already mentioned, 37 other multi-facet operationalizations of EWB (Table 2). This means that at least 45 different ways of operationalizing the overarching construct of EWB have been used. Scrutiny of Table 2 shows that the most commonly measured single elements include meaning/purpose, competence, autonomy, relatedness, and engagement. However, to date, researchers have operationally defined 63 distinct constructs as elements of EWB, ranging from emotional stability, serenity, and freedom, to mindfulness, resilience, and respect (for the full list, see Table 3). Some of these elements reference attitudes (e.g., hope, optimism), some reference motivations (e.g., effort in pursuing excellence), some reference behaviors (e.g., volunteering, doing new things), some reference feelings (e.g., energy, feeling of interest, and emotional stability), and some reference adaptive functioning (e.g., resilience, accomplishment).

Thus, the vagueness of the EWB category seems to permit almost any operationalization at all, as long as the measure has a healthy or appealing sound or flavor. Indeed, a recent review of measures of EWB concluded that "there was no consensus regarding the critical components of this conceptualization of well-being" (Cooke et al., 2016, p. 746)—an untenable situation if the aim is to do comparable and cumulative science. Heintzelman (2018, p. 4) also expressed concerns about the "diverse array of conceptualizations" complicating any comparisons, and Huta and Waterman (2014, p. 1428) report that the "multiplicity of conceptual and operational definitions of eudaimonia and hedonia" has led to "highly discrepant results," for example, the state-level correlations between hedonia and eudaimonia have ranged from –.3 to .8 depending on the chosen measures.

In sum, to avoid a "bracket creep" where an ever-expanding number of constructs become encompassed within an increasingly ambiguous construct of EWB (Kashdan & Steger, 2011; Sheldon, 2016), the field needs more clear criteria for what counts as a key element of EWB and what not. We believe that the path toward such clarity starts with splitting conceptions of well-being into three more clearly defined sub-categories.

Three Categories of Well-Being: Eudaimonic Motives/Activities, Psychological Need Satisfaction, and SWB

In general, there are at least three different schools within conceptualizations of EWB. First, there are the *objectivists* who claim that eudaimonia is not about subjective feelings but rather refers to an objective quality of a life (e.g., Haybron, 2008; Kristjánsson, 2010). There are certain qualities inherent to good living, and when those qualities are present in a person's way of living, that life is seen as eudaimonistic. Aristotle (2012, pp. 15, 13) himself would be in this camp as for him eudaimonia was not a type of well-being but about "living well and good action," more particularly, "an activity of soul in accord with virtue." This involves whether the person has, in fact, been able to exercise the essential and admirable virtues in that life to the highest standards of human capacity. Objectivists are thus "trying to give accounts of what it is to live well" rather than provide a theory of well-being (Haybron, 2008, p. 171). Second, there is a school emphasizing the *hedonic versus eudaimonic* distinction, which sees that this distinction can be drawn at various levels: there are hedonic and eudaimonic motives, hedonic and eudaimonic activities, and hedonic versus eudaimonic relationships, as well as hedonic and eudaimonic feelings (e.g., Huta, 2016; Huta &

Table 2. Other multi-element operationalizations of EWB and the specific elements they measured.

EWB (Joshanloo, 2016)
Psychological well-being
Social well-being

EWB (Frazier, Barreto, & Newman, 2012)
Self-acceptance
Personal growth
Meaning in life
Positive relations with others

EWB(Mackenzie, Karaoylas, & Starzyk, 2018)
Purpose in life
Personal growth

Eudaimonic measures (Clark & Senik, 2011)
Vitality
Resilience
Positive functioning

EWB (Thrash, Elliot, Maruskin, & Cassidy, 2010)
Vitality
Self-actualization

EWB (Vittersø & Søholt, 2011)
Feeling of interest
Personal growth

Eudaimonic happiness (Maltby, Day & Barber, 2005)
Long-term happiness

EWB (Klar & Kasser, 2009)
Meaning in life
Self-actualization
Basic needs satisfaction
Hope
Agency

EWB (Sedikides et al., 2016)
Subjective vitality

Eudaimonia (Waterman, 1993)
Personal expressiveness

EWB (Joshanloo, 2018b)
Learning
Social support
Respect
Efficacy
Freedom
Helping strangers
Volunteering

EWB (OECD, 2013)
Purpose

Eudaimonic SWB (Nikolaev, 2018)
Self-worth
Positive engagement and flow

EWB (Lewis, Kimiecik, Horn, Zullig, & Ward, 2014)
Personal growth
Subjective vitality
Self-determination
Life engagement

Present-eudaimonic scale (Vowinckel, Westerhof, Bohlmeijer, & Webster, 2017)
Flow
Mindfulness

EWB (Toma, Hamer, & Shankar, 2015)
Control
Autonomy
Self-realization

EWB (Kiaei & Reio, 2014)
Meaning in life
Pleasure of engagement

EWB (Di Fabio & Palazzeschi, 2015)
Life meaning
Authenticity

EWB (Yukhymenko-Lescroart & Sharma, 2019)
Sense of purpose

Eudaimonic (Clark, 2016)
Energy
Measure of control
Autonomy
Meaning
Doing new things

EWB (White, Pahl, Wheeler, Depledge, & Fleming, 2017)
Worthwhile activities

EWB (Berrios, Totterdell, & Kellett, 2018)
Eudaimonic motives for activities

EWB (Thege, Littvay, Tarnoki, & Tarnoki, 2017)
Life meaning
Sense of coherence

EWB (Kashdan, Uswatte, & Julian, 2006)
Positive self-regard
Rewarding social activity
Opportunity for personal growth

EWB (Lee, Bradburn, Johnson, Lin, & Chang, 2019)
Prosocial impact
Work engagement

EWB (Hansen, 2015)
Feelings of vitality
Personal flourishing
Social relations
Meaning in life

EWB (Sobol-Kwapinska, Jankowski, & Przepiorka, 2016)
Basic needs satisfaction
Authenticity

Eudaimonia at work (Turban & Yan, 2016)
Personal growth
Purpose
Social significance

EWB (Bauer & McAdams, 2010)
Psychosocial maturity
SWB

EWB (Passmore & Howell, 2014)
Elevating experiences
Sense of meaning

Eudaimonic feeling states (Vittersø & Dahl, 2013)
Engagement

EWB (Blasi, Nucera, Cicatiello, & Franco, 2013)
Health and physical equilibrium
Serenity and mental equilibrium
Daily life satisfaction
Material satisfaction
Social placement

EWB (Graham & Nikolova, 2005)
Meaning and purpose

EWB (Bauer, McAdams, & Pals, 2008)
Ego development

EWB (Nelson, Fuller, Choi, & Lyubomirsky, 2014)
Flow
Autonomy
Competence
Relatedness
Meaning in life

EWB (Fowers, Mollica, & Procacci, 2010)
Purpose in life
Self-actualization
Positive relationships

Note. EWB = eudaimonic well-being; SWB = subjective well-being; OECD = Organization for Economic Co-operation and Development.

Table 3. The 63 separate elements used in different operationalizations of EWB.

Accomplishment	Measure of control
Activities as personally expressive	Mindfulness
Agency	Optimism
Authenticity	Personal expressiveness
Autonomy	Personal flourishing
Basic needs satisfaction	Personal growth/development
Being a good person	Positive emotions
Being respected	Positive functioning
Clear thinking	Prosocial impact/contribution to others
Competence/environmental mastery	Psychosocial maturity
Daily life satisfaction	Purpose in life
Development of best potentials	Relatedness/positive relations
Doing new things	Resilience
Efficacy	Respect
Effort in pursuing excellence	Rewarding social activity
Ego development	Self-acceptance
Elevating experiences	Self-actualization
Emotional stability	Self-determination
Energy	Self-discovery
Engagement	Self-esteem
Eudaimonic motives for activities	Self-realization
Feeling of interest	Self-worth/positive self-regard
Flow	Sense of coherence
Freedom	Serenity and mental equilibrium
Health and physical equilibrium	Social placement
Helping strangers	Social significance
Hope	Social support
Intense involvement in activities	Subjective well-being
Learning	Vitality
Long-term happiness	Volunteering
Material satisfaction	Worthwhile activities
Meaning in life	

Note. EWB = eudaimonic well-being.

Waterman, 2014). Third, there are the proponents of an *eudaimonic activity* conceptualization, who see that there are certain motives and activities that are eudaimonic in nature and that contribute to SWB (e.g., Sheldon, 2016). Rather than identifying hedonic and eudaimonic elements simultaneously existing within any category, this approach assigns eudaimonic and hedonic concepts to somewhat different categories. In this article, we want to develop further this third approach to EWB, coming back to its implications for the two other approaches in the discussion.

As shown in Table 3, the various conceptualizations of EWB mix together very different types of elements: behaviors, intentions, feelings, and experiences (Huta & Waterman, 2014; Sheldon, 2018). This failure to "divide the construct of well-being into its component parts," thus conflating inputs, processes, and outcomes together is according to Henriques, Kleinman, and Asselin (2014, p. 11), a key reason behind the looseness and broadness of EWB. Thus, for example, rather than using everything from "volunteering" to "respect" to "material satisfaction" to "clear thinking" and more (Table 3) as indicators of EWB, it seems essential to bring some new focus to the construct by identifying some more clearly delineated "core" of EWB upon which future studies of EWB can concentrate. Accordingly, we suggest that the first step in clarifying EWB and well-being more generally is to make a distinction between three more clearly defined sub-categories within the broader construct of well-being, namely, *eudaimonic motives and activities, psychological need satisfaction*, and *SWB.*

This suggestion is based on the recently advanced "Eudaimonic Activity Model" (EAM; Sheldon, 2016, 2018). As shown in Figure 1, the EAM first distinguishes between "doing well" and "feeling well." Feeling well is about experienced well-being and how a particular life feels from the inside. Feeling well thus aims to cover the various ways a person can feel or evaluate one's life as positive or

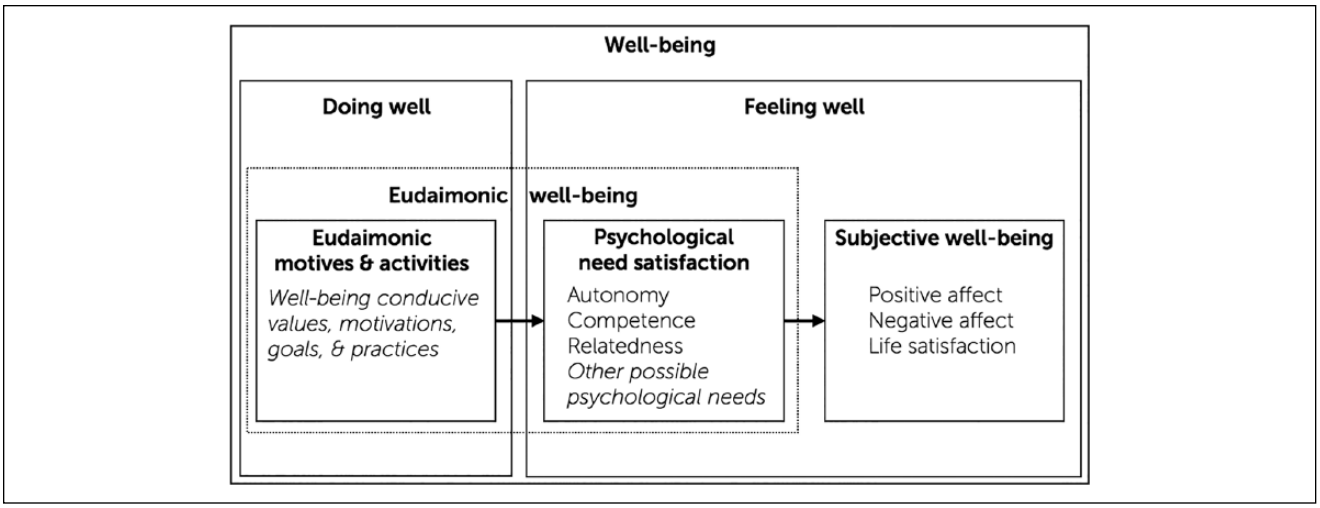

Figure 1. The eudaimonic activity model and the distinction between doing well and feeling well.

negative. Thus, it is about "good mental states, including all of the various evaluations, positive and negative, that people make of their lives, and the affective reactions of people to their experiences" (OECD, 2013, p. 29). At the same time, several researchers have emphasized that eudaimonia has an active and conative dimension to it, referring in its Aristotelian conception to how a person is living one's life, and to various motivations and activities that lead to feeling well (Huta & Ryan, 2010; Ryan & Martela, 2016; Sheldon, 2016; Sheldon, Corcoran, & Prentice, 2019). Accordingly, "doing well" should be recognized as an important part of eudaimonia and also to human well-being most broadly understood. "Being" in well-being is, after all, a verb. Thus well-being, in our model, is both about "doing well" *and* about "feeling well" (Figure 1).

The *feeling well* category can be further divided into two sub-categories: psychological need satisfaction and SWB. Constructs in the psychological need satisfaction sub-category are typically causally linked to constructs in the SWB category. SWB, defined as a category of well-being that includes general and context-free feelings and evaluations of life as good or bad, positive or negative, thus operates as the key outcome in the EAM model to which both eudaimonic motives/activities and psychological need satisfaction contribute (Sheldon et al., 2019). As Su, Tay, and Diener (2014) argue, "SWB can be conceived of as an internal barometer of 'how life is going'—it is a gauge of the extent to which other aspects of PWB or needs are fulfilled" (p. 254). Lyubomirsky, King, and Diener (2005) provided a comprehensive review of the tangible benefits of positive emotions and SWB, effects that include better marriages, higher income, and a longer life span. In other words, SWB is not just a trivial "feel-good" measure; rather, it indexes a state of mind that plays a critical role in peoples' subsequent adaptive functioning (Fredrickson, 2001). This provides a primary justification for including SWB within national surveys and other surveys, as an important indicator of societal health and predictor of future functioning.

According to the EAM, a key characteristic of SWB is that the feelings and evaluations examined are relatively free of "psychosocial content." By psychosocial content, we refer to evaluative adjectives that already tell something specific and substantial about the target's relation with oneself and the world. SWB only answers the question of *how* the subject is feeling, but not the question *why* the subject is feeling so, or *what* he or she is doing. SWB questions such as "how do you feel" or "are you satisfied" pre-suppose no causes, whereas any questionnaire item that examines subject's relationships with others or ways to engage with the world already introduces substantial psychosocial content into the equation (Sheldon, 2018). We argue that SWB should be kept free of psychosocial content, to the greatest degree possible. One of the upsides of excluding psychosocial content from this important criterion measure is that it helps to keep indicators within this category free of conceptual bias toward any particular lifestyle, form of governance, or cultural/religious belief system. Accordingly, it can help policymakers in estimating weights to give to various investments into quality of life (Diener, 2012) and serve as a relatively neutral and objective criterion variable concerning the happiness relevance of particular lifestyles, forms of governance, or cultural/religious belief systems.

Although the feeling of SWB is a critical outcome variable, it is not the only important variable for understanding human thriving. What the eudaimonic conception of well-being gets right is that certain ways of living and doing are consistently more conducive to well-being and human flourishing than other ways of living (Ryan & Martela, 2016; Sheldon, 2016). In other words, some values, goals,

motivations, orientations, and practices tend to be beneficial for the person and others less beneficial, in terms of outcomes such as well-being, health, integrity, personal growth, and social adjustment (Huta & Waterman, 2014; Ryan, Huta, & Deci, 2008). Eudaimonia, as originally conceptualized by Aristotle (2012), and as conceptualized by researchers within SDT (Ryan, Curren, & Deci, 2013; Ryan et al., 2008; Ryan & Martela, 2016), is about *a life well-lived* rather than a subjective state. Accordingly, based on the EAM (Sheldon, 2016, 2018), we suggest that a key part of eudaimonia is doing well through engaging in *eudaimonic motives and activities* that include those values, goals, motivations, orientations, and practices that have been empirically shown to consistently bring forth SWB, particularly within longitudinal studies of changes in SWB.

The rationale for the EAM can be clarified via the classical distinction between conative, affective and cognitive dimensions of the mind, with the conative referring to those aspects of human psychology that "propel or move the organism" (Mayer, Chabot, & Carlsmith, 1997, p. 31). Keeping this distinction in mind, eudaimonic motives refer to those *conative* processes known to contribute to positive *cognitive* evaluations and *affective* experiences. In other words, one important way to identify which proposed goals, values, motivations, orientations, and societal practices might be considered eudaimonic and which not, is to examine whether or not they contribute to SWB.[2] It is important to note that the eudaimonic motives/activities category does not refer directly to experienced well-being (Figure 1), because activities in this category "involve well-*doing*, not well-being; they are conative processes, not affective processes" (Sheldon, 2018, p. 126). Based on the present distinction between doing well and feeling well, eudaimonic motives/activities are best seen as activities and motivations that tend to *lead to* feeling well, rather than being included as parts of experienced well-being itself (Figure 1).

There is, however, also a third category of well-being that is positioned midway between eudaimonic motives/activities and SWB (Figure 1). We call it here *psychological need satisfaction*, seeing it as composed of specific types of satisfying experiences a person can get from one's interaction with one's environment, and that are presumed to be essential for the psychological health and well-being of the person (Ryan & Deci, 2017; Sheldon, 2018). This category concerns positive experiential constructs that are not conative, but that do involve some psychosocial content. Many theories of EWB include this type of element, such as experiencing autonomy, having a sense of environmental mastery or competence, feeling one is able to contribute to others, or feeling one is having high sense of relatedness with other people (Table 1). These are experiential rather than conative constructs as they tell not about the subject's intentions or activities, but how the subject experiences his or her relation with the environment. Using relatedness as an example, it is not only about how many minutes a person objectively spends with other people, but about whether a person *experiences* that there are mutually caring relationships in his or her life. Thus, like SWB, this category is about feeling well rather than doing well. At the same time, unlike SWB, these elements bring in psychosocial content by telling us something specific about the organism's relation to its environment. Having high or low relatedness, for example, tells something specific about a person's relation to other people. These experiences are part of the larger category of experienced well-being, but are not part of the subcategory of SWB; they are best seen as comprising their own sub-category (Figure 1).

By calling them *innately* satisfying experiences, we want to emphasize the fact that these are psychological factors that are in some sense essential to human wellness given the kind of organisms we humans are. In other words, the ultimate reason for why these experiences are satisfying is because the desire to acquire these experiences has been adaptive to human beings in the evolutionary sense (Deci & Ryan, 2000; Sheldon, 2011). Based on a line of research that has aimed to identify basic needs and fundamental human motivations (Baumeister & Leary, 1995; Deci & Ryan, 1985, 2000; Sheldon, 2011; Sheldon, Elliot, Kim, & Kasser, 2001), it appears that there are certain psychosocial experiences that have proven so necessary for the survival and thriving of the organism that humans have developed robust psychological mechanisms that ensure that individuals seek out these experiences and are emotionally rewarded when able to obtain these experiences (Sheldon, 2011).

In other words, the proposition is that there are "specifiable psychological and social nutrients which, when satisfied within the interpersonal and cultural contexts of an individual's development, facilitate growth, integrity, and well-being" (Ryan & Deci, 2017, p. 82). These psychological experiences thus function as kind of "nutrients" that are essential for the growth, integrity, and PWB of the individual (Ryan & Deci, 2017, p. 10). They also function as key predictors of SWB, mediating the relationship between various environmental contexts and motivated activities, and SWB. Longitudinal studies have indeed demonstrated that while concurrent SWB tends not to predict later boosts in EWB, concurrent EWB has been shown to predict later boosts in SWB in both United States and Japan (Joshanloo, 2018a, 2019).

Direct support for this model where psychological need satisfaction mediates the relations between eudaimonic motives/activities and SWB is found in three-wave fully longitudinal research studies as currently recommended for mediation testing (e.g., Maxwell & Cole, 2007; Maxwell, Cole, & Mitchell, 2011) that have shown how various T1 variables predict changes in SWB at T3, mediated by changes in need satisfaction at T2. Such studies have shown that need satisfaction mediates the relation between

supportive teaching style and engagement in high school (Jang, Kim, & Reeve, 2016), need satisfaction mediates the relation between coach motivational style and engagement in youth sports (Curran, Hill, Ntoumanis, Hall, & Jowett, 2016), need satisfaction fully mediates the relations between materialism and both SWB and depression (Wang, Liu, Jiang, & Song, 2017), and need frustration mediates the relation between self-critical perfectionism and binge eating symptoms (Boone, Vansteenkiste, Soenens, der Kaap-Deeder, & Verstuyf, 2014). Furthermore, other longitudinal research has shown that psychological need satisfaction mediates the SWB effects of achieving self-concordant versus less concordant goals (Sheldon & Elliot, 1999), the SWB effects of having intrinsic versus extrinsic aspirations (Niemiec, Ryan, & Deci, 2009), the SWB effects of motive dispositions toward affiliation and achievement (Sheldon & Schüler, 2011), and cross-sectional research has shown that the needs mediate the SWB effects of having one's "social character" traits should be consistent with one's "unguarded self" traits (Sheldon, Gunz, & Schachtman, 2012), the SWB effects of having correspondence between actual time use and ideal time use and having a more balanced lifestyle (Sheldon, Cummins, & Kamble, 2010), and the SWB effects of prosocial behavior (Martela & Ryan, 2016b; Weinstein & Ryan, 2010). Furthermore, assigning participants to directly pursue goals related to psychological need satisfaction has been shown to improve their SWB (Sheldon, Abad, et al., 2010), and a $2 \times 2 \times 2$ experimental manipulation of autonomy, competence, and relatedness support in a game-learning context showed that all three need factors had main effects on intrinsic motivation, positive mood, and game performance (Sheldon & Filak, 2008).

In proposing that psychological need satisfaction is a key aspect of EWB, we join forces with many other researchers who have seen psychological needs as a key part of EWB (e.g., Heintzelman, 2018). For example, Dolan et al. (2011, p. 9), Kapteyn, Lee, Tassot, Vonkova, and Zamarro (2015, p. 628), and Clark (2016) have all referred to underlying psychological needs, when defining and discussing EWB. Also, OECD (2013, see especially p. 32) guidelines note that psychological functioning draws at least partially from the idea of there being universal needs. Several studies have also used indicators of psychological needs alongside indicators of SWB in large-scale cross-national studies, sometimes as outcome variables (Conzo, Aassve, Fuochi, & Mencarini, 2017), but more typically aiming to examine whether these needs contribute to SWB (Diener, Ng, et al., 2010; Ng & Diener, 2014; Tay & Diener, 2011). However, while these approaches have suggested that EWB is partly about psychological needs, we are here making a more specific suggestion about there being a clearly defined sub-category within EWB that is about such basic needs.

The Four Criteria for Identifying Psychological Needs

Given that this "core" category of well-being refers to a limited set of psychosocial contents and tries to derive strong conclusions about what types of experiences are good for all human beings, researchers need to be very conservative about what elements are allowed to be included into this category. In other words, to arrive at an accurate and parsimonious list of needs, we need clear empirical inclusion criteria that any proposed element has to fulfill to be considered a basic need. We suggest—based on research within SDT (Deci & Ryan, 2000; Martela & Ryan, 2016a; Ryan & Deci, 2017; Sheldon, 2011)—that there are four key criteria that any suggested need should at least fulfill to be considered a serious contestant for a basic psychological need:

1. Mood: The satisfaction of the psychological need should be directly connected to positive affective consequences and momentary SWB

The satisfaction of any basic need should be rewarding in the sense of resulting in increased positive affect and other indicators of well-being (Sheldon et al., 2001). As Ryan and Deci (2004) have argued "to qualify as a need, a motivating force must have a direct relation to well-being" (p. 22). Just like successful attainment of food is rewarded by specific positive experiences such as relief, satiety, and quenching, the successful attainment of a psychological need should similarly be rewarded by positive feelings (Sheldon, 2011). These associations should be direct and not mediated. Furthermore, given the innate nature of psychological needs, their satisfaction should be associated with well-being "irrespective of whether they are valued by the individuals or their cultures" (Ryan & Deci, 2017, p. 10). Similarly, the lack and frustration of the need should be consistently and directly associated with indicators of ill-being (Vansteenkiste & Ryan, 2013). The need thus should have consistent and direct relations with well-being indicators when satisfied and ill-being indicators when frustrated.

2. Wellness: The chronic satisfaction of the psychological need should lead to long-term benefits in health, growth, and adaptation

The reason we have certain basic psychological needs is that they orient us toward certain psychosocial resources that were "entailed in thriving during our species' history" (Ryan & Deci, 2017, p. 84). The needs are psychological structures that guide humans toward certain conditions and behaviors that have been adaptive to our species. Given that any suggested psychological need should be adaptive in the long run (Deci & Ryan, 2000; Sheldon, 2011), its presence

in a person's life should lead to various long-term benefits in terms of well-being, health, social adaptation, and success (i.e., survival and successful reproduction). Thus, a suggested need should be empirically linked to various long-term indicators of wellness such as better physical health, longevity, resilience, better mental health, and well-being, and success in various arenas of life such as the work, educational, or social sphere.

3. Mediation: The need should explain the well-being benefits of many factors including behavioral orientations and activities and various environmental conditions

Given the role of basic needs in describing key satisfactions an organism can get from its relation with the environment, it occupies a middle space between conative and environmental influences on well-being and content-free SWB (Figure 1). Thus, any proposed need should be "essential to explain or interpret empirical phenomena" (Ryan & Deci, 2017, p. 251). Specifically, as suggested by the EAM (Sheldon, 2018), the needs should mediate the link between various eudaimonic motives/activities and SWB. Thus, they provide a key explanation for why certain activities and orientations typically lead to SWB. Furthermore, the needs should serve as mediators that explain the connection between various supportive or depriving environmental conditions and SWB (Ryan & Deci, 2017). Thus, whether we look at supportive work environments, educational environments, or even political systems, the needs should be able to explain why certain environments lead to more motivation, growth and well-being, than other environments.

4. Universality: The need should be universally operational across cultures

Given that innate psychological needs are said to be connected to human nature, and not to any particular individual or cultural patterns or preferences, any suggested need should be universal: It should be have effects around the world "across cultural contexts" and across national boundaries (Ryan & Deci, 2017, p. 85). Thus, for all the three criteria listed earlier, one should be able to find robust cross-cultural evidence that the criteria are not only satisfied within one culture but also in most cultures and individuals no matter whether they live in modern post-industrialized metropolises or in more primitive hunter-gatherer societies. Accordingly, an important part of the empirical rationale behind a basic psychological need is to show that it is robustly operational across a wide range of cultural contexts.

Other Criteria

Beyond these four essential criteria for a psychological need, a number of other criteria have been suggested that can further strengthen the case for arguing that an experience is indeed a psychological need (see, especially, Baumeister & Leary, 1995; Ryan & Deci, 2017). First, there can be no basic psychological need if it has not been somehow selected for through evolution. Accordingly, one should "preferably give a plausible evolutionary rationale for the existence of the need" (Martela & Ryan, 2016a, p. 761). Second, a need should be operational not only during adulthood but also "across developmental periods," and thus we should find evidence on its functioning in infants and young children (Ryan & Deci, 2017, p. 85; Sheldon, 2011). Furthermore, a need should direct cognitive processing, elicit goal-oriented behavior designed to satisfy it, affect a broad variety of behaviors, have implications beyond immediate psychological functioning, and produce effects readily under all but adverse conditions, as suggested by Baumeister and Leary (1995). Also, the candidate need must specify content, in the sense of pointing to "specific experiences and behaviors" in contrast to very general categories such as psychological health (Ryan & Deci, 2017 p. 251). Finally, the case for a psychological need would be significantly strengthened if one could pinpoint specific neurological or hormonal mechanisms underlying it, or if one would be able to show that the same need is functional in primates or other close relatives of the human species.

Autonomy, Competence, and Relatedness as Current Leading Candidates Within the Psychological Need Satisfaction Category

Given the aforementioned criteria for a psychological need, the obvious next question is what candidates best fulfill these criteria. A full review of the evidence behind every proposed candidate, however, goes beyond the scope of this article as each candidate would require a lengthy examination of its own. However, we suggest that currently the most comprehensive evidence has been built behind the three needs specified by SDT (Deci & Ryan, 2000; Ryan & Deci, 2017; Sheldon, 2011): autonomy, competence, and relatedness. Autonomy is about a sense of volition and an internal locus of causality, competence is about a sense of mastery, effectance and efficacy, whereas relatedness is about the sense of having mutually caring relationships in one's life. It is worth noting that in our review of various operationalizations of EWB (Tables 1 and 2), autonomy, competence, and relatedness were among the constructs that were most often measured as part of EWB.

Research within SDT has demonstrated that the three needs for autonomy, competence, and relatedness are related to various indicators of well-being both when we looking at the matter on a between-person or a within-person level (Ryan, Bernstein, & Brown, 2010; Sheldon & Niemiec, 2006) and even when controlling for the influence

of each other and for other potential need candidates (Martela & Ryan, 2016a; Sheldon et al., 2001). Furthermore, need frustration—the situation where one or more of these three needs are deprived—is consistently related to various indicators of ill-being such as depression, negative affect, and burnout (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Vansteenkiste & Ryan, 2013).

Also, the mediating role of the three needs has been confirmed in a number of studies. In introducing our model, we already cited several studies that showed how the satisfaction of these needs mediates the relation between various types of eudaimonic motives/activities and SWB. In addition, the three needs have also been shown to mediate the relation between various contextual factors and SWB. They mediate, for example, the SWB effects of attending a student-centered compared with a traditional law school (Sheldon & Krieger, 2007), the SWB effects of organizational support and controlling behaviors in a work setting (Gillet, Fouquereau, Forest, Brunault, & Colombat, 2012), the link between supportive versus controlling learning environments and learning outcomes such as engagement and achievement in high school (Jang, Reeve, Ryan, & Kim, 2009), the relation between higher socioeconomic status and better physical and mental health (González, Swanson, Lynch, & Williams, 2016), and the relation between higher income inequality and lower self-rated health (Di Domenico & Fournier, 2014). All in all, the mediating role of the three basic psychological needs has been tested in various contexts from work, education, and leisure to sports coaching and computer games (Ryan & Deci, 2017).

In line with criterion 4 above, the main results have also been replicated cross-culturally in various countries (Chen et al., 2015; Chirkov, Ryan, Kim, & Kaplan, 2003; Sheldon et al., 2001), including a Gallup World Poll involving 155 countries that showed how indicators for each of these three needs predicted SWB quite equally across the world regions (Tay & Diener, 2011), and a meta-analysis of 36 samples showing no difference in the size of correlation between autonomy and SWB in US and East Asian countries (Yu, Levesque-Bristol, & Maeda, 2018). A particularly interesting cross-national study of 63 countries showed that the link between national wealth and three key indicators of ill-being (burnout, anxiety, and general health) seemed to be fully explained by how much autonomy and individualism were valued in those countries (Fischer & Boer, 2011). Furthermore, a cross-cultural study of values utilizing data from over 60 different countries concluded that "values associated with autonomy, relatedness, and competence show a universal pattern of high importance and high consensus" (Fischer & Schwartz, 2011, p. 1127), underscoring their importance as something people across cultures value.

Thus, we follow SDT in proposing that currently the strongest empirical case as regards innate psychological need satisfactions concern the proposed needs for autonomy, competence, and relatedness. However, given that there are clear empirical criteria for determining whether something is a need or not, the list must be kept open. Research might in the future identify some other needs as well, alongside the three needs. For example, safety/security (Rasskazova, Ivanova, & Sheldon, 2016; Sheldon et al., 2001) and beneficence as a need to have a positive impact on other people (Martela & Ryan, 2016a) both seem to exhibit some characteristics of a need, although not enough evidence has been gathered to make a definitive conclusion of their status. Also, other candidates such as self-actualization and meaning have been tested, but found empirically wanting (Sheldon et al., 2001). Again, it seems wise to remain conservative and only accept a psychosocial experience as a true basic need when a robust set of empirical findings demonstrate that the candidate need can indeed fulfill all four criteria for a basic psychological need.

Conclusion

Well-being can be examined on many levels from very narrow, focusing mainly on momentary pleasures and pains of individuals (e.g., Kahneman, 1999), to very holistic, taking into account the person as part of a group and their shared material and social environments, cultural value frameworks (e.g., Henriques et al., 2014), and long-term temporal perspectives. EWB is located in between these extremes, focusing on the individual but on factors that go beyond mere subjective feelings to include both behavioral factors and need satisfaction-related factors. Although research on how to define and measure well-being has taken many important steps forward in the last few decades, the nature and limits of EWB are still poorly understood. To advance this debate, we have here suggested that we need to divide well-being into more clearly defined sub-categories. In addition to the category of SWB, we have discussed the category of *eudaimonic motives/activities*, and the category of *psychological need satisfactions*, arguing that the latter category should be seen both as a core outcome of doing well and a core aspect of feeling well. The goal within this middle category is to identify basic psychological needs that are essential for human well-being, growth, integrity, and long-term success in various life dimensions. We have argued that the three needs suggested by SDT, namely, autonomy, competence, and relatedness, have the best support so far to be included into this category.

As regards the eudaimonic motives/activities category, we have argued that it is not part of feeling well as such. Yet, it captures an important point that many thinkers have made (Huta & Waterman, 2014; Ryan et al., 2008). In examining what makes life good for a human being, we are typically not only interested in experienced well-being but more broadly about *a life well lived*—and many philosophical and some psychological accounts argue that happiness or experienced well-being is a mere "by-product of a life

that is well-lived" (Ryff & Singer, 1998, p. 5). Thus, philosophers such as Aristotle were mainly interested in examining the ways of living that are good and eudaimonic—and experienced well-being served merely as one of the symptoms of such good ways of living (Ryan & Martela, 2016). Thus, from a practical point of view, identifying goals, attitudes, and practices that belong to the eudaimonic motives/activities category can offer much needed guidance for people in making various life choices. Accordingly, we see research into eudaimonic motives/activities as an important research topic on its own.

As noted in the introduction, there are three main schools or traditions in the EWB literature: an objectivist tradition, focusing on activities and behaviors deemed to be valuable as such, whether or not they contribute to positive feelings; a bi-modal tradition, focusing on eudaimonic versus hedonic variants within a wide range of categories, such as goals, values, or feeling; and finally, the current approach, which suggests that SWB is not directly eudaimonic, but can be used as one of the main criterion through which to determine which motives, goals, and activities are actually eudaimonic. Instead of focusing on the contrast between eudaimonic and hedonic activities, this approach mainly focuses on better identifying what eudaimonic activities are. This approach does not require a distinction within feelings of well-being as we see that "hedonic" feelings such as joy are often also the result of eudaimonic activities, although they can naturally be produced by other things as well (see Sheldon, 2016). We believe that these three approaches are not directly opposed to each other but rather serve different research goals. For example, although drawing distinctions within the category of subjective feelings is not necessary for the current framework of EWB, this is an important research topic on its own right.

Although this article has focused on individually experienced well-being, it is important to acknowledge that well-being can be examined on many levels, from individually experienced well-being to interpersonal and community well-being to societal well-being (Prilleltensky et al., 2015). In these latter approaches, well-being is sometimes located in the *relations* between individuals rather than in the *experiences* of the individuals. For example, factors such as societal inequality, fairness, and justice have been argued to be important to such approaches to wellness (Pickett & Wilkinson, 2015; Prilleltensky, 2012). However, even while there can be important interpersonal dimensions to well-being, even community psychologists (e.g., Schueller, 2009) typically take aggregated individually experienced well-being as a key indicator of the wellness of a community or society, making it a key outcome across various psychological approaches to well-being—and the type of well-being that the present article has focused on. Furthermore, sometimes it is questioned whether a unified conceptualization of well-being is desirable at all, as one could argue that different cultures have their own idiographic perspectives on well-being that might diverge from how people in the Western countries tend to think about well-being and that we should celebrate this diversity rather than subsume it under one concept of well-being (e.g., Delle Fave & Bassi, 2009; Joshanloo, 2014). Nevertheless, in an increasingly globalized world where members of various cultures not only increasingly encounter each other but must increasingly make decisions about what goals to pursue together in organizations and in societies, some common denominators may be helpful. Thus, a quest to identify universal categories of well-being based on basic human nature seems an important goal, and basic psychological needs could provide one important avenue to reach that goal, although getting there is a long journey that will need to be firmly informed by cross-cultural research and cross-disciplinary viewpoints to avoid a narrowly Westernized understanding of well-being.

It is also worth noting that here we have concentrated on factors internal to the individual: one's activities, need satisfaction, and SWB. This focus does not mean that contextual factors are not equally important for need satisfaction and well-being. For example, research on relatedness frustration has shown that both subjective sense of loneliness and objective amount of social isolation, although sometimes weakly correlated, increased the risk for mortality approximately equally (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). Instead of downplaying the importance of social and environmental factors, we believe, in accordance with SDT (Ryan & Deci, 2017), that psychological need satisfaction is crucially important also in explaining why certain contextual and environmental factors ranging from supportive learning environments (e.g., Jang et al., 2009) to organizational support in the workplace (e.g., Gillet et al., 2012) are important for well-being. However, in addition to this direct effect that environmental conditions can have on need satisfaction and SWB, they play an important role in supporting the individual's ability to engage in eudaimonic motives/activities. For example, restrictive parenting at age 5 is associated with participants placing less emphasis on intrinsic values such as self-direction as adults (Kasser, Koestner, & Lekes, 2002). Accordingly, we argue that an important task for parents, teachers, supervisors, and other authority figures is to support people's capability to pursue eudaimonic goals and activities in their lives. Especially through being autonomy supportive and caring can others support a growing individual's capability to engage in eudaimonic activities and pursue eudaimonic goals.

In discussing the nature and dimensions of well-being, Clark (2016) concluded that "it may well be a long hard ride to reach any form of consensus, but it is difficult to overestimate the importance of such an undertaking" (p. 546). In this spirit, this article has aimed to offer a few steps toward

such a future consensus by arguing that within the broader category of well-being there are two sub-categories of "doing well" and "feeling well," with EWB involving elements of both. More precisely, we argue that EWB involves two more clearly defined sub-categories: eudaimonic motives/activities and psychological need satisfactions. Psychological needs pinpoint key elements of experienced well-being that are rooted in human nature and that enhance SWB universally, across cultures. Thus, measuring them along with SWB in future studies of well-being could offer a broader view of the nature of well-being of a society and insights about how to improve well-being in the future.

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Notes

1. The concept of *eudaimonia* comes originally from the Ancient Greeks, especially the writings of Aristotle (2012), concerning good and fulfilling ways of living, the nature of human virtue, and the ultimate causes of personal happiness (Ryan & Martela, 2016; Sheldon, 2016; Waterman, 1993).
2. If a proposed eudaimonic motive or activity does not contribute to SWB, a strong argument should be provided as to why not. Of course, SWB, does not have to be the only criterion variable. One could also examine whether or not certain conative processes bring forth optimal physical health, work performance, creativity, and other desirable outcomes.

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