## In Pursuit of Eudaimonia: Past Advances and Future Directions



Carol D. Ryff

Abstract Eudaimonic well-being builds on the writings of Aristotle and integrates contemporary theories of positive psychological functioning. The empirically operationalization is detailed, emphasizing the importance of rigorous psychometric evaluation. Scientific advances of this model of well-being are noted, showing links to sociodemographic factors, experiences in work and family life, and health outcomes. Three future directions for research are considered. The first addresses growing problems of socioeconomic inequality and their role in undermining the opportunities of disadvantaged segments of society to experience eudaimonia. These problems have now been exacerbated by the COVID-19 pandemic, which has disproportionately impacted those who were already vulnerable. The second new direction examines the role of the arts and humanities as factors that nurture eudaimonic well-being. Whether the arts can activate needed compassion and caring among the privileged is also considered. The third new direction examines the intersection of entrepreneurial studies with eudaimonic well-being. Conventional conceptions of entrepreneurial success focus on business profits; a case is made that eudaimonia, of the entrepreneur as well as his/her employees and surrounding communities, constitute further measure of success that elevate issues of virtue. morality, and ethics.

Keywords Eudaimonia · Inequality · Arts and humanities · Entrepreneurship

## 1 Introduction

This chapter examines an approach to psychological well-being that was developed over thirty years ago (Ryff, 1989). It was built on the integration of theories of positive psychological functioning from clinical, development, existential, and humanistic perspectives, while also drawing on Aristotle's distant view of

C. D. Ryff ( $\boxtimes$ )

Institute on Aging/Department of Psychology, University of Wisconsin-Madison, Madison, WI, USA e-mail: cryff@wisc.edu

"eudaimonia" as the highest of all human goods (Ryff & Singer, 2008). Points of convergence in these perspectives defined key dimensions of what it means to be well and live a good life (i.e., to flourish). This model subsequently had widespread impact gaged by the volume of publications across diverse scientific fields (see Ryff, 2014, 2018). The extensive use likely reflects an interest in and commitment to reaching for essential meanings of what constitutes the best within us, as emphasized by Aristotle. Stated otherwise, this model of well-being emerged from intellectually vital ideas and ideals that have been seen to have relevance across multiple domains of life and fields of empirical inquiry.

The first section below briefly describes the components of well-being in this approach and examines their scientific operationalization (how they are measured). Amidst growing formulations of flourishing, increased attention is now being given to what constitutes quality measurement of key constructs. The importance of rigorous psychometric evaluation of validity and reliability of proposed instruments cannot be overstated. Such matters take on ever greater significance as government surveys of well-being around the world are on the rise, along with cohort studies in multiple countries that are tracking experiences of well-being longitudinally and their health sequelae.

The second section then highlights select advances that have grown up around this eudaimonic model. Many are from the MIDUS (Midlife in the USA) national longitudinal study (www.midus.wisc.edu), which involves two representative samples of Americans—the initial baseline sample and a subsequent "refresher" sample. In terms of scope, MIDUS is deeply multidisciplinary, collecting extensive information on sociodemographic factors, psychosocial and behavioral factors, along with measures of biological regulation and neuroscience assessments of emotion regulation. Pertinent to the topic of flourishing, MIDUS includes comprehensive measures of both eudaimonic and hedonic well-being. All MIDUS data are publicly available and have been widely used by investigators across the globe to examine many questions, including how reports of well-being are linked with socioeconomic status, work and family life experiences, health outcomes (disease, functional capacities, length of life), and biological and brain mechanisms. Some eudaimonic research findings from other studies are included in this overview as well.

The third section then shifts to consider needed future directions, which are organized around three key topics. *Growing problems of socioeconomic inequality* define the first topic. Emphasis is given to how limited educational and economic opportunities are standing in the way of eudaimonic becoming for many. These problems have been exacerbated by the COVID-19 pandemic and its economic sequelae. Such "intersecting catastrophes" point to needed future science on obstacles to human flourishing and related public policy action needed to reduce gaping discrepancies between privileged and disadvantaged segments of contemporary societies. In counterpoint, the next section shifts to needed research on the *role of the arts and humanities as factors that may nurture eudaimonic well-being*. A burgeoning literature is now investigating links between encounters with the arts, broadly defined, and numerous aspects of well-being and health. Some of this work is briefly described, and returning to the theme of inequality, attention is given to the

role of literature, music, art, film, philosophy, and history in activating the compassion and caring needed among the privileged to enact social change. A final section examines the *intersection of entrepreneurial studies with eudaimonic well-being*. Entrepreneurship has emerged as its own scientific field in recent decades. Conceptions of entrepreneurial success initially focused primarily on business profits, but are now embracing well-being as a further relevant outcome. Most of these inquiries have emphasized hedonic well-being, although growing interest is now gathering around eudaimonic well-being. A case will be made that new business activities may be critical to how individuals, communities, and countries around the world recover from the losses and trauma of the worldwide pandemic. Bringing eudaimonia to these endeavors elevates issues of virtue, morality, and ethics. Such ideas point to future work needed to understand the virtuous becoming of entrepreneurs and those impacted by their pursuits.

A concluding section recapitulates key points from prior studies of eudaimonic well-being and the central objectives of proposed scientific studies going forward. Taken together, the intent is to continue building a framework of human flourishing anchored in a commitment to the realization of the talents and capacities conceived as the highest of all human goods.

## 2 Eudaimonia Well-Being: Flourishing as the Realization of Human Potential

Although subjective well-being has been empirically studied for more than fifty years, much of the initial work was largely atheoretical and focused on simple questions about happiness and life satisfaction. The lack of conceptual depth is puzzling, given that numerous subfields within psychology (clinical, developmental, existential, humanistic) had long ago thoughtfully articulated the upside of the human condition (Allport, 1961; Bühler, 1935; Erikson, 1959; Frankl, 1959; Jahoda, 1958; Jung, 1933; Maslow, 1968; Neugarten, 1973; Rogers, 1961). Such works thus addressed what it means to be fully functioning, developed, individuated, mature, self-actualized, and purposefully engaged in life. Most of these perspectives were not part of empirical science, however, largely because they lacked credible assessment procedures. Seeking to bring more of these ideas into contemporary science, I first sought to integrate these perspectives into a synthesis that distilled the key points of convergence among them. The result was a model of well-being that involved six key dimensions of well-being (Ryff, 1989), which are shown in Fig. 1. Distant philosophical input also came from Aristotle's eudaimonia, which he explicated in the Nichomachean Ethics (1925). This classic work opened with a profound query: what is the highest of all goods achievable by human action? Aristotle thought the answer was happiness, but he underscored notable differences in what is meant by happiness. In his view, happiness was not about pleasure or wealth or honor or satisfying appetites-things more aligned with hedonia, also of



Fig. 1 Core dimensions of psychological well-being and their theoretical underpinnings

interest to the ancient Greeks. Instead, he defined the highest good as *activity of the soul in accord with virtue*; it was thus about achieving the best that is within us. This core meaning of eudaimonia, conceived as a kind of personal excellence, is captured by the two Greek imperatives, inscribed on the Temple of Apollo at Delphi, namely, to "know thyself" and "become who you are" (Ryff & Singer, 2008).

Translation of the six different dimensions of well-being to quality assessment tools was imperative. So doing required a comprehensive psychometric approach that has been detailed in prior publications (Ryff, 1989; Ryff & Singer, 2008; Ryff, 2014). Of critical importance at the outset was the need for clear and coherent definitions of each proposed dimension. Table 1 provides these definitions,

including a description of both high and low scorers. These definitions, which came from the underlying theories, served as the basis for generating self-descriptive items intended to operationalize each dimension. A central point is that the items emerged from the guiding conceptual definitions of each aspect of well-being. Detailed psychometric analyses were then conducted to refine the item pools; such work included assessments of face and content validity as well as item-to-scale correlations (to insure that each item correlated more highly with its own rather than another scale). Internal consistency (alpha) coefficients were also examined. Confirmatory factor analyses were then conducted to assess whether the data supported the proposed six-factor model as well as to examine how it related to other constructs, thus addressing issues of convergent and discriminant validity (Ryff & Keyes, 1995; Keyes et al., 2002). In the main, these analyses, including those conducted with samples from other countries, have supported the proposed model (see Ryff, 2014). Of importance in evaluating the factorial structure has been the need to employ scales of sufficient length (Gallagher et al., 2009)-i.e., analyses based on limited items have shown problematic structures.

As the science of human flourishing proliferates, issues of measures are receiving heightened attention (e.g., Lee et al., 2021a) and debates are unfolding. Included in the preceding edited collection was a set of recommendations (VanderWeele et al., 2021a) for single-item assessments, 4-6 item scales, and longer, multi-item scales. A dissenting perspective (Ryff et al., 2021a) argued against ultra-short form (1 item) assessments on grounds that extensive prior science has documented the complex, multi-faceted nature of well-being. The specific multi-item assessment put forth also lacked a clear conceptual foundation, had limited evidence of validity and used highly redundant items, presumably to obtain high internal consistency coefficients. A rebuttal followed, noting areas of agreement and providing further defense for measures recommended (VanderWeele et al., 2021b). A final rebuttal (Ryff et al., 2021b) challenged the view that "one is better than none" perpetuates a simplistic view of well-being that is out of touch with how the field has progressed, while also questioning the idea of blanket advocacy for measures on grounds that best choices likely depend on the substantive scientific questions of interest. A final point emphasized quality control standards as essential in deliberating over measurement options. Included in quality control is extent of prior usage-presence in the published scientific literature.

The eudaimonic model of well-being described herein meets quality control criteria: it emerged from an integration of multiple theoretical perspectives and involved an empirical operationalization process that was comprehensive and rigorous. In addition, the model has taken hold in the scientific community: the scales have been translated to 40 different languages and more than 1,200 publications have been generated. This is not to argue that the eudaimonic model is the best or only credible choice for studying human flourishing. Rather, the point is to underscore that whatever approach is chosen, it needs a solid theoretical and empirical foundation. Otherwise, the science of flourishing will flounder.

#### Table 1 Definitions of theory-guided dimensions of eudaimonic well-being

#### Autonomy

*High scorer:* Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

Sample item: "I have confidence in my own opinions, even if they are different from the way most other people think."

*Low scorer:* Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways. *Sample item: "I tend to be influenced by people with strong opinions."* 

#### **Environmental Mastery**

*High scorer:* Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.

Sample item: "I am quite good at managing the many responsibilities of my daily life." Low scorer: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

Sample item: "The demands of everyday life often get me down."

#### **Personal Growth**

*High scorer:* Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness. *Sample item: "For me, life has been a continuous process of learning, changing, and growth." Low scorer:* Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors. *Sample item: "When I think about it, I haven't really improved much over the years."* 

#### **Positive Relations with Others**

*High scorer:* Has warm, satisfying, trusting relationships with others; is concerned about the welfare of other others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

Sample item: "I enjoy personal and mutual conversations with family and friends."

*Low scorer:* Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

Sample item: "I have not experienced many warm and trusting relationships with others." **Purpose in Life** 

*High scorer:* Has goals in life and a sense of directedness; feels there is *meaning to present and* past life; holds beliefs that give life purpose; has aims and objectives for living.

Sample item: "I have a sense of direction and purpose in life."

*Low scorer:* Lacks a sense of meaning in life; has few goals or aims; lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

Sample item: "I don't have a good sense of what it is I'm trying to accomplish in life." Self-Acceptance

*High scorer:* Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life.

Sample item: "When I look at the story of my life, I'm pleased with how things have turned out." Low Scorer: Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is. Sample item: "My attitude about myself is probably not as positive as most people feel about themselves."

Response options for all above items: 1 (*strongly disagree*) to 7 (*strongly agree*)

# **3** Past Advances: What Have We Learned About Eudaimonic Well-Being?

The brief overview of scientific findings draws on previous summaries of prior research (Ryff, 2014, 2018) as well as more recent reviews, one covering sociodemographic and health correlates of eudaimonic and hedonic well-being (Ryff et al., 2021c) and another examining growing interest in purposeful life engagement (Ryff & Kim, 2020). Findings in some earlier cross-sectional research conducted with convenience samples, and later work from MIDUS and other cohort studies, such as the Health and Retirement Study (HRS) and the Wisconsin Longitudinal Study (WLS). The first topic below briefly covers how sociodemographic factors have been linked to eudaimonic well-being. A second section reviews evidence linking experiences in family and work life to well-being and health. Given that several contributors to this volume are interested in human flourishing as it relates to the work-family interface, several more recent publications from MIDUS are covered in this section. A final section summarizes how eudaimonia has been associated with health outcomes, broadly defined, as well as with biological regulation/dysregulation and brain mechanisms.

### 3.1 Sociodemographic Factors and Eudaimonia

With regard to age, considerable evidence, initially based on cross-sectional findings and then extended to longitudinal investigations, has shown that certain aspects of eudaimonic well-being, especially purpose in life and personal growth, show decline as individual transition from midlife to older age (Hill & Weston, 2019; Springer et al., 2011; Ryff, 1989; Ryff & Keyes, 1995). Such decline may reflect "structural lag"—namely, that contemporary social institutions have not kept up with the added years of life that many older adults now experience (Riley et al., 1994). There is notable variability within age groups, however, such that some older adults maintain high levels of purposeful engagement, which in turn has been found to matter. With regard to personal growth, recent longitudinal findings (Toyama et al., 2020) have shown that many are able to maintain high levels across adult life. Multiple factors, especially positive relationships and generativity (having a concern for guiding the next generation), are shown to promote personal growth across time.

Gender differences have not been prominent in findings of eudaimonic wellbeing, although some work has shown that women report higher levels of positive relations with others and personal growth than men (Marks, 1996; Ryff & Heidrich, 1997). These findings are notable given that women are known to heightened risk for experiencing depression relative to men. In terms of socioeconomic standing, early work from multiple studies (National Survey of Families and Households, MIDUS, Wisconsin Longitudinal Study) showed that those with higher levels of educational attainment reported higher levels of eudaimonic well-being compared to those with lower educational standing (Marmot et al., 1998; Marmot et al., 1997). Greater educational opportunities implicate not only access to knowledge but also better jobs, higher incomes, and greater wealth. With regard to race, an early, unexpected finding from MIDUS was that African American adults had higher levels of eudaimonic well-being compared to their white counterparts (Ryff et al., 2003). Subsequent evidence from MIDUS showed that the minority advantage in well-being would be even greater were it not for experiences of discrimination (Keyes, 2009). Going forward, intersectionality—namely, how age, gender, socioeconomic status, and race interact to account for differing levels of eudaimonic well-being—will likely receive greater attention (see Ryff et al., 2021c).

## 3.2 Family and Work Life Experiences

Family and work life have been of sustained interest in MIDUS. Multiple findings are noted here, including those that are not explicitly linked to eudaimonic wellbeing, but potentially could be. Greater involvement in multiple life roles (worker, spouse, parent) has been found to promote higher well-being (Ahrens & Ryff, 2006), although the actual activities in these roles matter-i.e., helping others seems to enhance purpose and self-acceptance (Greenfield, 2009). Those who are married have been shown to have a well-being advantage compared to the divorced, widowed, or never married, although single women score higher on autonomy and personal growth compared to married women (Marks & Lambert, 1998). Parenting seems to enhance adult well-being, particularly when children are doing well (An & Cooney, 2006; Schmutte & Ryff, 1994), whereas the loss of a child predicts impaired well-being, even decades later (Rogers et al., 2008). Similarly, loss of a parent in childhood predicts lower levels of multiple dimensions of adult well-being (Maier & Lachman, 2000). Experiencing psychological or physical violence from a parent in childhood compromises adult well-being (Greenfield & Marks, 2010), as does caring for an aging parent, although less so for daughters with high environmental mastery (Li et al., 1999).

With regard to work, new MIDUS research (Weston et al., 2021) has shown cross-sectional and longitudinal links between work characteristics and employees' sense of purpose. Greater skill variety and coworker support (but not job autonomy or supervisor support) were associated with higher levels of purpose in life. Increases in purpose over time were also associated with higher levels of skill variety. Several other recent MIDUS publications (Choi, 2020; Kim et al., 2021; Kivimäki et al., 2015; Seeman et al., 2020) have linked various aspects of work (e.g., job insecurity, long working hours, job strain and physical demands, lack of autonomy and creativity in work) to various health outcomes (e.g., sleep quality, type 2 diabetes, opioid use, allostatic load, cognitive performance). These findings offer new opportunities to investigate psychological factors (resources and vulnerabilities) as potential moderators of the observed links between work characteristics and health.

Of particular prominence in MIDUS has been the interplay between work and family life, with early findings showing both negative and positive spillover between these domains (Marks, 1998; Grzywacz, 2000). Cohort differences were also observed in how young men and women manage work/family roles, with related differences for well-being (Carr, 2002). Negative work-to-family spillover (NWFS) has been found to matter for subjective well-being, with effects moderated by dispositional optimism (Lee et al., 2021b). Although increases in NWFS over time were found to predict increased chronic conditions (Lee et al., 2015), leisure-time physical activities were found to buffer against such adverse health effects. Additional work has linked NWFS over two decades to elevated chronic conditions and greater functional limitations (Tsukermann et al., 2020), while negative work spillover also mediated the relationship between job insecurity and subjective sleep quality (Kim et al., 2021). Among caregivers, those reporting higher levels of work-to-family spillover reported lower self-acceptance and higher negative affect that caregivers not dealing with such spillover (Hodgdon & Wong, 2021). Guided by the idea of stress proliferation, work-family conflict was found to be higher among employed US adults who reported that their spouses had mental or physical health problems (Fettro & Nomaguchi, 2018). In sum, a multitude of new findings from MIDUS have documented growing interest in the work-family interface and its relevance for well-being and health.

#### 3.3 Eudaimonic Well-Being and Health

Considerable research, generated from multiple studies, has grown up around purpose in life, a specific dimension of eudaimonia, and health. A key finding emerging from a community sample of older adults showed that those with higher purpose in life had reduced rates of mortality 7 years later (Boyle et al., 2009). Findings from MIDUS then replicated and extended the mortality findings (Hill & Turiano, 2014), showing greater survival over 14 years among those with higher purpose in life at baseline, after adjusting for numerous covariates. Findings from HRS (Health and Retirement Study) also showed lowest risk of all-cause mortality among those with highest levels of purpose in life as well as reduced risk of mortality from heart, circulatory, and blood conditions (Alimujiang et al., 2019; Kim et al., 2013a, b). A meta-analysis of ten prospective studies reported significant associations between purpose in life and reduced all-cause mortality and reduced cardiovascular events (Cohen et al., 2016). Relevant for understanding these profiles of morbidity and mortality is evidence showing that those with higher eudaimonic wellbeing are more likely to use preventive healthcare services and practice better health behaviors (diet, exercise) (Chen et al., 2019; Hill & Weston, 2019; Hooker & Masters, 2016; Kim et al., 2014, 2017; Steptoe & Fancourt, 2019). It is important to note that indicators of poor health or the presence of disease have also been associated with compromised eudaimonic well-being (e.g., Costanzo et al., 2009; Schleicher et al., 2005), underscoring the need to investigate bi-directional relationships.

Implicated above findings are biological and neurological mechanisms, which are also being studied. Early findings showed that higher well-being (particularly, personal growth, positive relations with others, purpose in life) was linked with better neuroendocrine regulation, better inflammatory profiles, lower cardiovascular risk factors, and better sleep profiles (Friedman et al., 2005; Lindfors & Lundberg, 2002; Ryff et al., 2004). More recent findings from national samples have shown that aspects of eudaimonia are associated with better glycemic regulation (Boylan et al., 2017; Hafez et al., 2018), better inflammatory profiles (Elliot & Chapman, 2016; Friedman & Ryff, 2012; Morozink et al., 2010), better lipid profiles (Radler et al., 2017), lower risk of metabolic syndrome (Boylan & Ryff, 2015), and lower allostatic load (Zilioli et al., 2015). With regard to neuroscience, van Reekum et al. (2007) used functional MRI techniques to show that those with higher eudaimonic wellbeing had less amygdala activation in response to negative stimuli as well as more activation of regions (ventral anterior cingulate cortex) that help regulate emotions. Heller et al. (2013) used fMRI techniques to show sustained activation of reward circuitry (striatal activity) in response to positive stimuli among those with higher eudaimonic well-being; this pattern was further linked with lower cortisol output over the course of the day. Schaefer et al. (2013) showed that higher purpose in life predicted less reactivity (eve-blink startle response) to negative stimuli. Finally, eudaimonic well-being has been linked with greater insular cortex volume, which is involved in an array of higher-order functions (Lewis et al., 2014).

In sum, growing evidence documents the benefits of eudaimonic well-being for health, assessed in terms of reduced chronic conditions, disease, and functional impairment as well as longer lives. Other emerging science shows the contribution of eudaimonic well-being to better regulation of different physiological systems as well as to neural circuitry implicated in emotion regulation.

#### 4 Future Eudaimonic Science: Needed Directions

The advocacy for future research that follows encompasses notably negative topics related to contemporary societal problems that are undermining the eudaimonic potential of many individuals. In counterpoint, a promising positive future direction calls for bringing the arts and humanities more prominently into studies of wellbeing. A final topic embraces the intriguing possibility of linking contemporary studies of entrepreneurship to research on eudaimonic well-being. New business ventures will likely be critical in how countries around the world recover from the COVID-19 pandemic. An important feature of eudaimonia in such pursuits is the emphasis it brings to virtue and ethics.

## 4.1 Impediments to Eudaimonia: Widening Inequality

Interest in human flourishing tends to focus on upbeat, happy topics, as exemplified by the positive psychology movement that was built on the assertion that too much of psychology was focused on the negative. There is a danger behind such thinking in that it can create blinders to human suffering, particularly forms tied to structural forces that can make life unlivable for some. Growing inequality is such a problem in the current era, although it has long been recognized that such socioeconomic hardship matters for health (Lynch et al., 1997; Marmot, 2015; Ross & Wu, 1995). Recent research conducted by demographers, economists, and epidemiologists documents the deepening of inequality (Graham, 2017; Pfeffer & Schoeni, 2016; Piketty et al., 2018; Piketty & Saez, 2014; Reeves, 2017). These problems were exacerbated by the Great Recession of 2008, which fueled dramatic increases in poverty rates (Bishaw, 2013) and accompanying health costs due to job loss, unemployment, and financial strain (Burgard & Kalousova, 2015; Kirsch & Ryff, 2016). The take-home message is that privileged segments of society, particularly in the USA, are, indeed, flourishing, defined by objective indicators (better jobs, greater wealth, marital stability, safer neighborhoods, healthier lifestyles) as well as subjective indicators (optimism, life satisfaction, happiness). However, for others, including those who formerly were middle class, life has become dire (Kristof & WuDunn, 2020). This heightened trauma among the disadvantaged is what sits behind increased "deaths of despair"-suicides, deaths to addictions, such as opioids and alcohol, now evident among midlife adults (Case & Deaton, 2015, 2020).

Prior to these recent changes, MIDUS findings were already showing the adverse consequents of inequality. Gruenewald et al. (2012) linked socioeconomic adversity in childhood (parental education, welfare status) and adulthood (education, income, difficulty paying bills) to heighted multisystem biological risk (allostatic load) in adulthood. Focused on the lives of African Americans, other studies (Slopen et al., 2012; Slopen et al., 2013) linked cumulative stress across multiple life domains (neighborhood, financial, relationship, work, perceived inequality, discrimination, childhood adversity) to increased risk of smoking. Other studies of inequality in MIDUS brought attention to the role of psychological and behavioral factors as moderators and mediators of adverse health effects, including dysregulation of different physiological systems (Kirsch et al., 2019).

A unique feature of the MIDUS design made it possible to examine social and historical change in health inequalities. Specifically, MIDUS includes two national samples of US adults situated on either side of the Great Recession. The baseline sample (ages 25–74) was recruited in 1995; it was followed by recruitment of a new "refresher" national sample (same ages) in 2012. Over this period educational attainment in the USA improved: college-educated adults increased from 24.8% to 33.2% and those with less than a high school education decreased from 15.3% to 11.3%. Despite such gains, the post-Recession sample reported less household income (after adjusting for inflation) and lower financial stability than the pre-Recession sample (Kirsch et al., 2019). In addition, the post-Recession sample

had worse health (measured in terms of chronic conditions, body mass index, functional limitations, and physical symptoms) as well as lower levels of many aspects of eudaimonic and hedonic well-being.

Additional MIDUS research (Goldman et al., 2018) compared these two national samples on an array of mental health measures (negative and positive) and showed that mental health had become more compromised among the later refresher (post-Recession) sample compared to the baseline MIDUS sample *among those with lower socioeconomic positions* (measured with a composite of education, occupation, income, and wealth). This worsening of mental health among disadvantaged Americans was framed in the context of the opioid epidemic, growing alcoholism, and increased suicide rates among middle-aged whites of low SES standing (Case & Deaton, 2015, 2020; Grant et al., 2017; Kolodny et al., 2015; Schuchat et al., 2017).

Returning to the eudaimonic focus of this chapter, these combined findings underscore historic changes unfolding in the USA that need to be considered in thinking about people's opportunities to make the most of their own talents and potential. These life objectives are now beyond the reach of many. Sadly, the COVID-19 pandemic has exacerbated these problems. What we know is that economic fallout from the pandemic hit lower-income Americans the hardest, measured in terms of paying bills, receiving help from a food bank, job loss, and risk of eviction (Pew Research Center, 2020). More recent evidence (Serkez, 2021) extends this troublesome tale: the wealthiest segments of society were more likely to stay at home during the lockdown and rely on delivery services compared to those at the low end of the income hierarchy; the disadvantaged also experienced more employment changes and had greater problems with online schooling (availability of a computer, evidence of progress in math coursework). Finally, life expectancy fell for Americans, but only by about a year for white Americans compared to nearly three years for Black Americans, whose life expectancy is now at its lowest level in 20 years (Serkez, 2021).

In sum, the pandemic has aggravated existing disparities in unemployment, education, housing, health, and survival. These ominous changes demand scientific attention among those who care about human flourishing. A critical concern going forward is whether positive human functioning will increasingly be restricted to privileged segments of society. History is replete with the grim consequences that follow when the prosperous are indifferent to the suffering of those who lack opportunities to lead good and dignified lives. These societal problems are not new: the ancient Greeks were concerned about problems of greed and injustice (Balot, 2001) and argued that they violated virtues of fairness, which contributes to civic strife. Centuries later Dante (1308/2006) placed the sins of greed and gluttony in his nine circles of hell. Returning to the present, a central question in the face of rampant inequality, now carried to greater heights by the pandemic, is what will it take to see this nightmare for what it is: stark evidence of societal dysfunction at structural levels that demands social change toward more equitable opportunities to realize human potential.

#### 4.2 Nurturing Eudaimonia Through the Arts

While inequality is worsening, other more hopeful work points to recent advances on beneficent contributions of the arts and humanities to well-being and health (Crawford et al., 2015; Lomas, 2016; Royal Society and Public Health Working Group, 2013; Stuckey & Nobel, 2010). A new synthesis report from the World Health Organization (Fancourt & Finn, 2019) summarized evidence on the role of the arts in improving health and well-being in many countries. Although future research is needed, it thus appears that the creating and consuming of literature, poetry, the visual arts, film, music, and dance may nourish good lives and human becoming. Among those who study well-being and flourishing, the arts and humanities have received limited attention; hence, the advocacy herein.

In thinking about such issues, it is worth considering what cultivates sensibilities to partake of the arts. I have suggested that the opportunity to have a broad liberal education may matter (Ryff, 2016, 2019a). Such ideas have been articulated by those who teach great literature and poetry in higher education as a way of nourishing inner vitality and strengthening the self (Edmondson, 2004, 2015). Science aligns with this view, showing that the best predictor of attendance at arts events (broadly defined) is years of schooling (DiMaggio & Mukhtar, 2004). Others have emphasized the importance of history and philosophy, key components of the humanities, as critical for creating capable and competent citizens that democratic societies need (Nussbaum, 1997, 2010). At the same time, problems of elitism in higher education are under scrutiny. This form of inequality was recognized centuries ago by Benjamin Franklin as something the "cementing of privilege" that occurred in private institutions (see Roth, 2014). From our era, other have written about elite institutions, which serve as the primary mechanisms through which class hierarchies are maintained (Bourdieu & Passeron, 1977, 1990). Going further, Deresiewicz (2014) has described the miseducation of the American elite as a process that nurtures a false sense of self-worth, compromises capacities to relate to non-elites, and promotes a narrow view of intelligence needed for achievement in business, law, medicine, and science.

Recent research illuminates the contributions of educational elitism to growing problems of inequality (Mendelberg et al., 2016). Using a large sample of US students, the study showed that norms for financial gain are more prominent at affluent colleges compared to public universities. In addition, psychologists have shown that those from higher compared to lower class backgrounds have a greater sense of entitlement and higher levels of narcissism (Piff, 2014; Piff et al., 2012). Regarding the well-being consequences of such life outlooks, Kasser and Ryan (1993) showed that those motivated by primarily extrinsic factors (financial success) had lower well-being and adjustment compared to those motivated by less materialistic values.

How the pursuit of wealth and privilege translates to malevolent consequences for others is well-represented in much of the world's great literature: thanks to Charles Dickens, Victor Hugo, Leo Tolstoy, and John Steinbeck, among others, we have been taken inside the suffering of the disadvantaged. Such themes are evident in contemporary fiction as well, such as Call Me Zebra (Van der Vliet Oloomi, 2019) and Exit West (Hamid, 2017), which depict the difficulties and inner experience of refugees. Contemporary film (e.g., The Florida Project, American Honey, Paterson, Parasite) also reveals the lived experiences of inequality, including homelessness and having addicted parents, but also finding poetry in working class lives, and the cleverness of those at the bottom vis-à-vis insensitive elites. Recently, Nomadland portrays experiences of many older Americans whose lives were undone by the Great Recession. Many who lost their homes and savings now survive by moving from temporary job to temporary job, living in their vans and trailers. This film emerged from a book by the same name (Bruder, 2017) written by an academic journalist. It opens with the impossible choices now facing those who used to be middle class: do you pay your mortgage or your electric bill? Do you buy food or get or dental work? Do you make a car payment or buy medicine? Do you purchase warm clothes or buy gas for your commute? To be sure, the book also documents the resilience and comradery of many of these individuals, while also detailing the grueling demands of long shifts in Amazon warehouses. A central point nonetheless is the growing prevalence of those who have lost their homes and savings and are struggling to make a living wage.

To summarize, widespread suffering is part of our era, and the arts may play critical roles in depicting these contemporary problems. That is, encounters books, poetry, film, and art *about the traumas many now experience* may serve as conscious-raising endeavors that foster greater caring and compassion. These are researchable topics, anchored in deeper questions about what it takes to penetrate complacency and indifference among some who are privileged. Whether the arts can serve as vehicles for social justice—i.e., venues to inform, educate, and activate societal change—is thus important future direction for science.

## 4.3 Entrepreneurship and Eudaimonia

The field of entrepreneurial studies has become increasingly interested in the wellbeing of entrepreneurs (Stephan, 2018), although most studies to date have focused on hedonic indicators, especially life satisfaction. How self-initiated business venturing might matter for eudaimonic well-being is an important question that points to multiple new directions in research (see Ryff, 2019b). As noted in the preceding research advances, prior studies have linked work experiences to various dimensions of eudaimonia, although few studies have focused on entrepreneurial, self-initiated business pursuits that may matter for particular aspects of well-being, such as autonomy, personal growth, and purpose in life. In thinking about these questions, distinctions between opportunity versus necessity entrepreneurs may be important because they likely implicate pre-existing sociodemographic factors (educational status, income), which are known contributors to variation in reported levels of eudaimonic well-being. Being forced into self-employment because one lacks other alternatives may well compromise experiences of well-being. Another important consideration for future inquiries is the need to investigate how entrepreneurs impact the well-being of others (employees, families, communities). Such assessments embody an enlightened approach to evaluation of entrepreneurial impacts.

A recent endeavor (Shir & Ryff, 2021) proposed a dynamic approach to studying links between entrepreneurial experience and eudaimonic well-being, guided by the view that venture creation involves separate phases of deliberation, planning, implementation, and reflection, each of which may involve different aspects of well-being. Planning and initiation, for example, may be particularly consequential for purpose and mastery, whereas the reflection and evaluation phase may contribute to one's sense of personal growth and self-acceptance. A dynamic view is thus needed to illuminate the richness of the entrepreneurial process unfolding in time. Guided by multiple philosophical perspectives, including Aristotle and Kant, it is important to see entrepreneurs as distinct from others, not only for reasons of their selfemployment, but also because they are engaged in self-organized activities and pursuits that, ideally, are guided by a personally meaningful vision. Selfresponsibility, attention to many factors, and commitment are likely critical for bringing the vision to fruition. Those who are guided by a sense of calling, aligned with core meanings of eudaimonia, may thus be more likely to prevail and persist through the challenges that unfold. It is also important for future research to better understand when the entrepreneurial journey fails to proceed as hoped, planned, and anticipated.

A final point in Shir and Ryff (2021) called for rethinking the meaning of entrepreneurial success. From standard economic and utilitarian perspectives, profit is the obvious and key indicator of success. Indeed, profit is necessary for the endeavor to survive. Nonetheless, emphasis needs to be given to entrepreneurship as ideally rooted in personal dreams formulated about one's place in, and desired contributions to, the surrounding world. Entrepreneurial success in this formulation thus encompasses more far-reaching aims that include pursuing a moral life and having communitarian concerns. Issues of virtue, foundational to Aristotle's formulation, are thus center-stage in eudaimonic business venturing. This blending of traditional economic objectives with a commitment to initiating business ventures that reflect concerns for the greater good will likely be key in rebuilding, post-pandemic, an enlightened marketplace that promotes many valued ends, including the eudaimonic well-being of many (the entrepreneur, her/his employees, the surrounding community) and thereby, communitarian objectives that are fundamental in responsible and just societies.

#### 5 Conclusion

Extensive territory has been covered in this chapter, beginning with a distillation of the eudaimonic model of well-being, which frames the content of what follows, beginning with a look at research advances that have grown up around this model.

These are wide-ranging, but were highlighted in terms of how eudaimonia varies depending on sociodemographic factors, how it is linked with experiences in family and work life, including the interface between the two, and how it matters for health, defined in terms of chronic conditions and disease outcomes, functional capacities, biological risk factors, and underlying brain mechanisms. Shifting to future directions in the science of eudaimonia, emphasis was given to widening problems of economic inequality. Although prior studies of health inequalities have documented known socioeconomic gradients in well-being and health, recent decades have witnessed ever-deepening discrepancies between disadvantaged and privileged segments of societies. These disturbing changes have been linked to impacts of the Great Recession, and now more recently, to the COVID-19 pandemic. A concern of dire urgency is whether eudaimonic becoming is increasing beyond the reach of many in contemporary societies who lack requisite resources and opportunities. These questions were framed vis-à-vis growing evidence of suicide, alcohol and drug addictions among the disadvantaged. A more hopeful future direction was then considered, drawing on emerging evidence that the arts, broadly defined, are linked with multiple indicators of better health, although more research is needed to document the nature and scope of these links. Emphasis was given to the humanities, especially philosophy and history, in thinking about issues of social justice. An observation was made that the arts (great literature, poetry, film) may be critical in addressing the indifference of some among the privileged regarding the suffering of others. These questions thus point to the role of the arts and humanities not only in nurturing well-being and health, but also in effecting needed social change. The final future direction pertained to building bridges between the growing field of entrepreneurial studies and eudaimonic well-being. It was suggested that self-initiated business venturing may constitute an archetypal example striving to become one's best self via pursuit of core dreams and visions (passions). In addition, the eudaimonic approach offers an expanded meaning of entrepreneurial success beyond the usual utilitarian emphasis on business profits. A wider conception of success encompasses the promotion of eudaimonic well-being of all involved, including the entrepreneur, her/his employees, and the surrounding community context. Returning to Aristotle's overarching concern with ethics and virtue, this approach coheres with and extends the core motif throughout this chapter-namely, the nurturing welllived lives that are personally meaningful and fulfilling, while also socially responsible, just, and morally good.

#### References

Ahrens, C. J., & Ryff, C. D. (2006). Multiple roles and well-being: Sociodemographic and psychological Moderators. Sex Roles, 55, 801–815.

Alimujiang, A., Wiensch, A., Boss, J., Fleischer, N. L., Mondul, A. M., McLean, K., et al. (2019). Association between life purpose and mortality among US adults older than 50 years. JAMA Network Open, 2(5), e194270. https://doi.org/10.1001/jamnetworkopen.2019.4270

Allport, G. W. (1961). Pattern and growth in personality. Hold, Rinehart, & Winston.

- An, J. S., & Cooney, T. M. (2006). Psychological well-being in mid to late life: The role of generativity Development and parent-child relationships across the lifespan. *International Journal of Behavioral Development*, 30, 410–421.
- Aristotle. (1925). The Nicomachean Ethnics. Oxford University Press.
- Balot, R. K. (2001). Greed and injustice in classical Athens. Princeton University Press.
- Bishaw, A. (2013). Poverty: 2000 to 2012. https://www.census.gov/library/publications/2013/acs/ acsbr12-01.html
- Bourdieu, P., & Passeron, J. (1977). Reproduction in education, society, and culture. Sage.
- Bourdieu, P., & Passeron, J. (1990). Reproduction in education, society, and culture (2nd ed.). Sage.
- Boylan, J. M., & Ryff, C. D. C. D. (2015). Psychological well-being and metabolic syndrome: Findings from the Midlife in the United States national sample. *Psychosomatic Medicine*, 77(5), 548–558.
- Boylan, J. M., Tsenkova, V. K., Miyamoto, Y., & Ryff, C. D. (2017). Psychological resources and glucoregulation in Japanese adults: Findings from MIDJA. *Health Psychology*, 36(5), 449–457.
- Boyle, P. A., Barnes, L. L., Buchman, A. S., & Bennett, D. A. (2009). Purpose in life Is associated with mortality among community-dwelling older persons. *Psychosomatic Medicine*, 71(5), 574–579.
- Bruder, J. (2017). Nomadland: Surviving America in the twenty-first century. W.W. Norton & Co.
- Bühler, C. (1935). The curve of life as studied in biographies. *Journal of Applied Psychology*, 43, 653–673. https://doi.org/10.1037/h0054778
- Burgard, S. A., & Kalousova, L. (2015). Effects of the great recession: Health and well-being. Annual Review of Sociology, 41, 181–201. https://doi.org/10.1146/annurev.soc-073014-112204
- Carr, D. (2002). The psychological consequences of work-family tradeoffs for three cohorts of men and Women. *Social Psychology Quarterly*, 65, 103–124.
- Case, A., & Deaton, A. (2015). Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21<sup>st</sup> century. *Proceedings of the National Academy of Sciences*, 112, 15078–15083.
- Case, A., & Deaton, A. (2020). *Deaths of despair and the future of capitalism*. Princeton University Press.
- Chen, Y., Kim, E. S., Koh, H. K., Frazier, A. L., & VanderWeele, T. J. (2019). Sense of mission and subsequent health and well-being among young adults: An outcome-wide analysis. *American Journal of Epidemiology*, 188(4), 664–673. https://doi.org/10.1093/ajekwz009
- Choi, B. (2020). Opioid use disorder, job strain, and high physical job demands in the US workers. International Archives of Occupational and Environmental Health, 93, 577–588.
- Cohen, R., Bavishi, C., & Rozanski, A. (2016). Purpose in lif097/PSY.e and its relationship to all-cause https://doi.org/10.1097/PSY.00000000000274
- Costanzo, E. S., Ryff, C. D., & Singer, B. H. (2009). Psychosocial adjustment among cancer survivors: Findings from a national survey of health and well-being. *Health Psychology*, 28(2), 147–156.
- Crawford, P., Brown, B., Baker, C., Tischler, V., & Abrams, B. (2015). *Health humanities*. Palgrave Macmillan.
- Dante, A. (1308/2006). The divine comedy. (A. Amari-Parker, & H. W. Longfellow, Trans.). New York, NY: Chartwell Books.
- Deresiewicz, W. (2014). Excellent sheep: The miseducation of the American elite. Simon & Schuster, Inc.
- DiMaggio, P., & Mukhtar, T. (2004). Arts participation as cultural capital in the United States, 1982–2002: Signs of decline? *Poetics*, 32, 169–194.
- Edmondson, M. (2004). Why read? Bloomsbury.
- Edmondson, M. (2015). Self and soul: A defense of ideals. Harvard University Press.
- Elliot, A. J., & Chapman, B. P. (2016). Socioeconomic status, psychological resources, and inflammatory markers: Results from the MIDUS study. *Health Psychology*, 35(11), 1205–1213.
- Erikson, E. H. (1959). Identity and the life cycle. Psychological Issues, 1, 1–171.

- Fancourt, D., & Finn, S. (2019). What is the evidence on the role of the arts in improving health and well-being? A scoping review. WHO Regional Office for Europe. Health Evidence Network (HEN) synthesis report 67.
- Fettro, M. N., & Nomaguchi, K. (2018). Spousal problems and family-to-work conflict among employed US adults. *Journal of Family Economic Issues*, 39, 277–296.
- Frankl, V. E. (1959). Man's search for meaning: An introduction to logotherapy. Beacon Press.
- Friedman, E. M., Hayney, M. S., Love, G. D., Urry, H. L., Rosenkranz, M. A., Davidson, R. J., et al. (2005). Social relationships, sleep quality, and interleukin-6 in aging women. *Proceedings of the National Academy of Sciences*, 102(51), 18757–18762.
- Friedman, E. M., & Ryff, C. D. (2012). Living well with medical comorbidities: A biopsychosocial perspective. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 1–10.
- Gallagher, M. W., Lopez, S. J., & Preacher, K. J. (2009). The hierarchical structure of well-being. *Journal of Personality*, 77, 1025–1050.
- Goldman, N., Glei, D. A., & Weinstein, M. (2018). Declining mental health among disadvantaged Americans. Proceedings of the National Academy of Sciences, 115, 7290–7295.
- Graham, C. (2017). *Happiness for all? Unequal hopes and lives in pursuit of the American Dream.* Princeton University Press.
- Grant, B. F., et al. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DMS-IV alcohol use disorder in the United States, 2001-2002 to 2012-2013: Results from the National Epidemiological Survey on Alcohol and Related Conditions. *JAMA Psychiatry*, 74, 911–923.
- Greenfield, E. A. (2009). Felt obligation to help others as a protective factor against losses in Psychological well-being in middle and later life. *Journal of Gerontology B: Psychological and Social Sciences*, 64, 723–732.
- Greenfield, E. A., & Marks, N. F. (2010). Identifying experiences of physical and psychological violence in childhood that jeopardize mental health in adulthood. *Child Abuse and Neglect*, 34, 161–161.
- Gruenewald, T. L., Karlamangla, A. S., Hu, P., Stein-Merkin, S., Crandall, C., Koretz, B., & Seeman, T. E. (2012). History of socioeconomic disadvantage and allostatic load in later life. *Social Science and Medicine*, 74(1), 75–83. https://doi.org/10.1016/j.socscimed.2011.09.037
- Grzywacz, J. D. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, 14, 236–243.
- Hafez, D., Heisler, M., Choi, H., Ankuda, C. K., Winkelman, T., & Kullgren, J. T. (2018). Association between purpose in life and glucose control among older adults. *Annals of Behavioral Medicine*, 52(4), 309–318.
- Hamid, M. (2017). Exit west. Riverhead Books.
- Heller, A. S., van Reekum, C. M., Schaefer, S. M., Lapate, R. C., Radler, B. T., Ryff, C. D., & Davidson, R. J. (2013). Sustained ventral striatal activity predicts eudaimonic well-being and cortisol output. *Psychological Science*, 24, 2192–2000. https://doi.org/10.1177/ 0956797613490744
- Hill, P. L., & Turiano, N. A. (2014). Purpose in life as a predictor of mortality across adulthood. *Psychological Science*, (May).
- Hill, P. L., & Weston, S. J. (2019). Evaluating eight-year trajectories for sense of purpose in the Health and Retirement Study. Aging and Mental Health, 23(2), 233–237. https://doi.org/10. 1080/13607863.2017.1399344
- Hodgdon, B. R., & Wong, J. D. (2021). Influences of work and family spillover on filial and sandwiched caregivers' psychological well-being. *The International Journal of Aging*, 92, 197–214.
- Hooker, S. A., & Masters, K. S. (2016). Purpose in life is associated with physical activity measured by accelerometer. *Journal of Health Psychology*, 21(6), 962–971. https://doi.org/10.1177/ 1359105314542822
- Jahoda, M. (1958). Current concepts of positive mental health. Basic Books.
- Jung, C. G. (1933). Modern man in search of a soul. Harcourt Brace & World.

- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410–422.
- Keyes, C. L. M. (2009). The Black-White paradox in health: Flourishing in the face of social inequality and discrimination. *Journal of Personality*, 77(6), 1677–1706.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82, 1007–1022.
- Kim, E. S., Kawachi, I., Chen, Y., & Kubzansky, L. D. (2017). Association between purpose in life and objective measures of physical function in older adults. *JAMA Psychiatry*, 74(10), 1039.
- Kim, E. S., Strecher, V. J., & Ryff, C. D. (2014). Purpose in life and use of preventive health care services. Proceedings of the National Academy of Sciences of the United States of America, 111(46), 16331–16336.
- Kim, E. S., Sun, J. K., Park, N., Kubzansky, L. D., & Peterson, C. (2013a). Purpose in life and reduced risk of myocardial infarction among older U.S. adults with coronary heart disease: a two-year follow-up. *Journal of Behavioral Medicine*, 36(2), 124–133.
- Kim, E. S., Sun, J. K., Park, N., & Peterson, C. (2013b). Purpose in life and reduced incidence of stroke in older adults: "The Health and Retirement Study.". *Journal of Psychosomatic Research*, 74(5), 427–432.
- Kim, Y., Kramer, A., & Pak, S. (2021). Job insecurity and subjective sleep quality: The roll of spillover and Gender. *Stress and Health*, 37, 72–92.
- Kirsch, J. A., Love, G. D., Radler, B. T., & Ryff, C. D. (2019). Scientific imperatives vis-à-vis growing inequality in America. *American Psychologist*, 74, 764–777.
- Kirsch, J. A., & Ryff, C. D. (2016). Hardships of the Great Recession and health: Understanding varieties of vulnerability. *Health Psychology Open, Jan-June: 1-15.*
- Kivimäki, M., Virtanen, M., Kawachi, I., et al. (2015). Long working hours, socioeconomic status, and the risk of incident type 2 diabetes: A meta-analysis of published and unpublished data from 222,120 individuals. *The Lancet Diabetes and Endocrinology*, *3*, 27–34.
- Kolodny, A., et al. (2015). The prescription opioid and heroin crisis: A public health approach to an epidemic of addiction. *Annual Review of Public Health*, *36*, 559–574.
- Kristof, N. D., & WuDunn, S. (2020). Tightrope: Americans reaching for hope. Alfred A. Knopf.
- Lee, B., Lawson, K. M., Chang, P. J., et al. (2015). Leisure-time physical activity moderates the longitudinal associations between work-family spillover and physical health. *Journal of Leisure Research*, 47, 444–466.
- Lee, M. T., Kubzansky, L. D., & VanderWeele, T. J. (Eds.). (2021a). *Measuring well-being: Interdisciplinary Perspectives from the social sciences and humanities*. Oxford University Press.
- Lee, S. T. H., Choy, B. K. C., & Yong, J. C. (2021b). A bubble of protection: Examining dispositional Optimism as a psychological buffer of the deleterious association between negative work-family spillover and psychological health. *European Journal of Work and Organizational Psychology*,
- Lewis, G. J., Kanai, R., Rees, G., & Bates, T. C. (2014). Neural correlates of the "good life": eudaimonic well-being is associated with insular cortex volume. *Social Cognitive and Affective Neuroscience*, 9, 615–618.
- Li, L. W., Seltzer, M. M., & Greenberg, J. S. (1999). Change in depressive symptoms among daughter caregivers: an 18-month longitudinal study. *Psychology of Aging*, 14, 206–219.
- Lindfors, P., & Lundberg, U. (2002). Is low cortisol release an indicator of positive health? *Stress Health*, *18*, 153–160.
- Lomas, T. (2016). Positive art: Artistic expression and appreciation as an exemplary vehicle for Flourishing. *Review of General Psychology*, 20, 171–182.
- Lynch, J. W., Kaplan, G. A., & Shema, S. J. (1997). Cumulative impact of sustained economic hardship on Physical, cognitive, psychological and social functioning. *The New England Journal of Medicine*, 337, 1889–1895.

- Maier, E. H., & Lachman, M. E. (2000). Consequences of early parental loss and separation for health And well-being in midlife. *International Journal of Behavioral Development*, 24, 183–189.
- Marks, N. F. (1996). Flying solo at midlife: Gender, marital status, and psychological well-being. *Journal of Marriage and the Family*, 58, 917–932.
- Marks, N. F. (1998). Does it hurt to care? Caregiving, work-family conflict, and midlife well-being. Journal of Marriage and Family, 60, 951–966.
- Marks, N. F., & Lambert, J. D. (1998). Marital status continuity and change among young and midlife adults: Longitudinal effects on psychological well-being. *Journal of Family Issues*, 19, 652–686.
- Marmot, M. (2015). The health gap: The challenge of an unequal world. Bloomsbury.
- Marmot, M. G., Fuhrer, R., Ettner, S. L., Marks, N. F., Bumpass, L. L., & Ryff, C. D. (1998). Contributions of psychosocial factors to socioeconomic differences in health. *Milbank Quarterly*, 76, 403–448. https://doi.org/10.1111/1468-0009.00097
- Marmot, M., Ryff, C. D., Bumpass, L. L., Shipley, M., & Marks, N. F. (1997). Social inequalities in health: Converging evidence and next questions. *Social Science and Medicine*, 44, 901–910. https://doi.org/10.1016/S0277-9536(96)00194-3
- Maslow, A. H. (1968). Toward a psychology of being (2nd ed.). Van Nostrand.
- Mendelberg, T., McCabe, K. T., & Thal, A. (2016). College socialization and the economic views of affluent Americans. *American Journal of Political Science*, 61, 606–623.
- Morozink, J. A., Friedman, E. M., Coe, C. L., & Ryff, C. D. (2010). Socioeconomic and psychosocial predictors of interleukin-6 in the MIDUS national sample. *Health Psychology*, 29(6), 626–635.
- Neugarten, B. L. (1973). Personality change in late life: A developmental perspective. In C. Eisdorfer & M. P. Lawton (Eds.), *The psychology of adult development and aging* (pp. 311–335). American Psychological Association.
- Nussbaum, M. D. (1997). Cultivating humanity: A classical defense of reform in liberal education. Cambridge University Press.
- Nussbaum, M. C. (2010). Not for profit: Why democracy needs the humanities. Princeton University Press.
- Pew Research Center (2020). Unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession. June 11, 1–9. https://www.pewresearch.org/facttank/2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-in-twoyears-of-the-great-recession/
- Pfeffer, F. T., & Schoeni, R. F. (2016). How wealth shapes our future. *The Russell Sage Foundation Journal of the Social Sciences*, 2, 2–22.
- Piketty, T., Saez, E., & Zucman, G. (2018). Distributional national accounts: Methods and estimates for the United States. *The Quarterly Journal of Economics*, 133, 553–609.
- Piff, P. K. (2014). Wealth and the inflated self: Class, entitlement, and narcissism. *Personality and Social Psychology Bulletin*, 40, 34–43. https://doi.org/10.11770/0146167213501699
- Piff, P. K., Stancato, D. M., Côté, S., Mendoza-Denton, R., & Keltner, D. (2012). Higher social class Predicted increased unethical behavior. *Proceedings of the National Academy of Science*, 109, 4086–4091. https://doi.org/10.1073/pnas.1118373109
- Piketty, T., & Saez, E. (2014). Inequality in the long run. Science, 344, 838-843.
- Radler, B. T., Rigotti, A., & Ryff, C. D. (2017). Persistently high psychological well-being predicts better HDL cholesterol and triglyceride levels: findings from the midlife in the U.S. (MIDUS) longitudinal study. *Lipids in Health and Disease*, 17(1), 1–9. https://doi.org/10.1186/s12944-017-0646-8
- Reeves, R. V. (2017). Dream hoarders: How the American upper middle class is leaving everyone else in the dust, why that is a problem, and what to do about it. The Brookings Institution.
- Riley, M. W., Kahn, R. L., Foner, A., & Mack, K. A. (1994). Age and structural lag: Society's failure to provide meaningful opportunities in work, family, and leisure. John Wiley & Sons.

- Rogers, C. H., Floyd, F. J., Seltzer, M. M., Greenberg, J., & Hong, J. (2008). Long-term effects of the death of a child on parent's adjustment in midlife. *Journal of Family Psychology*, 22, 203–211.
- Rogers, C. R. (1961). On becoming a person. Houghton Mifflin.
- Ross, C. E., & Wu, C. I. (1995). The links between education and health. American Sociological Review, 60, 719–745.
- Roth, M. S. (2014). Beyond the university: Why liberal education matters. Yale University Press.
- Royal Society and Public Health Working Group. (2013). Arts, health, and well-being beyond the Millennium: How far have we come and where do we want to go? Royal Society for Public Health.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well -being. *Journal of Personality and Social Psychology*, 57, 1069–1081. https://doi.org/10. 1037/0011-3514.57.6.1069
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83, 10–28. https://doi.org/10.1159/ 000353263
- Ryff, C. D. (2016). Eudaimonic well-being and education: Probing the connections. In D. W. Harward (Ed.), Well-being and higher education: A strategy for change and the realization of Education's greater purposes (pp. 37–48). Bringing Theory to Practice.
- Ryff, C. D. (2018). Well-being with soul: Science in pursuit of human potential. *Perspectives in Psychological Science*, 13, 242–248. https://doi.org/10.1177/1745691617699836
- Ryff, C. D. (2019a). Linking education in the arts and humanities to life-long well-being and health. Andrew W. Mellon Foundation. Retrieved from https://mellong.org/resources/articles/linkingeducation-arts-and-humanities-life-long-well-being-and-health/
- Ryff, C. D. (2019b). Entrepreneurship and eudaimonic well-being: Five venues for new science. Journal of Business Venturing, 34, 646–663. https://doi.org/10.1016/j.jbusvent.2018.09.003
- Ryff, C. D., Boylan, J. M., & Kirsch, J. A. (2021a). Advancing the science of well-being: A dissenting view on measurement recommendations. In M. T. Lee, L. D. Kubzansky, & T. J. VanderWeele (Eds.), *Measuring well-being: Interdisciplinary perspectives from the social sciences and humanities*. Oxford University press.
- Ryff, C. D., Boylan, J. M., & Kirsch, J. A. (2021b). Response to response: Growing the field of well-being. In M. T. Lee, L. D. Kubzansky, & T. J. VanderWeele (Eds.), *Measuring well-being: Interdisciplinary perspectives from the social sciences and humanities*. Oxford University Press.
- Ryff, C. D., Boylan, J. M., & Kirsch, J. A. (2021c). Eudaimonic and hedonic well-being: An integrative Perspective with linkages to sociodemographic factors and health. In M. T. Lee, L. D. Kubzansky, & T. J. VanderWeele (Eds.), *Measuring well-being: Interdisciplinary per*spectives from the social sciences and humanities. Oxford University Press.
- Ryff, C. D., & Heidrich, S. M. (1997). Experience and well-being: Explorations on domains of life and how they matter. *International Journal of Behavioral Development*, 20(2), 193–206.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychologial well-being revisited. Journal of Personality and Social Psychology, 69(4), 719–727.
- Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2003). Status inequalities, perceived discrimination, and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health and Social Behavior*, 44(3), 275.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, *9*, 13–39.
- Ryff, C. D., Singer, B. H., & Love, G. D. (2004). Positive health: Connecting well-being with biology. *Philosophical Transactions: Biological Sciences*, 359(1449), 1383–1394.
- Ryff, C. D., & Kim, E. S. (2020). Extending research linking purpose in life to health: The challenges of Inequality, the potential of the arts, and the imperative of virtue. In A. L. Burrow & P. Hill (Eds.), *The ecology of purposeful living across the lifespan* (pp. 29–58). Springer Nature Switzerland AG.

- Schaefer, S. M., Boylan, J. M., van Reekum, C. M., Lapate, R. C., Norris, C. J., Ryff, C. D., & Davidson, R. J. (2013). Purpose in life predicts better emotional recovery from negative stimuli. *PLOS One*, 8, e80329. https://doi.org/10.1371/journal.pone.0080329
- Schleicher, H., Alonso, C., Shirtcliff, E. A., Muller, D., Loevinger, B. L., & Coe, C. L. (2005). In the face of pain: The relationship between psychological well-being and disability in women with fibromyalgia. *Psychotherapy and Psychosomatics*, 74(4), 231–239.
- Schmutte, P. S., & Ryff, C. D. (1994). Success, social comparison, and self-assessment: Parents' midlife evaluations of sons, daughters, and self. *Journal of Adult Development*, 1, 109–126.
- Schuchat, A., Houry, D., & Guy, G. P., Jr. (2017). New data on opioid use and prescribing in the United States. JAMA, 318, 425–426.
- Seeman, M., Merkin, S. S., Karlamangla, A., Koretz, B., Grzywacz, J. G., Lachman, M., & Seeman, T. (2020). On the biopsychosocial costs of alienated labor. *Work, Employment, and Society*, 1–23.
- Serkez, Y. (2021). We did not suffer equally. The New York Times, March 11.
- Shir, N., & Ryff, C. D. (2021). Entrepreneurship, self-organization, and eudaimonic well-being: A dynamic approach. *Entrepreneurship Theory and Practice*, 1–27.
- Slopen, N., Dutra, L. M., Williams, D. R., Mujahid, M. S., Lewis, T. T., Bennett, G. G., et al. (2012). Psychosocial stressors and cigarette smoking among African American adults in midlife. *Nicotine and Tobacco Research*, 14(10), 1161–1169. https://doi.org/10.1093/ntr/ nts011
- Slopen, N., Kontos, E. Z., Ryff, C. D., Ayanian, J. Z., Albert, M. A., & Williams, D. R. (2013). Psychosocial stress and cigarette smoking persistence, cessation, and relapse over 9–10 years: A prospective study of middle-aged adults in the United States. *Cancer Causes & Control*, 24(10), 1849–1863. https://doi.org/10.1007/s10552-013-0262-5
- Springer, K. W., Pudrovska, T., & Hauser, R. M. (2011). Does psychological well-being change with age?: Longitudinal tests of age variations and further explorations of the multidimensionality of Ryff's model of psychological well-being. *Social Science Research*, 40(1), 392–398. https://doi.org/10.1016/j.ssresearch.2010.05.008
- Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. Academic of Management Perspectives, 32, 290–322.
- Steptoe, A., & Fancourt, D. (2019). Leading a meaningful life at older ages and its relationship with Social engagement, prosperity, health, biology, and time use. *Proceedings of the National Academy of Sciences*, 116(4), 1207–1212. https://doi.org/10.1073/pnas.1814723116
- Stuckey, H. L., & Nobel, J. (2010). The connection between art, healing, and public health: A review of current literature. American Journal of Public Health, 100, 254–263.
- Toyama, M., Fuller, H. R., & Hektner, J. M. (2020). Psychosocial factors promoting personal growth throughout adulthood. *Journal of Happiness Studies*, 21, 1749–1769.
- Tsukermann, D., Leger, K. A., & Charles, S. T. (2020). Work-family spillover stress predicts health outcomes across two decades. *Social Science and Medicine*, 265, 113516.
- Van der Vliet Oloomi, A. (2019). Call me zebra. Houghton Mifflin Harcourt.
- VanderWeele, T. J., Trudel-Fitzgerald, C., Allin, P., Farrelly, C., Fletcher, G., Frederick, D. E., Hall, J., Helliwell, J. F., Kim, E. S., Lauinger, W. A., Lee, M. T., Lyubomirsky, S., Margolisow, S., McNeely, E., Messer, N. G., Tay, L., Viswanath, V. W.-B., & Kubzansky, L. (2021a). Current recommendations on the selection of measures for well-being. In M. T. Lee, L. D. Kubzansky, & T. J. VanderWeele (Eds.), *Measuring well-being: Interdisciplinary perspectives* from the social sciences and humanities. Oxford University Press.

- VanderWeele, T. J., Trudel-Fitzgeral, C., & Kubzansky, L. D. (2021b). Response to "Advancing the science of well-being: A dissenting view on measurement recommendations.". In M. T. Lee, L. D. Kubzansky, & T. J. VanderWeele (Eds.), *Measuring well-being: Interdisciplinary per*spectives from the social sciences and humanities. Oxford University Press.
- Van Reekum, C. M., Urry, H. I., Johnstone, T., Thurow, M. E., Frye, C. J., Jackson, C. A., Schaefer, H. S., Alexander, A. L., & Davidson, R. J. (2007). Individual differences in amygdala and ventromedial prefrontal cortex activity are associated with evaluation speed and psychological well-being. *Journal of Cognitive Neuroscience*, 19, 237–248.
- Weston, S. J., Hill, P. L., & Cardador, M. T. (2021). Working toward a purpose: Examining the cross-sectional and longitudinal effects of work characteristics on sense of purpose. *Journal of Personality*, 89, 244–257.
- Zilioli, S., Slatcher, R. B., Ong, A. D., & Gruenewald, T. L. (2015). Purpose in life predicts allostatic load ten years later. *Journal of Psychosomatic Research*, 79(5), 451–457.

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