



Discussion

Disagreement about recommendations for measurement of well-being

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We offer a dissenting view on VanderWeele et al.'s (2020) recommendations for the measurement of well-being, none of which we endorse. This commentary distills why.

A first point pertains to the recommendation for single-item assessment of well-being, based on the view that including even one item is better than not assessing it at all. We see this position as mistaken. Such ultra-streamlined assessment devalues the richness of subjective well-being, compared to space in government surveys and multi-use cohort studies given to assessing socioeconomic status (SES), health behaviors, healthcare utilization, and diverse health outcomes. The implication is that how people think and feel about their well-being is simple, not complicated, and can be easily captured with a single question. The past 50 years of research on subjective well-being (Diener et al., 1999; Ryan & Deci, 2001; Ryff et al., 2020a) make clear that no single question can do justice to this fundamentally important realm of human experience, which is increasingly known to matter for many aspects of health.

Second, recommendations for multi-item assessments of well-being (4-item scales, 6-item scale) extend the problem above by invoking single items to assess diverse constructs (hedonic well-being, eudaimonic well-being, optimism, anxiety). In addition, quality control standards (clear definitions, psychometric rigor in scale construction) are missing throughout. For broader assessment of flourishing, the Comprehensive Inventory of Thriving (CIT; Su et al., 2014) is recommended, but it has multiple theoretical and empirical problems (elaborated in Ryff et al., 2020b, 2020c) and has received minimal scientific use.

Nonetheless, we appreciate the challenges faced by newcomers to the field of well-being, with its long history of empirical work guided by different approaches, and the accompanying proliferation of new measures in recent years. In our view, however, it is imprudent to advocate for specific measures in the absence of substantive scientific questions of interest. The reason is that the relevance of any particular indicator likely varies depending on the specific objectives of a study and relevant contextual factors. Critical in peer review of grant proposals and journal articles is presentation of measurement rationales based on goals of the project, guiding theoretical models, related prior findings, contextual considerations, and feasibility issues. For example, a prior review of 350+ studies of well-being (Ryff, 2014) revealed

richly distinct patterns of findings depending on whether the context was examining the challenges of aging, experiences in family life (e.g., caregiving), work contexts (e.g., work-family conflict; volunteering), or specific health conditions (e.g., fibromyalgia, cancer, frailty). We offer two additional illustrations.

Cultural psychology reveals that well-being is conceptualized and experienced differently across sociocultural contexts. In *independent* contexts, like the United States, well-being is personal and individual in scope, and higher levels of nearly all dimensions of well-being (hedonic and eudaimonic) predict better mental and physical health. In contrast, in *interdependent* contexts, like Japan, well-being is relational and collective, which calls for emphasis on social connectedness as a key aspect of well-being (Yoo et al., 2016). In Japan, positive affect often does not predict better health, including biological outcomes (Boylan et al., 2017; Yoo et al., 2017). Negative affect, which is known to predict poorer health in the U.S., likewise does not predict poor health in Japan (Miyamoto et al., 2013; Park et al., 2019). Alternatively, eudaimonic well-being, especially purpose in life and what makes life worth living (known as *ikigai* in Japan) appear to be valued and health relevant in both cultural contexts (Ryff et al., 2014). Comparative studies also distinguish between low and high arousal emotions, given emphasis on high arousal in the U.S. and low arousal in Japan (Clobert et al., 2019).

Differing socioeconomic contexts call for attending to prior research and theory as well. Lower SES is associated with lower levels of well-being, including optimism and life satisfaction (Boehm et al., 2015) and purpose in life (Ryff and Singer, 2008), despite notable variability within socioeconomic strata (Ryff et al., 1999; Markus et al., 2004). Higher well-being further attenuated associations between lower SES and higher levels of inflammation (Morozink et al., 2010). Other psychological resources are implicated in the context of socioeconomic inequality (sense of control, conscientiousness), along with an array of vulnerability factors (negative affect, neuroticism, anger, anxiety; Kirsch et al., 2019). Theoretical considerations highlight that some protective psychological factors may be disabled by pervasive socioeconomic disadvantage (Shanahan et al., 2014). Purpose in life, typically conceived as a protective resource, emerged as a vulnerability factor for poorer health among those with low educational status who also experienced greater hardships from the Great Recession (Kirsch and Ryff, 2016). These ideas call for psychological measurement that is

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broad in scope.

To recapitulate, researchers, policy-makers, and practitioners need to recognize the time has long since passed for believing that well-being can be adequately assessed with single items. In deciding which among many extant multi-item measures to use, choices will vary depending on the guiding scientific questions and contextual considerations. Where prior evidence offers limited guidance, it is wise to include multiple measures to maximize knowledge about which aspects of well-being matter under which conditions and for whom. An excellent source for wide-ranging findings based on multiple well-validated measures of well-being (250+ publications) is the MIDUS national longitudinal study (www.midus.wisc.edu). An undeniable marker of quality is scope of prior usage – the array of scientific findings that have grown up around particular measures need careful consideration. Finally, and most importantly, scholarly exchange, as exemplified by this response to VanderWeele et al.'s recommendations, about how to best move the field of well-being forward is essential.

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