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What is positive psychological functioning?

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ABSTRACT

Many key theories of human well-being refer to positive psychological functioning, when defining well-being. However, psychological functioning itself is rarely defined and explicated. What exactly do we mean by positive psychological functioning? I review how the term has been used, highlighting a key distinction between subjective well-being, which is about feeling good and positive psychological functioning, which is about the presence of certain key experiential requirements that consistently lead to beneficial psychological and behavioral outcomes. The first tells *how* the person is doing, the latter focuses on psychological factors that explain *why* the person is feeling good or bad. I offer a definition and three criteria for elements of positive psychological functioning and propose a distinction between two categories within it: Basic psychological needs as key psychosocial nutriments humans need from their interaction with their environment and basic functional attitudes as ways of approaching life consistently giving rise to well-being.

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Introduction

Positive psychological functioning plays a prominent role in many influential conceptualizations of human well-being. Providing a functional viewpoint on what well-being is for humans (Vansteenkiste et al., 2020), positive functioning and positive psychological functioning have featured in Ryff's conceptualization of psychological well-being (Ryff, 1989; Ryff & Singer, 2000), in Self-Determination Theory's (SDT) understanding of well-being (Ryan & Deci, 2001), in Keyes's conceptualization of flourishing in life (Keyes, 2002, 2007), in Huppert's definition of flourishing and mental well-being (Huppert & So, 2013; Huppert et al., 2009), in OECD's guidelines on measuring subjective well-being (OECD, 2013), in Warwick-Edinburgh Mental Well-Being Scale (Tennant et al., 2007), and in Waterman's (1993), US National Research Council's (2013), and even some of Diener's (Diener et al., 2010; Su et al., 2014) work on well-being. Positive psychology, more generally, has been framed as focusing on 'a psychology of positive human functioning' (Seligman & Csikszentmihalyi, 2000, p. 13). In these conceptualizations, psychological functioning is typically used to complement a narrow focus on life satisfaction and positive and negative affect – the most used indicators of well-being (Diener et al., 1999) – by providing a broader assessment of how well a person is doing psychologically. Positive psychological functioning has thus come to play a key role as the 'third' component of human well-being in psychological, sociological, and policy-relevant accounts of well-being, alongside life satisfaction and positive and negative affect.

However, what exactly do we mean when we talk about positive psychological functioning? In any of the above-cited sources, we tend not to find save a few sentences of explanation of what psychological functioning more specifically means. It thus plays a central role in many key definitions of human well-being but itself remains rather vaguely defined. Accordingly, given the prominence of the concept in definitions of well-being, it is long due to give it a deeper theoretical treatment.

More generally, research on subjective dimensions of human well-being has been accused of being relatively atheoretical (Alexandrova, 2017; Dodge et al., 2012; Fabian, 2022), suffering from a failure to 'divide the construct of well-being into its component parts' (Henriques et al., 2014, p. 11) and rushing to create measures before settling on the theoretical definitions of key concepts (Fowers et al., 2023). However, it is 'necessary to understand a concept before attempting to measure it' (Fowers et al., 2024), leading to recent attempts to provide theoretical clarifications of concepts such as eudaimonic well-being (Martela & Sheldon, 2019) and flourishing (Fowers et al., 2024). In the same spirit, the present work aims to address the lack of

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theoretical debate around one key component of well-being – positive psychological functioning – by providing a more theoretically grounded account of what exactly it involves.

The present work will review how positive psychological functioning has been defined in previous work before offering a more comprehensive definition and three empirical criteria that can be used to identify elements of positive psychological functioning. Such criteria are crucial to make informed decisions about what elements to include, and what to exclude, in conceptualizations and measurements of positive psychological functioning. The present work will also make a distinction between basic psychological needs and basic functional attitudes as two key categories within positive psychological functioning.

Crucially, the article seeks to make a transformation in how we identify elements of positive psychological functioning by making it into an empirical science that examines how well various candidates fulfill certain empirical criteria. Thus, while I will be offering also a preliminary list of elements to be included in basic psychological needs and basic functional attitudes, they serve mainly as examples of elements that currently seem to have relatively much empirical support, rather than a final statement about the elements. Given that this is the first theoretical exposition of positive psychological functioning, the aim is not to offer a final word on the topic but to initiate a long overdue discussion about the basic nature of psychological functioning, hopefully triggering more systematic empirical work aiming to examine what proposed elements of positive psychological functioning best fulfill the identified criteria.

Positive psychological functioning in past work

The traditional focus of psychology was for a long time concentrated on a 'disease model of human functioning', with an exclusive focus on human pathology and how to address and heal various forms of psychological malfunctioning (Seligman & Csikszentmihalyi, 2000, p. 5). The aim was to understand individuals and groups when they did not function as they should, engaging in various forms of maladaptive behavior and suffering from ill-being. In focusing mainly on 'pathological psychological functioning', what this focus came to miss was a psychology of human beings when they were functioning well and in a healthy way (Maddux, 2008, p. 55). Positive psychology arose as an antidote to the exclusive focus on pathology and treating symptoms of ill-being, arguing that it needs to be complemented with 'a psychology of positive human functioning' focusing on factors that make life good and flourishing (Seligman & Csikszentmihalyi, 2000, p. 13). Flourishing in life is not the mere absence of active ill-being and psychopathology but requires the presence of various positive experiential and psychosocial aspects of well-being (Keyes, 2002). The absence of active symptoms of ill-being *and* the absence of active symptoms of well-being is what Keyes (2002) calls languishing, and it is far from active thriving and flourishing in life. Accordingly, it became relevant to identify what are the key factors that make life good and flourishing.

Positive psychological functioning (Keyes, 2007) – sometimes referred to as positive functioning (Keyes, 2002; Ryff, 1989), optimal psychological functioning (Ryan & Deci, 2001), optimal human functioning (Ryff & Singer, 2000) or psychological functioning with the 'positive' implied rather than stated (Martela & Ryan, 2023) – is often alluded to in various definitions of well-being. Maslow (1968), for example, talks about psychological functioning in association with self-actualization, peak experiences, and evolved and mature human beings but does not provide a definition of what functioning as such means. While sometimes the phrase is used without any clear definition, many of the most influential well-being frameworks of the last decades have referred to positive psychological functioning in one way or another.

Carol Ryff (1989, p. 1077) influentially asked 'what constitutes positive psychological functioning', arguing that life satisfaction and positive feelings are not all that there is to positive functioning and providing a theory-guided proposal about six dimensions of what she called psychological well-being. For Ryff, psychological functioning seems to mean an umbrella term for all dimensions of psychological well-being, and she provides no specific definition of psychological functioning as such. Similarly, Waterman (1993, p. 678) suggests that self-realization should be seen as 'a component of optimal psychological functioning' but never provides any definition of psychological functioning itself. Also, the US National Research Council (2013, p. 2) seems to use 'psychological functioning' as an umbrella term capturing all subjective aspects of well-being. These authors thus seem to use psychological functioning as an umbrella term of all possible dimensions of psychological well-being in order to highlight that there are important dimensions of well-being beyond life satisfaction and positive affect. This is most explicit when Stone and Krueger (2018, p. 166) note that eudaimonia is commonly used 'to describe aspects of people's psychological functioning not falling under Diener's definition'.

Another strand of research similarly aims to highlight that there are important dimensions of well-being beyond life satisfaction and affects but reserves the

term 'positive psychological functioning' to refer to dimensions that go beyond them. Corey Keyes (2002, p. 207), in conceptualizing mental health continuum from languishing to flourishing, argued that mental health should be understood as 'a syndrome of symptoms of positive feelings and positive functioning in life'. Similarly, Ryan and Deci (2001) note that well-being refers to both optimal psychological functioning and experience, Huppert and So (2013, p. 838) argue that flourishing is a 'combination of feeling good and functioning effectively', and Marsh et al. (2020, p. 295) highlight that well-being is 'more than the combination of feeling good and being satisfied' as it includes 'functioning well both personally and socially'.

Ed Diener – the key developer of the SWB approach to well-being consisting of life satisfaction and positive and negative affect (Diener, 1984; Diener et al., 1999) – created a Flourishing Scale to capture 'important aspects of human functioning' such as positive relationships and meaning in life so that the scale could complement measures of life satisfaction and positive/negative affect (Diener et al., 2010, p. 146). He was also involved in the creation of the Comprehensive Inventory of Thriving (Su et al., 2014) that similarly aimed to capture a number of dimensions of positive psychological functioning beyond life satisfaction and affect. The developers of the much-used Warwick-Edinburgh Mental Well-Being Scale similarly make a central distinction between two aspects of positive mental health: positive affect and psychological functioning (Tennant et al., 2007). Similarly, the European Social Survey's Well-being Module distinguishes between feelings and functioning (Huppert et al., 2009). According to this strand of research, there is thus a key distinction between 'feeling good and functioning well' (Ruggeri et al., 2020, p. 1), the first focusing on experienced well-being such as life satisfaction and affects, the latter focusing on 'social – psychological functioning' (Diener et al., 2010, p. 145).

Based on these distinctions, many experts have come to propose a tripartite structure for human psychological well-being and its measurement that includes evaluative well-being (life satisfaction), affective well-being (positive and negative affect), and a third dimension capturing eudaimonia or positive psychological functioning (Clark, 2016; Delle Fave, 2016; Dolan et al., 2011; Graham et al., 2018; Martela & Ryan, 2023; Steptoe et al., 2015; Tennant et al., 2007; VanderWeele, Trudel-Fitzgerald, et al., 2020). This trichotomy has been also endorsed by many key policy-oriented expert groups (Eurostat, 2017; National Research Council, 2013; OECD, 2013), again with the understanding that positive psychological functioning complements emotions and life evaluations by focusing on 'broader suite of elements that psychologists deem necessary for a person to flourish or to fulfil their potential' (Eurofound, 2018, p. 7). Beyond feeling good and evaluating one's life as good, there thus seems to be a need for a 'functional viewpoint on wellness' (Vansteenkiste et al., 2020, p. 1) aiming to capture what does it mean to be fully functioning psychologically. The more specific elements that have been proposed to be part of this functional dimension of well-being by the theorists mentioned above are captured in Table 1. As is visible, quite a wide variety of different elements have been used to capture positive psychological functioning, calling for conceptual clarification to identify which of these elements should be counted as core elements.

The need for conceptual clarification

From the previous discussion, we see that there is a need for a label for three separate aspects of well-being: 1) *Overall psychological well-being* comprising all relevant aspects of human psychological experiences and processes. This is thus an umbrella term covering all psychologically relevant aspects of well-being, and labels used for this dimension have included subjective well-being, psychological well-being, personal well-being, positive psychological functioning, flourishing, and thriving. 2) *Experiential aspects of well-being* comprising key psychological experiences, evaluations and affects relevant for well-being, most usually life satisfaction and positive and negative affect. The labels used for this include experienced well-being, perceived well-being, and subjective well-being, with a further distinction sometimes made between evaluations and affects, with the first called evaluative well-being and the latter affective well-being. 3) *Functional aspects of well-being* comprising functionally relevant dimensions of well-being the presence of which consistently leads to beneficial psychological outcomes. The labels used for this include functional well-being, positive psychological functioning, eudaimonic well-being, and eudaimonia. Positive psychological functioning thus overlaps much with discussions of eudaimonic well-being, both being about those aspects of well-being that go beyond mere affects and general evaluations. Both also suffer from vagueness and lack of clear defining criteria, with Martela and Sheldon (2019) identifying 45 different operationalizations of eudaimonic well-being using 63 different constructs – hence the need for conceptual clarification. Figure 1 displays the three separate categories of well-being and some key elements within each.

Not much hangs on a label but much confusion in psychology of well-being is caused by not acknowledging these distinctions and different researchers using

Table 1. The elements of positive psychological functioning in key theories and operationalizations.

Psychological well-being Ryff (1989)	**Mental Health as Flourishing** Huppert and So (2013)	**Psychological functioning in Warwick-Edinburgh mental well-being scale** Tennant et al. (2007)
Self-acceptance	Positive emotion	
Positive relations	Emotional stability	Energy
Autonomy	Vitality	Clear thinking
Environmental mastery	Optimism	Self acceptance
Purpose in life	Resilience	Personal development
Personal growth	Self-esteem	Competence
	Engagement	Autonomy
Basic needs from SDT Ryan and Deci (2000)	Competence	
	Meaning	**The Well-Being Profile** Marsh et al. (2020)
Autonomy	Positive relationships	
Competence		Positive emotions
Relatedness	**Comprehensive Inventory of Thriving** Su et al. (2014)	Meaning
The Questionnaire for Eudaimonic Well-Being Waterman et al. (2010)	Positive feelings	Positive relations
Self-discovery	Negative feelings	Autonomy
Development of one's best potential	Life satisfaction	Competence
Sense of purpose and meaning	Meaning and purpose	Self-esteem
Intense involvement in activities	Optimism	Self-acceptance
Investment of significant effort	Autonomy	Clear thinking
Enjoying personally expressive activities	Skills	Vitality
	Learning	Engagement
Social well-being Keyes (1998)	Accomplishment	Optimism
Social acceptance	Self-efficacy	Prosocial
Social actualization	Self-worth	Emotional stability
Social contribution	Engagement	Resilience
Social coherence	Support	Empathy
Social integration	Community	
	Trust	**Flourishing Scale** Diener et al. (2010)
PERMA theory of well-being Seligman (2011)	Respect	Purpose and meaning
	Loneliness	Supportive relationships
Positive emotions	Belonging	Engagement
Engagement		Contribution to others
Meaning		Competence
Accomplishment		Optimism
Relationships		Being respected
		Being a good person

the same label to refer to different dimensions – falling into this so-called 'jingle-jangle fallacy' is a common critique of well-being psychology (van Zyl et al., 2023). Keeping the distinction between the three aspects in mind helps to see, for example, that Ryff (1989) offers her six dimensions of positive functioning as definitional aspects of *overall* psychological well-being, while Ryan and Deci (2000) offer psychological needs for autonomy, competence, and relatedness as key parts of *functional* aspects of well-being, arguing that they contribute to *experiential* aspects of well-being. To keep the labels consistent, and avoid confusions, in this article, I use the label *personal well-being* for overall psychological well-being, *subjective well-being* for experiential aspects of well-being and *positive psychological functioning* for functional aspects of well-being.

Furthermore, it is important also to distinguish *positive psychological functioning* from *positive behavioral functioning*. The former is about certain psychological experiences and attitudes, the latter is about adjusting, succeeding, and behaving well in various contexts of life (see Bickenbach et al., 2023). Thus, while positive psychological functioning as conceptualized here is subjective, in being about subjectively felt psychological experiences and attitudes of the subject, positive behavioral functioning is objective, in focusing on the behavior of the person. Positive behavioral functioning is thus, to paraphrase Sigmund Freud (Elms, 2013; Erikson, 1950), about being able to love and work – to successfully navigate one's social relationships and various social contexts, and to be able to pursue various short- and long-term projects starting from ensuring survival to more self-expressive endeavors. Positive behavioral functioning can thus be seen as being about 1) the ability to succeed in various everyday tasks such as getting food (from the grocery shop), 2) the ability to succeed in various social interactions and to build functioning social relations, and 3) the ability to pursue long-term projects in a reliable way through work, through hobbies, and in one's everyday life. While positive psychological and behavioral functioning are thus clearly separate concepts, they hang together in the sense that good psychological functioning is one of the key factors that tend to give rise to better behavioral functioning – and seriously impaired psychological functioning tends to lead to serious challenges in even the most basic dimensions of behavioral functioning.

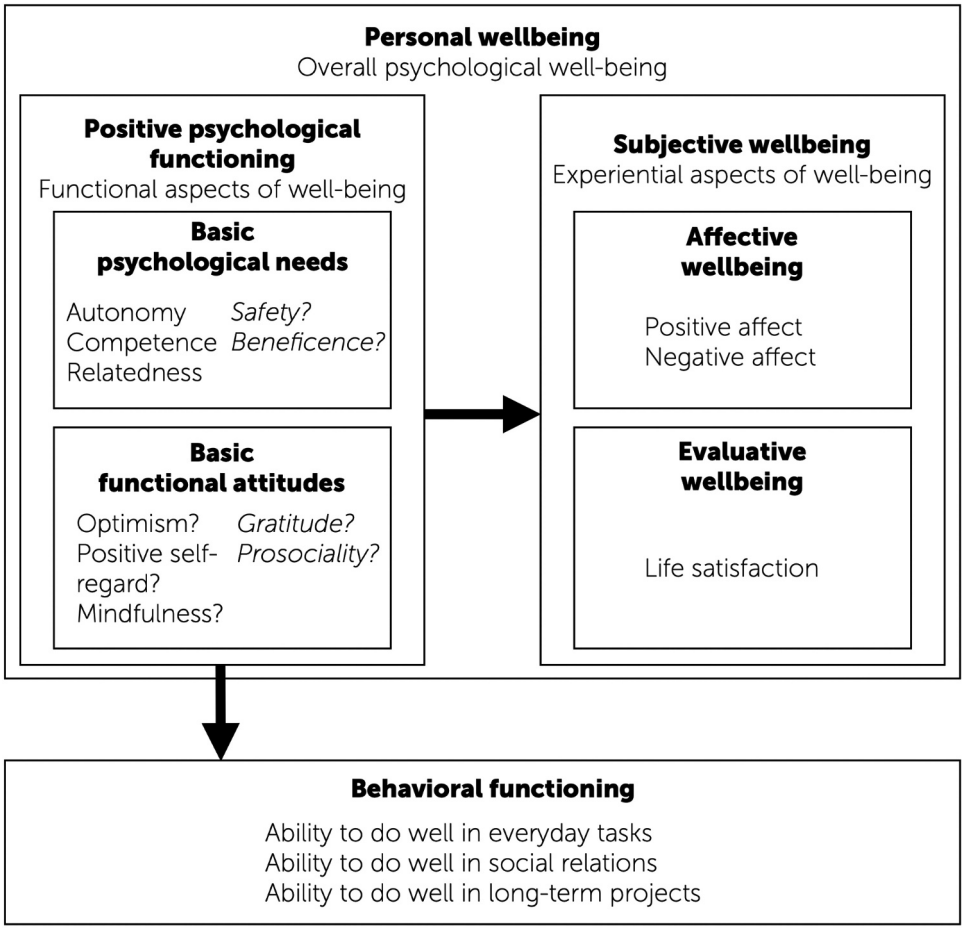

Figure 1. The distinction between subjective well-being and psychological functioning and the two dimensions of psychological functioning and subjective well-being.

Positive psychological functioning rooted in human nature

'What does it mean to be well psychologically?' This is the key question – from Ryff and Keyes (1995, p. 719) – that we need to answer in order to tap into positive psychological functioning. Positive psychological functioning is about psychological factors required 'to function as a human being' (Galtung, 1980, p. 60) – about a person's psychological processes operating as they are supposed to and providing the subject the experiences and behavior that the subject needs.[1] But to say anything about what the subject needs and how their psychological processes are supposed to operate is already to take a stand on what is it like to be a human. Any account of psychological functioning is inescapably rooted in an implicit or explicit account of human nature. If we say, as different theorists have suggested, that autonomy, competence, or optimism would be key components of positive psychological functioning, we are in essence arguing that experiencing autonomy, competence, or optimism is rooted in human nature as a key component of what flourishing is for a creature like human being. Emphasis on positive psychological functioning has, from the beginning, aimed to address the 'absence of theory-based formulations of well-being' in psychology (Ryff & Keyes, 1995, p. 719) by aiming to identify the key psychological experiences, attitudes, and processes that are essential for *human* well-being and 'consistently and robustly lead to beneficial outcomes' (Martela & Sheldon, 2019, p. 459).

As already noted, the concept of positive psychological functioning builds on a key distinction between being well and doing well (Huppert et al., 2009; Martela & Sheldon, 2019; NEF, 2008). Being well is about feeling good: having positive content-free experiences and positive overall evaluations of life. Being well is thus about *subjective well-being*, and includes life satisfaction, positive affect, negative affect (Diener, 1984; Diener et al., 1999), and other evaluative and affective indicators that all can be seen as key *symptoms* of being well psychologically. These dimensions of affective and evaluative well-being are 'relatively free of

"psychosocial content"' (Martela & Sheldon, 2019, p. 464) – they don't yet say anything 'specific and substantial about the target's relation with oneself and the world'. They tell *how* the person is doing but not *why* the subject is feeling good or bad.

Positive psychological functioning, in contrast, already takes a stand on the *why* question: It identifies psychosocial factors deemed central for human well-being; key experiential and attitudinal requirements for a subject to be able to feel well in life. As Ryan and Huta (2009, p. 203) note, psychological well-being involves 'the functions and processes through which subjective states accrue'. Humans are biologically constructed to universally require specifiable experiences from their environment to survive, thrive, and function well (Doyal & Gough, 1991; Pittman & Zeigler, 2007; Ryan & Deci, 2017). To function well physically requires that humans get certain nutriments from their environment without which they would physically suffer. Similarly, to function well psychologically requires that the relation of humans to their environment gives rise to certain key experiences without which humans don't do well psychologically. Positive psychological functioning, as Martela and Ryan (2023, p. 1125) put it, 'focuses on identifying the universally required psychological factors that humans need to do well in life and to feel well – psychological experiences deemed as central to both human well-being, well-doing, and thriving'. Accordingly, identifying elements of positive psychological functioning is about identifying the specific psychosocial, experiential, and attitudinal requirements that consistently lead to beneficial outcomes for the person, such as subjective well-being, personal growth, social adjustment, and doing well in various fields of life.

Positive psychological functioning thus takes a stand on what are the more specific experiential requirements giving rise to well-being. This means that it necessarily needs to make substantial claims about the specifics of human nature – what factors are so essential for us humans as to merit being called universal factors of human psychological functioning. While some accounts of positive psychological functioning have aimed to be rooted in such a theory about human nature (Deci & Ryan, 2000; Ryff, 1989), others have just settled with listing a number of commonly used elements without much attempt to justify why some elements are included and others are not (Diener et al., 2010; Su et al., 2014). One key message of the present article is that we can't operationalize positive psychological functioning without theoretical rooting – any proposed dimension of positive psychological functioning needs to be rooted in human nature. Furthermore, in making claims about human nature we should tread carefully with any claim having to be backed up by robust empirical evidence. To make this more concrete, I propose three key empirical criteria that need to be fulfilled, before we can accept any candidate element as being part of psychological functioning. Any proposed element of positive psychological functioning needs to be:

(1) *Consistently and causally connected to positive subjective well-being*. Positive psychological functioning is about the *why* factors of well-being, the factors whose presence directly enhances well-being. The presence of the given factor in a person's life should thus be rewarding in the sense of giving rise to more positive feelings and higher evaluations of well-being.
(2) *Consistently linked to a) long-term subjective well-being and b) behavioral functioning in life*. Positive psychological functioning entails that a person's psychological processes are producing good outcomes for the person in question. Accordingly, beyond enhanced short-term well-being, the chronic presence of the given factor in a person's life should increase the long-term subjective well-being, mental health, and thriving of the person and also give rise to better behavioral functioning in terms of more adaptive behavior, and good outcomes in various life contexts from succeeding in various everyday tasks and everyday social interactions to building lasting and healthy social relationships and being able to reliably pursue various long-term projects both within and outside work.
(3) *Universal in the sense of applying to all human beings no matter the cultural context or developmental period*. Positive psychological functioning makes claims about human nature, and thus any element of psychological functioning should in general have a positive effect in all cultural contexts and throughout the lifespan of a human being (Ryan & Deci, 2017). Many psychological models of human nature and human needs have been traditionally accused of being too Western-centered. Cross-cultural research reaching beyond the typically studied western, industrialized, and educated populations (Henrich et al., 2010) is a key empirical pathway to make any robust claims about human nature. Cultural context can influence how certain needs are manifested and how well they can be satisfied, and how functional certain attitudes might be, giving rise to a degree of cultural variation. However, the elements of positive psychological functioning should be *functional psychological universals*

(Norenzayan & Heine, 2005) in the sense of being 'potentially detectable in all cultures', while varying 'in degree of expression according to the cultural context' (Aknin et al., 2013, p. 636). Cross-cultural research is a key way of distinguishing culturally adaptive factors from factors rooted in human nature. Thus, the key elements of positive psychological functioning should be found to be robustly beneficial for subjective well-being and behavioral functioning across the world and in various cultural contexts. Rather than claiming universality based on Western samples, establishing cross-cultural generalizability requires extensive and systematic cross-cultural research efforts (Norenzayan & Heine, 2005). Such research programs are thus necessary to establish what needs and attitudes really are universal, and hence part of the human nature, rather than being effective only in certain cultural contexts.

Two dimensions of positive psychological functioning: basic psychological needs and basic functional attitudes

Having defined what positive psychological functioning as such means, I want to propose a distinction between two key dimensions of positive psychological functioning, basic psychological needs and basic functional attitudes (see Figure 1). Establishing this distinction helps to identify the more specific elements of positive psychological functioning.

Basic psychological needs

One core part of positive psychological functioning is arguably the satisfaction of basic psychological needs (Martela & Ryan, 2023; Martela & Sheldon, 2019). As Vansteenkiste et al. (2020, p. 4) put it, 'full functioning entails ongoing psychological need satisfactions'. Psychological needs have been defined as '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). Certain psychosocial experiences humans can get from their interaction with the environment have proven so necessary for the survival and thriving of the organism that humans 'have developed robust psychological mechanisms that reward them emotionally when they are able to obtain these experiences' (Martela & Ryan, 2023). Psychological needs thus mediate the influence of many environmental factors on well-being, providing a key explanation for why some institutions, societies, organizations, and groups enhance well-being, while others induce ill-being (Ryan & Deci, 2017).

If humans have such basic psychological needs, then it is clear that their satisfaction ought to be seen as a core part of human positive psychological functioning, as such needs are, by definition, universal and give rise to both short-term positive feelings and long-term well-being and adaptive behavior (Martela & Ryan, 2023). In other words, if a certain factor fulfils the criteria to be counted as a psychological need, then it also comes to fulfill the criteria for an element of positive psychological functioning, as both emphasize positive and universal short-term and long-term well-being and adaptive benefits as key criteria for making something a need or an element of positive psychological functioning. Psychological needs thus identify certain specific experiential nutriments humans require from their interaction with the environment to be well and function well in life – and thus they are a core part of human psychological functioning.

A long line of research within psychology has aimed to identify what human psychological needs are (Baumeister & Leary, 1995; Deci & Ryan, 1985; Maslow, 1943; reviewed in; Pittman & Zeigler, 2007), with a consensus especially around that humans have a social need for *relatedness*, belonging, and mutually caring interpersonal relationships (Baumeister & Leary, 1995; Deci & Ryan, 2000; Maslow, 1943; McClelland, 1985). Besides social needs, other potential needs suggested by different theorists include physiological needs, safety needs, esteem needs, and need for self-actualization (Maslow, 1943), need for existence (physiological and safety needs) and need for growth (Alderfer, 1972), needs for achievement and for power (McClelland, 1985), physical health and autonomy (Doyal & Gough, 1991), material needs and needs for personal growth (Allardt, 1993), and needs for autonomy and competence (Ryan & Deci, 2000, 2017).

To settle which of these proposed needs truly are basic psychological needs, what is needed is an empirical research program testing various candidate needs against the empirical criteria. In this regard, self-determination theory (SDT) has gone the longest in providing explicit empirical criteria for psychological needs that align well with current criteria for positive psychological functioning. In particular, SDT has offered five key criteria that must be satisfied for something to be considered a psychological need (Martela & Ryan, 2023; Ryan & Deci, 2017, p. 1) The satisfaction of the need should be directly connected to positive affective consequences, while 2) the chronic satisfaction of the need should lead to long-term benefits. On the other hand, 3) the active frustration of the psychological need

should be directly connected to negative affective consequences. Furthermore, 4) the need should explain and mediate the positive well-being benefits of many behavioural and environmental factors, and finally 5) the need should be universally operational across cultural contexts and developmental periods.

Based on these criteria, SDT has proposed that humans have a need for *autonomy* – a sense of volition and self-endorsement of one action's –, a need for *competence* – a sense of effectance, efficacy, and mastery, and a need for *relatedness* – a sense of caring mutual relationships (Ryan & Deci, 2000, 2017). Of various need theories, SDT has provided the most extensive empirical program to examine these three needs against the mentioned empirical criteria. Altogether, 12 separate meta-analyses (reviewed in Ryan et al., 2022) have examined how the psychological needs relate to well-being in various contexts, such as well-being at work (Van den Broeck et al., 2016), well-being among elderly people (Tang et al., 2020), and well-being among athletes (Li et al., 2013). The three needs have been shown to predict subjective well-being in longitudinal studies (e.g. Sheldon & Elliot, 1999; Unanue et al., 2023) and experimental studies (e.g. Sheldon & Filak, 2008; Sheldon et al., 2010), with the relations to well-being having been shown to be robust also in cross-cultural research (Chen, Vansteenkiste, et al., 2015; Church et al., 2013; Martela et al., 2023; Sheldon et al., 2001). Given an extensive amount of evidence of the importance of these needs for human well-being (Ng et al., 2012; Stanley et al., 2021; Van den Broeck et al., 2016; Vansteenkiste et al., 2020; Yu et al., 2018), researchers focusing on SDT argue that 'it is hard to imagine any fully functioning person for whom relatedness, autonomy, and competence needs are unimportant or chronically unmet' (Vansteenkiste et al., 2020, p. 5).

At the same time, given that there are clear empirical criteria for what counts as a psychological need (Martela & Ryan, 2023; Vansteenkiste et al., 2020), the list of needs should remain open, ready to be revised based on new empirical findings. Indeed, researchers have explored empirically various other potential needs throughout the years. Martela has examined beneficence, defined as a sense of prosocial impact, against the empirical criteria provided by SDT, finding that beneficence seems to have an independent effect on human well-being (Martela & Ryan, 2016a, 2016b; Martela et al., 2021, 2024), while the evidence for the frustration of beneficence causing ill-being remains an open question (Martela & Ryan, 2020, 2021; Titova & Sheldon, 2022). Other researchers have examined novelty (Bagheri & Milyavskaya, 2020; González-Cutre et al., 2016, 2020) and safety (Chen, Van Assche, et al., 2015; Rasskazova et al., 2016) as potential psychological needs. Accordingly, while autonomy, competence, and relatedness currently represent the candidates for psychological needs with the strongest empirical support, it is a matter of empirical investigation to determine whether some new needs should be acknowledged in the future.

Basic functional attitudes

Having one's psychological needs satisfied is not, however, all there is to positive psychological functioning. As can be seen in Table 1, many of the proposed elements of positive psychological functioning are not needs but rather types of attitudes that people can have towards themselves or towards their life, such as self-acceptance (Marsh et al., 2020; Ryff, 1989; Tennant et al., 2007), self-esteem (Huppert & So, 2013; Marsh et al., 2020), self-worth (Su et al., 2014), optimism (Diener et al., 2010; Huppert & So, 2013; Marsh et al., 2020; Su et al., 2014) and prosociality (Marsh et al., 2020). There thus seems to be another crucial category within positive psychological functioning that we could call *basic functional attitudes*. There are a number of key attitudes and ways of approaching one's situation and one's life in general that are so fundamental and so robustly linked with well-being as to merit being seen as elements of human psychological functioning.

These attitudes are about the fundamental ways we approach life: What kind of attitudes we have towards life in general and specific events we face within life, what we pay attention to, what we value and appreciate, and how we process what we encounter in life. While basic psychological needs are estimations about some endowments we *get from* our interaction with the environment, basic functional attitudes are beliefs and expectations we *have towards* the environment, towards ourselves, and towards our lives. Accordingly, basic functional attitudes can be defined as generalized and internalized ways of looking at, approaching, and making sense of the world, oneself, and one's life. As parts of positive psychological functioning, these attitudes should be robustly and cross-culturally related to both short-term subjective well-being and to long-term well-being and behavioral functioning in various contexts.

As regards basic functional attitudes, there are no comparable large-scale research programs as there are for basic psychological needs. Thus, the list of functional attitudes is not as established and clear, with various candidates proposed by different theorists. Nevertheless, I want to highlight a few candidates that have accumulated a substantial amount of research supporting their importance for well-being. While also other candidates could be examined, I will focus on optimism

(Carver et al., 2010; Scheier & Carver, 1992; Snyder et al., 1996), self-esteem (Leary & Baumeister, 2000; Rosenberg, 1965; Sowislo & Orth, 2013), and mindfulness (Brown & Ryan, 2003; Grossman et al., 2004; Keng et al., 2011; Lomas et al., 2019a) as each has generated their own research programs examining how well they predict well-being.

Optimism refers to the extent to which people hold generalized favorable expectancies for their future (Scheier & Carver, 1985) and has been often featured when elements of positive psychological functioning has been listed (Diener et al., 2010; Huppert & So, 2013; Marsh et al., 2020; Su et al., 2014). Optimism makes people more likely to invest in their future and more resilient in their goal pursuit as they have higher expectancy of succeeding (Carver et al., 2010; Nes & Segerstrom, 2006). Accordingly, research has found optimism to be consistently and positively related to subjective well-being, also helping to maintain higher levels of subjective well-being when facing various setbacks and stressful events in life (reviewed in Carver et al., 2010). One caveat is that the good outcomes tend to be the result of realistic optimism, as too strong and unrealistic optimism can be less optimal and lead to negative consequences such as being less prone to mitigate any risks associated with one's behaviors (Purol & Chopik, 2021; Radcliffe & Klein, 2002).

Regarding behavioral functioning, optimism has been associated with engagement in more healthy behaviors such as physical activity and healthy diet (Boehm et al., 2018; Progovac et al., 2017), more active coping strategies (Nes & Segerstrom, 2006), and better adjustment after traumatic events (Gallagher et al., 2020). Optimism has also been prospectively associated with many positive health-related outcomes such as less chronic diseases (Kim et al., 2019), and lower risk for all-cause mortality (Rozanski et al., 2019). Cross-cultural research has found that a positive association between optimism and subjective well-being is consistently found across 61 countries (Baranski et al., 2021) and across 142 countries (Gallagher et al., 2013). While more cross-cultural and prospective research would be needed, existing evidence shows that reasonable levels of optimism are functional for people, leading to better subjective well-being, more functional behavior, and better health-related outcomes. Accordingly, optimism is one relevant candidate to be examined further as a potential basic functional attitude.

Self-esteem can be defined as a generalized positive attitude one has towards oneself and one's value and self-worth (Leary & Baumeister, 2000; Rosenberg, 1965). It has been a broadly studied attitude that in general is seen as important for psychological adjustment (Sowislo & Orth, 2013), often seen as a kind of internalized sense of whether the person is valued in the eyes of others, helping us to adjust and navigate in social contexts (Leary & Baumeister, 2000; Reitz et al., 2016). Empirical research has shown that self-esteem is clearly associated with various indicators of subjective well-being (Baumeister et al., 2003; Rosenberg et al., 1995), with longitudinal research demonstrating that self-esteem predicts higher positive affect and lower negative affect in the future (Orth et al., 2012), while low self-esteem predicts increased levels of depression and anxiety (Sowislo & Orth, 2013; Steiger et al., 2014). With regard to behavioral functioning, research has demonstrated that self-esteem predicts better task persistence (Baumeister et al., 2003; DiPaula & Campbell, 2002), and high-quality social relations (Harris & Orth, 2020), while low self-esteem during adolescence is predictive of poorer health, criminal behavior, and worse economic prospect in adulthood (Trzesniewski et al., 2006).

However, the Western bias in existing research is a clear concern for claims about universality, as ideal levels of self-esteem may vary between cultures (Hornsey et al., 2018). Indeed, one review of the research concluded that 'the need for positive self-regard, as it is currently conceptualized, is not a universal, but rather is rooted in significant aspects of North American culture' (Heine et al., 1999, p. 766). Another review aimed to bring clarity to this debate about the universality of self-esteem by noting how Westerners assign more importance to competence-based self-esteem, while Easterners assign more importance to liking-based self-esteem (Sedikides et al., 2015). Relatedly, research focusing on self-compassion as a kind and caring attitude towards oneself has argued that such compassionate attitude towards oneself is universally positive for one's well-being (Neff, 2011, 2023). In contrast to self-esteem, it thus provides 'an alternative conceptualization of a healthy attitude toward oneself' (Neff, 2003, p. 85), with its own empirical research program demonstrating its positive effects on well-being (Neff, 2023). Thus, while some form of positive attitude towards oneself has the potential to be a basic functional attitude with universally positive well-being consequences, we need to carefully define what kind of positive self-regard we are referring to, before reviewing the (cross-cultural) evidence and drawing conclusions.

Mindfulness can be defined as a state of being attentive to and aware of what is taking place in the present without judgment or appraisal (Brown & Ryan, 2003; Shapiro et al., 2006). Separate from mindfulness meditation as a practice, it is thus about everyday awareness and acceptance of one's present situation (Brown et al., 2007; Wielgosz et al., 2019). Mindfulness is thought to

improve behavioral regulation and reduce emotional reactivity, with research associating trait mindfulness with various indicators of subjective well-being like life satisfaction, positive affect, and less rumination, depression, and anxiety (Brown et al., 2007; Keng et al., 2011). Causal evidence of positive well-being effects of mindfulness mostly comes from mindfulness meditation interventions that have been shown to improve depression among older adults (Reangsing, Rittiwong, et al., 2021) and adolescents (Reangsing, Punsuwun, et al., 2021) and reducing anxiety and stress while increasing subjective well-being among healthcare professionals (Lomas et al., 2019a). While Western countries are overpresented, 25 RCTs have also been conducted in Asia and the Middle East, increasing the cross-cultural generalizability of the findings (Galante et al., 2021).

As for behavioral functioning, mindfulness has been positively associated with physical activity, healthy eating, sleep (Sala et al., 2020), physical health (Grossman et al., 2004), better relationship quality (McGill et al., 2016), and relationship satisfaction (Quinn-Nilas, 2020), while being negative associated with substance use (Karyadi et al., 2014). Mindfulness-based interventions have also been found to have a positive effect on various immunity-related biomarkers (Dunn & Dimolareva, 2022), peer relationships of children and adolescents (Dai et al., 2022), academic achievement (Klingbeil et al., 2017), and work-related well-being and job performance (Lomas et al., 2019b). Given the positive correlations of trait mindfulness and positive impact of mindfulness-based interventions on subjective well-being and behavioral functioning, mindfulness is another good candidate for basic functional attitude.

What unites the three candidates examined here is that they represent general positive and accepting attitudes towards some of the central domains of life: future (optimism), present (mindfulness), and self (self-esteem). Given their broad target domains, the proposed attitudes can thus be seen as *basic*, with each of them significantly affecting how the subject approaches life and how they react to various emerging situations, thus having potentially significant behavioral downstream consequences. Their focus on broad and central life domains thus makes them *basic*, while the evidence for both short-term and long-term well-being benefits makes these attitudes *functional*. As there is space to only introduce each candidate briefly, the present work should be seen as the start of the investigation on these basic attitudes, calling for further conceptual and empirical work on these three candidates while keeping the list open as further research might highlight other potential candidates for basic functional attitudes. For example, some form of positive attitude towards the past and what has already happened could complement the current list focusing on present (mindfulness) and future (optimism). Here gratitude, understood as a tendency to respond with grateful emotion to various things happening in one's life, could be a good candidate (McCullough et al., 2002), as it has generated a significant amount of research as a predictor of well-being (Portocarrero et al., 2020). Also, the Stoic attitude of unconditionally accepting what has already happened (Aurelius, 2003), promoted in a more modern form through Acceptance and Commitment Therapy (Hayes et al., 2006), could be a potential candidate for a healthy and well-being enhancing attitude towards the past. Furthermore, some form of a positive attitude towards others could also complement the list of potential basic functional attitudes, with general prosociality (Marsh et al., 2020) and empathy (Morelli et al., 2015) as potential candidates. However, here it is harder to find a systematic research program examining the well-being benefits of such attitudes for the self. All in all, by providing empirical criteria for basic functional attitudes, the present article thus aims to bring together various disparate literatures around potential attitudes, to identify which of them have the most robust evidence to be considered basic functional attitudes.

Discussion

The present article has made the case for positive psychological functioning as being about the presence of certain key psychosocial and attitudinal experiences that consistently lead to beneficial psychological and behavioral outcomes. In addition to feeling well in the moment, well-being should thus be seen as being about functioning well psychologically. Furthermore, to identify key elements of positive psychological functioning from the long list of proposed elements (see Table 1), we need empirical criteria, and here three such criteria were proposed: Any element of positive psychological functioning should lead to 1) short-term subjective well-being and 2) long-term well-being and behavioral functioning, and 3) these effects must be universal and cross-cultural. Providing clearer definition and empirical criteria for positive psychological functioning advances research on this concept by offering a way to empirically settle discussions about what elements to include and what to exclude, when constructing measures of positive psychological functioning, thus enabling a more cumulative science of healthy psychological functioning. Broader accounts of well-being have tended to be relatively atheoretical (Dodge et al., 2012; Fabian, 2022; Fowers et al., 2023), leading to calls to offer more explicit theoretical criteria to settle what elements to include in

conceptions of well-being (Fowers et al., 2024). This is what the present work aims to offer as regards one key dimension of well-being: positive psychological functioning.

In addition to offering an explicit definition and set of criteria for positive psychological functioning, the second key contribution of the present article is the proposal that there are two sub-categories within this broader construct of positive psychological functioning: basic psychological needs and basic functional attitudes. The first of these, psychological needs, is a relatively well-established research topic, with previously proposed empirical criteria (Martela & Ryan, 2023; Ryan & Deci, 2017) and a broad research program that has investigated autonomy, competence, and relatedness as three key candidates for psychological needs (Deci & Ryan, 2000; Vansteenkiste et al., 2020), with some research also exploring beneficence (e.g. Martela & Ryan, 2016b, 2021), safety (e.g. Chen, Van Assche, et al., 2015; Rasskazova et al., 2016), and novelty (e.g. Bagheri & Milyavskaya, 2020; González-Cutre et al., 2020) as potential needs. Here, the present work highlights the place of psychological needs at the core of positive psychological functioning.

Proposing the category of basic functional attitudes, in turn, is a novel contribution that has not been discussed previously. While various individual attitudes have been investigated as potential elements of well-being such as self-acceptance (Ryff, 1989; Tennant et al., 2007), optimism, self-esteem (Huppert & So, 2013) and empathy (Marsh et al., 2020), the present work offers a broader integrative framework to gather together such research while offering empirical criteria that clarify how such attitudes relate to well-being and help to settle which of the potential attitudes should be considered as basic functional attitudes and hence key elements of positive psychological functioning and well-being.

By proposing a few clearly defined categories of well-being, the present framework can be used to clarify to what category various proposed elements belong. For example, Seligman's (2011) PERMA model includes three elements that seem to be mostly about experiential aspects of well-being (positive emotions, meaning, engagement) and two elements that seem to focus on potential psychological needs (positive relationships, accomplishment). Ryff's (1989) six dimensions of wellness include three dimensions that could be seen as potential needs (autonomy, environmental mastery, positive relations with others), one element related to basic functional attitudes (self-acceptance), one element related to experiential aspects of well-being (purpose in life), and one element that is harder to categorize into the presently proposed categories (personal growth). Waterman's (Waterman et al., 2010) six aspects of eudaimonia include elements I would categorize into experiential aspects of well-being (sense of purpose and meaning, enjoyment of activities as personally expressive), and elements that don't easily fall into these categories (self-discovery, perceived development of one's best potentials), some of which seem to be more behavioral in nature (investment of significant effort in the pursuit of excellence, intense involvement in activities). Huppert and So (2013) similarly propose elements that present potential basic needs (competence, positive relationships), potential basic attitudes (optimism, self-esteem), experiential aspects of well-being (positive emotion, emotional stability, engagement, vitality, meaning) and elements not easily categorized in any of these categories (resilience). Of course, some of the categorizations I make here could be disputed. For example, while I categorize meaning and purpose into experiential aspects of well-being (see Martela & Ryan, 2023), others have seen them as experiential requirements leading to subjective well-being (Hadden & Smith, 2019). Thus, the categorizations here are mainly demonstrative and full engagement with the theories above would require more space. What this examination, however, already shows is that there are suggested elements of well-being that don't easily fall into any of the existing categories, such as personal growth, self-discovery, resilience, and intense involvement in activities. Thus, there might be room to propose some new categories within positive psychological functioning, focusing, for example, more on behavioral aspects central to well-being. However, while this shows that the two categories proposed in this article (needs and attitudes) are not exhaustive and other categories might exist, identifying those other categories is something left for future work.

Another avenue for future research would be to investigate more the interpersonal and societal implications of positive functioning. The current account of positive psychological functioning is individual-centric in focusing on what contributes to an individual's well-being and ability to successfully navigate various situations. While flourishing individuals arguably are more prone to behave in prosocial ways that support the flourishing of those around them (Donald et al., 2021; Martela, 2023), this is not now an explicit criterion of positive psychological functioning. Positive individual functioning does not automatically translate into positive group functioning. Thus, a more societal or interpersonal definition of positive psychological functioning would require that an individual's behavior has a positive impact on the societal level or on the

interpersonal level. This is an area where we need to consider how individual-centric notion of positive psychological functioning we want to promote. Here I have focused on the individual, in line with the general focus of *well-being* on a life 'which is good for the person whose life it is' (Raz, 2004, p. 269), while recognizing that this could be an area where the theory might be expanded in the future.

Given that this is the first article to propose empirical criteria for basic functional attitudes, the research evidence around various potential candidates is still scattered, with more research needed in several areas. Thus, the current list of elements should not be taken as final but rather as a first proposal, to be revised based on more careful review of empirical research. Ideally, the present article would encourage more systematic research programs around various potential candidates for positive psychological functioning, to establish better which of them are able to fulfill the proposed criteria and thus be included in the list of elements of human psychological functioning. Besides testing elements proposed by previous theories, such research could benefit from more bottom-up approaches that allow participants to express their own ideas about what positive psychological functioning and flourishing means for them (Alexandrova & Fabian, 2022; Synard & Gazzola, 2017). Given that most of the existing theories have been developed by Western scholars, especially cross-cultural participatory co-production workshops could generate new ideas about potential key elements of positive psychological functioning (Sollis et al., 2022). Theoretical unity, construct clarity, and parsimony are crucial for establishing internationally comparable set of indicators of human well-being (Martela & Ryan, 2023), and here systematic research on positive psychological functioning is important as it currently is the least established category of well-being (Mahoney, 2023; OECD, 2013). Such systematic research evaluated against established criteria would allow governments, international organizations, and other stakeholders to make a more informed choice of what indicators of well-being to choose for national surveys and other contexts where space is limited and where the results of such well-being assessments impact future policy decisions.

More agreement on key dimensions of positive psychological functioning would also benefit clinical practice and various health interventions (VanderWeele, Trudel-Fitzgerald, et al., 2020). While clinical psychology has developed a taxonomy of pathological psychological functioning through manuals such as Diagnostic and statistical manual of mental disorders (DSM), currently in its fifth edition (American Psychiatric Association, 2013), consensus around the key characteristics of positive psychological functioning have been lacking (Huppert & So, 2013; Maddux, 2008). Such consensus around 'positive epidemiology' would help clinicians and other practitioners to define what is the healthy state of well-being they are seeking to provide for their clients (VanderWeele, Chen, et al., 2020), and thus to better know what to attend to and promote in their work.

Conclusion

What is well-being like for creatures like *Homo Sapiens*? A focus on positive psychological functioning as part of human psychological well-being highlights that doing well in life is not only about well-*being* in the sense of feeling well but also about well-*doing* in the sense of functioning well psychologically. To be 'fully functioning' psychologically is not only about how one feels but also about how one approaches life and what psychologically relevant factors are present in one's life. Accordingly, human psychological functioning entails that certain basic psychological needs are satisfied in a person's life and the person has certain healthy and well-being conducive attitudes towards life. Explicating what positive psychological functioning is about broadens our understanding of what human well-being consists of, making possible more comprehensive and systematic assessments of well-being in the future. This is important because 'how we define well-being influences our practices of government, teaching, therapy, parenting, and preaching, as all such endeavors aim to change humans for the better, and thus require some vision of what "the better" is' (Ryan & Deci, 2001, p. 142). A better understanding of the key elements of human well-being makes possible better and more evidence-based advancement of human well-being – thus ultimately serving our ability to support the well-being of all humans.

Note

1. Something *functioning as it should be functioning* means to operate properly in order to fulfill the nature of the thing in question. A car that functions as it should function has an engine that works and wheels that carry you to your destination. A heart that functions as it should function is able to pump blood to the whole body. In case of biological organisms, we can talk about healthy functioning, when referring to something functioning properly. Thus, we can't talk about healthy human functioning without talking about human nature – healthy psychological functioning means that the psychological processes operate properly to provide the subject whatever such processes are supposed to provide for them.

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