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Meaning in life: structure, sources and relations with mental and physical health

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Abstract

Meaning in life is a core component of human experience, and it plays a relevant role in the promotion of mental, social and physical well-being, as well as in the successful adaptation to adverse conditions, including chronic and progressive diseases. This paper provides an overview of the most recent conceptualizations of meaning in the psychological domain, specifically addressing its tripartite structure, encompassing the facets of coherence, significance and purpose. Empirical evidence will be summarized concerning the role of social relationships and self-transcendence as primary sources of meaning in life. Research findings highlighting the role of meaning as a core component of mental health, and as a resource in adaptively managing illness consequences on daily functioning and life goals will be also reported. Current research gaps and future directions for theoretical and empirical advancements will be outlined.

Keywords

Meaning; purpose; coherence; well-being; illness

Introduction

During the history of animal evolution, the emergence of organisms endowed with a central nervous system gave rise to associative learning and end-directed behaviors, rooted in the ability to memorize previous experiences and to pursue adaptive goals (Carillo, Thompson, Gabrieli & Disterhoft, 1993; Ginsburg & Jablonka, 2010). The capacity for culture, specifically characterizing humans, has represented for our species a further evolutionary resource for adaptation (Richerson & Boyd, 2005). It includes language development, artifact building and the production of symbolic information embedded in social norms and values (Jablonka & Lamb, 2014). Capitalizing on these assets, humans have successfully settled as active and agentic characters in the interaction with the environment, contributing to shaping their own biological and cultural environment, with massive impact on the ecosystem (Mesoudi, Withen, & Laland, 2006).

Far from being mere carriers of bio-cultural information, individuals interact with their environment through a co-construction process; human experience does not consist of the passive elaboration of external stimuli, rather encompassing representations of oneself and reality grounded in the symbolic realm (McGregor & Little, 1998; Schlegel, Hicks, Arndt & King, 2009), and goal pursuits based on the lifelong dynamic process of psychological selection (Massimini & Delle Fave, 2000). Intentionality and direction are two crucial elements supporting the selection and evolution of cultures and societies, allowing individuals to progressively acquire and integrate in their experience new environmental information and socially shared meanings and values, but also to generate new information and meanings themselves (Jablonka & Lamb, 2014).

Cultures therefore shape individuals' developmental trajectories, both providing a meaning-making system for daily events and interactions, and fostering or limiting opportunities for growth and self-expression (Diener, Oishi, & Lucas, 2003; Ryan & Deci, 2001; Uchida, Norasakkunkit, & Kitayama, 2004). In their turn, individuals organize their experience moment by moment, integrating daily events and environmental information into their behavior, goal orientation and life history (Delle Fave, 2007). Through the dynamic process of meaning making, they can ceaselessly revise their experiences, attribute new meanings to them, expand or narrow their own meaning system ((Hicks & King, 2009; Vaalsiner, 2007).

Taking into account the dynamic nature of meaning, researchers have distinguished between the two processes of meaning detection and construction (King & Hicks, 2009), also operationalized as presence of and search for meaning (Steger, Frazier, Oishi & Kaler, 2006). Meaning detection represents the assimilation of an event (usually a positive one) into a pre-existing meaning system; meaning construction consists instead of an effortful attempt to revise one's own meaning system in order to integrate in it a (usually) negative and disruptive event (Heine, Proulx & Vohs, 2006; Park,

2010). Meaning construction is however not restricted to a reactive strategy adopted to cope with a negative situation; it can also be an enjoyable and proactive experience, providing opportunities for exploration of new life avenues and fostering complexity in the person's meaning system (King & Hicks 2009; Steger, 2012).

The increasing recognition of positive psychology in the scientific domain has attracted the interest of researchers, practitioners and policy makers towards the promotion of well-being among individuals and communities, giving impulse to the investigation of meaning in life as a key component of positive mental health. Several theories and models were developed to define meaning, and a variety of assessment tools were designed to investigate its structure and contents (Brandstätter, Baumann & Borasio, 2012; Emmons, 2005; Steger, 2012; Wong, 2012). Meaning in life was also included in broader constructs, such as Psychological Well-Being (PWB, Ryff, 1989), the Dual Continua Model (Keyes, 2007) and the PERMA model (Seligman, 2011); all these models totally or partially endorse the conceptualization of well-being as the fulfilment of the human potential for growth and social contribution, following the Aristotelian view of happiness as eudaimonia.

The tripartite structure of meaning

A core question still awaiting an univocal answer is the definition of meaning, a complex term that subsumes multiple dimensions. During the last two decades, several attempts have been made to address this issue, based on the review of previous models, as well as their refinement and empirical testing through assessment tools focused on different components of meaning. Three core dimensions were eventually identified in meaning (Heintzelman & King, 2013; Martela & Steger, 2016). The first one refers to the cognitive facet of meaning as a sense of coherence, order and connection, that allows individuals to perceive internal and environmental stimuli as parts of a structured and consistent whole (Antonovsky, 1987; Battista & Almond, 1973; Heine, Proulx, & Vohs, 2006; Reker & Wong, 1988). The second dimension is motivational, and it is related to purpose and goals, conceived as orientations to the future that provide life with direction and scope (Emmons, 2005; Frankl, 1963; Steger, Oishi, & Kashdan, 2009). The third dimension is ultimately ontological and evaluative; it consists of attributing an inherent value and significance to life, and perceiving life as worth living (George & Park, 2014; Morgan & Farsides, 2009). The three facets of meaning differ from each other as concerns the psychological processes involved, as well as the functions they play in human life.

More specifically, Sense of Coherence (SOC; Antonovsky, 1987) represents a general orientation toward reality, based on the assumption that life events and situations – including the negative ones

- are ultimately meaningful, comprehensible and manageable. People reporting high levels of SOC are able to find and bring order and organization in apparently ambiguous, disruptive and uncontrollable situations (Antonovsky, 1987), through the identification of plausible connections among different information units and environmental stimuli, that allows for the construction of a unitary Gestalt (Amrikhan & Greaves, 2003).

As concerns the motivational dimension of purpose, it has been defined as a self-organizing system of goal selection and pursuit that provides a sense of direction in life (McKnight & Kashdan, 2009), at the same time being congruent with core aspects of the self (McGregor & Little, 1998).

Purposeful individuals “see the future as promising and their current actions as leading to such a positive future state” (George & Park, 2013, p.266). The concept of purpose can be found in the eudaimonic model of Psychological Well-Being, together with mastery of environment, autonomy, personal growth, positive social relations, and self-acceptance (Ryff, 1989). It is also closely related to the autonomous pole of the continuum of behavior regulation described in Self Determination Theory (SDT, Ryan & Deci, 2000), as suggesting that the kind of goals individuals set and pursue sheds light on their level of perceived self-concordance and self-determination in goal orientation (Sheldon & Schueler, 2011).

The evaluative dimension of significance is related to the perceived meaning *of* life as a whole, rather than to the more specific aspects of finding order among life events, or setting goals *in* life (Auhagen & Holub, 2006; Morgan & Farsides, 2009). Life significance is better understood in relation to a broader, self-transcendent existential sphere that includes ultimate values representing the foundational bricks on which individuals build their own identity and ethical orientation, such as spiritual and religious beliefs, philosophical principles, conceptions of humanity, community, and nature (George & Park, 2014; Leontiev, 2007).

Moving from these general definitions, researchers have proposed different models of meaning. A four-level model (Reker & Wong, 1998) distinguishes between self-preoccupation (pleasure, comfort), realization of personal potential, social service to others, and transcendent values. The PURE model (Wong, 2012) comprises purpose, understanding, responsible action, and enjoyment/evaluation. Another approach (Auhagen & Holub, 2006) distinguishes between provisional meaning, related to daily events; personal meaning, referring to individual life as a whole, and ultimate meaning, involving the self-transcendent dimension.

From a different perspective, Steger and colleagues have investigated the perceived presence or absence of meaning, focusing on the two dimensions of coherence and purpose (Steger et al., 2006). Other researchers have explored the need for meaning, identifying four components in it: purpose; value and justification; efficacy in the world; and self-worth (Baumeister, 1991). Researchers have

also paid attention to the features of the subjective experience of meaning, relating it to the characteristics of an individual's true self (Auhagen & Holub, 2006; Hicks & King, 2009).

Sources of meaning: relatedness, self-transcendence, self-actualization

Besides focusing on meaning definition and structure, researchers have also attempted to classify sources of meaning, that could be considered as “reservoirs” of value and purpose that provide tangible directions to individuals' attempts to detect and construct meaning. Sources of meaning comprise both contextual domains, and inner aspects of self. Reker and Wong (1988) adopted a need-based perspective, proposing 12 sources of meaning ranging from the basic biological needs to the transcendent and spiritual ones. A different categorization was provided through the Personal Meaning Profile (Wong, 1998), which includes achievement, religion, self-transcendence, relationships, intimacy, fairness, and self-acceptance. A further classification was adopted in studies aimed at promoting well-being in old age through reminiscence (Westerhof, Bohlmeijer & Valenkamp, 2004), with meaning sources being located within the person; in relationships; in health, functioning and physical integrity; in daily activities; and in material possessions. Within a conceptualization of meaning as purpose (Emmons, 2005), a further classification of meaning sources was suggested, encompassing relationships/intimacy, achievement/work, religion/spirituality, and self-transcendence/ generativity/ service. Growth/self-realization, contribution, and family were identified by Leontiev (2007) as the three major sources of meaning. Through a mixed-method approach, Schnell (2009) identified 26 sources of meaning, grouping them into the main categories of vertical self-transcendence, horizontal self-transcendence, self-actualization, order, and well-being/relatedness. Finally, in a study conducted among adult participants from six countries, aimed at identifying through a qualitative, bottom-up approach both sources of meaning and the motives supporting them (Delle Fave, Brdar, Wissing, & Vella-Brodrick, 2013), the two major sources of meaning reported by participants across countries were family and personal life – primarily referring to the dimensions of personal growth, well-being, inner harmony and self-actualization. The value/meaning dimension of personal life instead emerged as the prominent motive underlying the previously mentioned meaning sources, which were deemed as intrinsically valuable, points of reference in life, basic components of individual life, resources making life worth living, globally pointing to the significance facet of meaning. It is worth noticing that, despite some differences in structure and articulation, all these classifications include an overarching source of meaning, namely relatedness - to other persons, from family to friends and community members; to one's true self along growth pathways; to a higher power (Delle Fave & Soosai-Nathan, 2014). Various studies have underscored the crucial

role of relations in supporting meaning in life, through the provision of a system of values, purposes, and expectations that stimulates goal setting and pursuit, personal identity formation, an increase in self-esteem, and the fulfillment of the need to belong (Debats, 1999; Krause, 2007; Keyes, 2002; Lambert, Stillman, Baumeister, Fincham, Hicks, & Graham, 2010; Zadro, Williams, & Richardson, 2004). Studies were also conducted to explore the different pathways through which religion and spirituality promote meaning detection and construction (Emmons, 2005; Park, 2013; WHOQOL Group, 2006). As concerns psychological life, personal growth and self-actualization as sources of meaning are consistent with a vast array of philosophical and psychological views, including the more recent conceptualization of the true self (Schlegel, Hicks, King, & Arndt, 2011), echoing the Aristotelian *daimon* as the inner core that provides individuals with a unique approach to life, thus orienting the process of psychological selection (Delle Fave, Massimini & Bassi, 2011) and promoting self-knowledge (Ryff & Singer, 2008). These dimensions share the common feature of tension and commitment towards higher stages of development, in terms of personal improvement, inner balance and stability, and intrinsic aspirations. This tension towards eudaimonic pursuits – transcending personal limitations, expressing and developing resources, attaining maturity - and the meaning it provides to life are important indicators of the dynamic increase in integration and complexity that takes place in any living system, and that in humans attains its highest expression at the psychological level.

Meaning and health, in good and bad times

By virtue of the growing interest in the assessment and promotion of well-being shown by researchers, practitioners, stakeholders and policy makers, meaning has been included in a variety of studies focused on the evaluation of well-being across disciplines. More specifically, meaning has been often treated as a possible source or mediating factor in the well-being promotion. Positive correlations were recurrently detected between perceived presence of meaning in life and hedonic well-being dimensions, such as life satisfaction and positive affect, while search for meaning is correlated with neuroticism, depression, and negative emotions (Steger, Kashdan, Sullivan, & Lorents, 2008). Among older adults, the attribution of meaning to transcendental sources was associated with higher levels of responsibility and agreeableness, than finding meaning in more individualistic, self-serving interests (Reker & Woo, 2011). Conversely, meaning levels were predicted by levels of positive affect (King, Hicks, Krull, & Del Gaiso, 2006).

A great amount of attention has been specifically devoted to the relationship of meaning with physical functioning and cognitive impairment. The evaluation of eudaimonic constructs, such as meaning and purpose, seems to be more promising and useful than the evaluation of more transient

and fluctuating components of well-being, such as mood; moreover, the current availability of interventions targeting well-being may have a favorable impact on public health, in terms of cost-effectiveness and acceptability (Steptoe, 2019). In addition, the recurrent association of meaning with specific sources, such as religion and spirituality, allows for evaluating the benefits of meaning on health through the availability and use of these sources (Chida, Steptoe, & Powell, 2009; Koenig & Cohen, 2002). Within this literature, prospective studies indicate significant association between purpose in life and lower allostatic load, reduced risk of incident stroke, as well as slower decline in walking speed and mortality among elderly persons over time (Boyle, Barnes, Buchman & Bennett, 2010; Hill & Turiano, 2014; Kim, Strecher & Ryff, 2014; Krause, 2009; Zilioli, Slatcher, Ong & Gruenewald, 2015), after controlling for covariates such as socio-demographic factors, disease history, and emotional distress. Among older participants, perceiving engagement in worthwhile activities during daily life was associated with a variety of social, economic, health, biological, and behavioral assets, both cross-sectionally and longitudinally. Other studies highlighted that a meaningful and goal-driven life reduces the risk of dementia (Galderisi, Heinz, Kastrup, Beezhold, & Sartorius, 2015), while a positive relationship was detected between sense of coherence and quality of life (Eriksson & Lindström, 2007). This vast literature suggests the potential role of meaning as determinant of health and positive functioning; nevertheless, further studies are required to verify this finding; it is currently more plausible and cautious to claim for a bi-directional and positive relationship between meaning and psychophysical health.

A vast literature is also currently available about the pivotal role of meaning detection and construction in facing existential hurdles and adverse life events, such as disease, unemployment or job dismissal, divorce and family losses, and death (Wong, 2012). For sake of exemplification, findings will be reported here from studies investigating the role of meaning in the adjustment to adversarial health conditions, with a specific focus on chronic and progressive diseases. Constructs such as benefit finding (Urcuyo, Boyers, Carver, & Antoni, 2005), post-traumatic growth (Tedeschi & Calhoun, 2004), and meaning-centred coping (Folkman & Greer, 2000) rely on meaning search and construction under unfavorable circumstances.

The need to consider meaning as a coping strategy in dealing with stressful conditions, such as the advanced stages of cancer, was first suggested by Park and Folkman (1997). These authors focused on two questions that were recurrent in consultations with patients: “why this disease?” and “why me?”. The substantial difficulties in providing satisfying answers to them can be partially overcome through an aware regulation of emotions; this is however not sufficient, as the two questions imply a more existential challenge, namely the necessity to revise life plans, expectations, and priorities coherently with one’s own hierarchy of values and beliefs. Attributing meaning to disease and

perceiving life purposes is a basic prerequisite to find the motivational resources and commitment needed to actively pursue new and realistic goals (Lee, Cohen, Edgar, Laizner, & Gagnon, 2006; Pakenham, 2008; Park, Malone, Suresh, Bliss & Rosen, 2008).

One of the meaning dimensions most widely explored in the medical domain is the sense of coherence (SOC). This prominence should not be surprising, considering the pioneer role of Antonovsky, who rejected the unilaterally pathogenic view of stressors, considering them as potentially salutogenic resources fostering personal growth as well. By shifting the focus from the sole prevention of risk factors to the promotion of protective resources, his studies contributed to a radical change of perspective, officially endorsed at the Ottawa Charter for Health Promotion (World Health Organization, 1986). From a salutogenic point of view, experiencing degenerative diseases, that often lead to death through unpredictable patterns of progression and increased impairments is compatible with the perception of high levels of SOC. Among people with disabilities, SOC was found to be strongly associated with life satisfaction (Jacobson, Westerberg, Malec, & Lexell, 2011). Among caregivers, positive correlations were detected between high levels of stress, poor health, low SOC, and higher risk of burn-out (Oelofsen & Richardson, 2006). Research also linked caregivers' SOC with physical and psychological well-being and the use of adaptive coping strategies (Ekwall, Sivberg, & Hallberg, 2007).

Coherence was included in the Common Sense Model of Self-Regulation (Leventhal et al., 2003), in which adjustment to a disease condition is related to individuals' personal representations about illness identity and associated symptoms, illness causes, duration and course, consequences, expected personal and treatment control, emotional impact on one's life and overall illness coherence (primarily comprehensibility). These beliefs are both directly related to psychological adjustment, as well as indirectly by orienting individuals' selection of coping strategies that are congruent with personal beliefs. Studies conducted among persons diagnosed with multiple sclerosis highlighted the effectiveness of meaning-focused strategies (i.e. acceptance and positive reframing) in promoting adjustment to less modifiable and controllable disease dimensions (Roubinov, Turner & Williams, 2015; Bassi et al., 2019).

The supportive role of family and social relationships, as crucial sources of meaning, recurrently emerged in studies evaluating the consequences of disease. Relations promote well-being both directly, as sources of positive emotions and meaningful sharing of time and activities, and indirectly by providing support in stress management (Albrecht & Goldsmith, 2003; Delle Fave et al., 2017; Hawkley, Burleson, Berntson & Cacioppo, 2003; Krause, 2007; Ratnasigam & Bishop, 2007; Revenson & DeLongis, 2011).

On the same vein, religion as a source of meaning, and a complex set of behavioral rules and norms that can be actualized within the daily context, provides individuals coping with disease with both short- and long-term opportunities for action and goal setting (McClain, Rosenfeld & Breitbart, 2003; WHOQOL Group, 2006).

Concluding remarks and future directions

The psychological investigation of meaning has given rise to different theories, models and measurement tools; this is a common event in a discipline attempting to describe and understand mental processes relying on self-reports, and being inevitably bound to the cultural perspective endorsed by each researcher. In addition, meaning itself is a construct rooted into values and beliefs, themselves representing constitutive components of culture. Nevertheless, in spite of the different orientations characterizing meaning theories, definitions of meaning in life share relatedness as a core component, and acknowledge the dynamic nature of meaning as a process of expansion beyond an isolated and static description of the self (Delle Fave et al., 2013). Even from the etymological point of view, meaning (in its English version derived from the German *meinen*) refers to mentally connecting things through reflective thinking, a feature shared by all the three facets of coherence, purpose and significance (Martela & Steger, 2016).

Although meaning is associated with mental and physical health, it is important to bear in mind that it is not necessarily related to positive emotions and good feelings (Delle Fave & Soosai-Nathan, 2014; Ryff & Singer, 2008; Wong, 2012). As a component of eudaimonic well-being, meaning perception is compatible with commitment to the cultivation of activities or to the pursuit of goals considered as valuable, but potentially undermining quality of life in the short term (such as volunteering, caregiving, building competences to the detriment of free time). Further studies are however needed in order to more clearly disentangle the interplay between hedonic and eudaimonic facets of well-being in meaning laden aspects of life.

Future research should also overcome the western ethnocentric approach characterizing meaning research. The construction of meaning in life directly calls into play the individual self-definition and position in a broader framework: cultural specificities in this respect cannot be overlooked. When conducting studies on meaning perception, researchers should consider that well-being components can vary across countries and communities, based on cultural values and beliefs that profoundly orient individual conceptualizations of self, life and relations. Culturally salient concepts of indigenous origin need to be operationalized and included in models of meaning, in order to acknowledge the peculiarity of different cultural systems and its impact on individual life orientations and meaning-making processes. Little empirical evidence is however available on the

cultural variations in the conceptualization and role of meaning in daily life. Few exceptions are represented by a multinational study showing that citizens of poor countries report high levels of perceived meaning, compared to citizens of richer nations (Oishi & Diener, 2014); studies conducted on the presence/search model, highlighting variations in the perceived search for meaning across countries, based on the individualism/collectivism dimension (Steger, Kawabata, Shimai & Otake, 2008; Negri, Bassi & Delle Fave, 2019); and the cross-national investigation of meaning sources and related motives (Delle Fave, Wissing, Brdar, Vella-Brodrick & Freire, 2013), showing differential prevalence of religion/spirituality and family as sources of meaning across linguistic groups. Cultural variations in perceived meaning can be ascribed to contingent social and contextual circumstances, to historical processes, or to the more general belief system of a human community. Cultural, economic and collective rules and norms can expand or restrict the opportunities for meaning construction and goal pursuit available to individuals and groups within a society. The individualistic and abstractionist approach too often characterizing psychology as a discipline, and emerging in meaning research as well, entails caution in formulating unwarranted generalizations (Richardson & Guignon, 2008), considering that cultural differences in value systems affect the weight and meaning (sic!) individuals attribute to collective norms, goals and purposes, and social relations (Triandis, 2007). Finally, the multifaceted structure of meaning as a personal and social construct would greatly benefit from interdisciplinary research, with the aim of expanding the understanding of meaning through the joint contribution of psychological, philosophical, social, cultural and ethical perspectives (Negri, Bassi & Delle Fave, 2019).

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