



Why Definitional Clarity Matters: Implications for the Operationalization of Emotional Well-Being

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Abstract

The National Institutes of Health (NIH) is increasingly prioritizing research on health-promoting processes. Park et al. (this issue) respond to a call made by NIH to advance the study of emotional well-being (EWB) and to increase understanding of the fundamental constituents of EWB across the lifespan and among diverse subgroups. They propose a definition of EWB that provides an organizing framework for research on ‘psychological aspects of well-being’ and health. We commend this important first step and urge consideration of three important issues related to operationalization — the process by which an abstract concept is transformed into variables that can be measured — in future research on EWB. We expect that an iterative process of construct refinement and empirical validation will advance the study of EWB, producing scientific discoveries that can be leveraged to enhance health across the lifespan.

Keywords Emotional well-being · Operationalization

The mission of the National Institutes of Health (NIH) is to seek and apply “knowledge to enhance health, lengthen life, and reduce illness and disability”. Though a disease-centric approach to biomedical research, clinical practice, and public discourse and policymaking has historically prevailed at NIH and beyond (Picard, 2022), more recently, a growing number of NIH Institutes, Centers, and Offices have begun to prioritize research that advances understanding of health-promoting processes (Crimmins et al., 2019; National Center for Complementary and Integrative Health, 2021; Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2020;

Colditz et al., 2021). Building off momentum from a 2018 meeting on emotional well-being (EWB; Emotional Well-Being: Emerging Insights and Questions for Future Research, 2018), the National Center for Complementary and Integrative Health (NCCIH), National Institute on Aging (NIA), and Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), together with the NIH Office of Disease Prevention and Office of Behavioral and Social Sciences Research, issued a request for applications (RFA)¹ in 2020 for research networks to advance study of EWB. The RFA noted that though EWB has previously been defined as “an overall positive state of one’s emotions, life satisfaction, sense of meaning and purpose, and ability to pursue self-defined goals (Feller et al., 2018)”, “fundamental consensus concerning the definition and components of emotional well-being ... is lacking.”

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Park et al. (Park et al., this issue) have provided a response to this call for greater conceptual clarity, proposing a definition of EWB that reflects over a year of collaboration across six research networks funded through the RFA — the “Network of Networks” (NoN) — and the NoN’s associated NIH Project Scientists (hereafter Park et al.’s definition will be referred to as the NoN’s definition). Though the term ‘emotional well-being’ is by no means new, the NoN argues that, relative to other terms characterizing ‘psychological aspects of

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¹ RFA-AT-20-003; https://grants.nih.gov/grants/guide/rfa-files/1_rfa-at-20-003.html

well-being’, EWB is less widely (and perhaps more heterogeneously) used. They seize this opportunity to increase specificity in the definition of EWB and to provide an organizing framework for research on ‘psychological aspects of well-being’ and health. We applaud the networks for embarking on what we expect to be an ongoing iterative process of phenomena description, concept definition and refinement, measurement, and empirical validation (Bringmann et al., 2022; Cronbach & Meehl, 1955; Elliott, 2012). We appreciate the authors’ intent to create a definition that delineates the extent to which related concepts (e.g., ‘evaluative well-being’, ‘experiential well-being’) are constituent components, versus correlates, causes, or consequences, of EWB. We also value their attention to challenges associated with considering EWB across the lifespan.

We note, however, that the NoN has discounted the necessity for a definition to offer clear and unambiguous guidelines for operationalization — the process by which an abstract concept is transformed into variables that can be observed, manipulated, and measured. This is especially necessary for higher order constructs like EWB, self-regulation, and stress, which subsume multiple distinct phenomena and are studied across different scientific disciplines. Construct ambiguity can result in contamination of purported measures by unrelated factors or inadequate representation of the conceptual domain (MacKenzie, 2003). Empirical study that is unfettered by critical evaluation of construct conceptualization can lead to a proliferation of scientific publications that purport, but fail, to measure a unified construct, hindering scientific advancement (Kaplan et al., 2022). For example, conceptual ambiguity in the term ‘self-regulation’ led to innumerable survey and behavioral measures with poor convergent validity (Eisenberg et al., 2019), creating heterogeneity in the scientific literature on self-regulation that potentially obstructed meaningful scientific advances. Similarly, heterogeneity in the operationalization of ‘stress’ was identified in a series of NIA-sponsored meetings as a chief challenge to advancing research on stress and health, resulting in NIA-supported efforts to develop a ‘Stress Typology’ (Epel et al., 2018). This typology defines and lays out clear guidelines for operationalization of multiple stress constructs within the broader domain. The NoN notes the need for future research on EWB measurement issues. Yet future work to identify and validate measures of and approaches to studying EWB will be fundamentally constrained by the definition of EWB.

The NoN call for their paper to kindle research discourse in hopes of advancing scientific inquiry. We appreciate the opportunity to engage in that discourse and address three issues of importance to NIA, NCCIH, and NICHD: (a) our concerns about equating EWB with positivity, (b) the need for greater depth when considering context and culture, and (c) a call for greater attention to levels of analysis beyond the individual. Each issue has implications for future operationalization of EWB.

Positivity

EWB, as put forth by the NoN, is “a multi-dimensional composite that encompasses how positive an individual feels generally and about life overall...” (Park et al., [this issue](#)), yet there are many life circumstances in which it may be maladaptive to feel ‘positive’. We are concerned that inclusion of the word ‘positive’ in the definition may preclude operationalizations that account for the full range of normative experiences of EWB across the entire population. Although the NoN does allow that “high levels of EWB should not be taken to imply a lack of negative emotions” (Park et al., [this issue](#)), they imply that negative emotions need be conducive or otherwise adaptive within life’s broader context; they further note that, in the context of high EWB, negative emotions are “superimposed upon a background of feeling well” (Park et al., [this issue](#)). Yet life circumstances may sometimes suppress positive evaluations of (e.g., ‘reflective features’) or experiences in (e.g., ‘experiential features’) one’s life. For instance, those faced with chronic and unavoidable psychosocial stress might not score highly on a measure of EWB that is focused on positivity. However, one could perhaps reasonably argue that these individuals experience EWB — even if they score low on positivity — if they demonstrate a relative absence of negative evaluations and/or relatively sustained perceptions of some pursuits as meaningful, despite circumstances. At the end of life, individuals and their families may have a complex mix of regrets and positive memories. In this context, “the goal for EWB of the individual and family may be dignity, respect, calm, and acceptance rather than an explicitly positive emotion” (Carr & Luth, 2019), which highlights the potential adaptive value of mixed emotional states (Gonzalez et al., 2017).

We caution that including the word ‘positive’ may bias or constrain future assessment of EWB to include only positively framed measures. It has been argued that research on well-being and health cannot advance without accounting both for positive *and* negative affective states and experiences (Hernandez et al., 2018). This is in part because positive emotions and evaluations can be orthogonal to negative ones and the presence of positivity does not exclude the possibility of negativity (Larsen et al., 2001; Larsen & McGraw, 2014; Cacioppo & Berntson, 1994). Measures that assess emotion or evaluation on a continuum (i.e., from very negative to very positive), rather than orthogonally, will fail to account for negativity in the face of positivity. By overemphasizing positivity, the NoN’s definition discounts the potential adaptive or normative role of negativity. Subsequent operationalizations of EWB based on this definition may promote a research literature that inadequately represents the full range of experiences of EWB.

Context and Culture

The NoN's definition of EWB notes that “[experiential and reflective] features occur in the context of culture, life circumstances, resources, and life course” (Park et al., [this issue](#)), but falls short of delineating *how* they do so. While recognizing the need for a relatively pithy definition, we suggest this issue needs deeper consideration. Clear guidance on how to account for context when operationalizing EWB will benefit its empirical study. Is context a moderating variable, such that those in some contexts have higher (lower) mean EWB or a more expansive (truncated) range of EWB than those in others? Or do the constituent components of EWB differ by context? Perhaps the constituent components of EWB are universal, but are weighted differently as a function of contextual factors? The NoN's definition leaves ambiguous the best approaches for building a cumulative research field capable of comparing across these contextual factors. Further, by stating that EWB “occur[s] in the context of culture” (Park et al., [this issue](#)), the NoN's definition runs the risk of being operationalized differently for different cultures or groups of people, potentially stymieing endeavors to examine cultural moderators or introducing stereotypes into cross-cultural comparisons. To avoid heterogenous operationalizations of EWB and establish a “unifying foundation for future research in measurement and methodology” (Park et al., [this issue](#)), more explicit articulation of these issues and how they should be approached empirically is necessary.

Levels of Analysis

We appreciate the NoN's attention to EWB “at different levels of analysis, such as family, neighborhood, school, social class, and culture” (Park et al., [this issue](#)), which together have implications for individual health (Hill et al., 2015), and concur with their call for a “broader understanding of the units at which EWB occurs and potential reciprocity of influence across units” (Park et al., [this issue](#)). Yet the explicit use of the word ‘individual’ in the NoN's definition may occlude these efforts. The nomenclature the NoN adopts (e.g., ‘family EWB’), which could presumably apply to any group superordinate to the individual (e.g., ‘classroom EWB’, ‘national EWB’), further reinforces a notion that EWB, as currently defined, is a characteristic of the individual, rather than agnostic to unit size.

We caution that this strong emphasis on the individual when defining EWB runs the risk of fragmenting, rather than unifying, empirical inquiry. It facilitates operationalizations of EWB that differ depending on the units of analysis, which are likely to differ depending on scientific discipline as well as cultural context. Whereas ‘everyday experiences’ and obstacles or facilitators to the ‘ability to pursue goals’ are features

of EWB that may be shared by one or more individuals within a larger unit of analysis and could thus be measured with instruments agnostic to unit size, it is difficult to operationalize “feel[ing]s, generally and about life overall”, “judgments about life satisfaction”, or a “sense of meaning” at a level of analysis beyond the individual — especially if these features for larger groups are “not simply the aggregate of members’ well-being” (Park et al., [this issue](#)).

Humans are social beings who typically experience social emotions (e.g., compassion, nostalgia) and pursue socially motivated goals. Individual well-being is often inextricably linked to the well-being of one's social partners or groups. Yet social and interpersonal factors are relatively absent from the NoN's definition. A broadening of the EWB definition to account for these social aspects of well-being and for how experiential and reflective features might be operationalized beyond the individual will be important for advancing fundamental understanding of EWB and its role in health and development.

Defining EWB: Final Remarks

The three issues raised here concern operationalization — how the abstract concept of EWB will be made measurable. The NoN is sensitive to the significance of measurement issues. They acknowledge important challenges with assessment of EWB by self-report in populations with executive functioning or memory skills that are still developing, those impacted by a developmental disorder, or those with cognitive decline. It is unreasonable to assume that proxy reports adequately capture subjective experience for those who cannot report themselves (Sentenac et al., 2021), and the most appropriate approach to measuring EWB in these populations remains unclear. We strongly concur with the need for future consideration and research to understand EWB in these populations.

To address these questions and more, the NoN is currently taking a more data-driven approach to defining EWB, synthesizing existing research on well-being across multiple disciplines to identify self-report, psychophysiological, and neural measures of EWB. As with any data-driven approach, these measurement analyses will invariably be biased to some extent by the human decisions made at the outset regarding what existing research to synthesize (Egger & Smith, 1998). Continued scientific dialog will likely jockey between more theoretically and data-driven approaches in an iterative process of construct refinement. We urge consideration of the operationalization issues raised here as that process unfolds.

In their seminal paper on construct validity, Cronbach and Meehl (Cronbach & Meehl, 1955) highlight the chicken-or-egg problem common among forays into new areas of research: “We will be able to say ‘what [a construct] is’ when

we know all of the laws involving it; meanwhile, since we are in the process of discovering these laws, we do not yet know precisely what [that construct] is.” Any definition of a construct made while a line of inquiry is still evolving is bound to be inadequate as the field advances further empirical study; at the same time, further empirical study would be disheveled and fragmented in the absence of the inciting, organizing definition. We commend the NoN for this important first step in defining EWB and look forward to future empirical advances, including work that tests whether EWB (or its constituents) are malleable targets that can be leveraged to enhance health across the lifespan.

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