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Measuring Well-Being: A Review of Instruments

Philip J. Cooke
Marquette University

Timothy P. Melchert
Marquette University, timothy.melchert@marquette.edu

Korey Connor
Marquette University

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Philip J. Cooke
College of Education, Marquette University
Milwaukee, WI
Timothy P. Melchert
College of Education, Marquette University
Milwaukee, WI
Korey Connor
College of Education, Marquette University
Milwaukee, WI

Abstract: Interest in the study of psychological health and well-being has increased significantly in recent decades. A variety of conceptualizations of psychological health have been proposed including hedonic and eudaimonic well-being, quality-of-life, and wellness approaches. Although instruments for measuring constructs associated with each of these approaches have been developed, there has been no comprehensive review of well-being measures. The present literature review was undertaken to identify self-report instruments measuring well-being or closely related constructs (i.e., quality of

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life and wellness) and critically evaluate them with regard to their conceptual basis and psychometric properties. Through a literature search, we identified 42 instruments that varied significantly in length, psychometric properties, and their conceptualization and operationalization of well-being. Results suggest that there is considerable disagreement regarding how to properly understand and measure well-being. Research and clinical implications are discussed.

Keywords: well-being, happiness, assessment, instruments, measurements

In recent years, interest in positive conceptualizations of health and well-being has grown steadily in the behavioral sciences as well as in society more generally. It is possible that human beings have always contemplated the nature of well-being, health, happiness, and the "good life"; psychological theorizing has explored these questions across the history of the discipline (Lent, 2004). However, little sustained empirical attention has been given to these topics until the past few decades, when several different conceptualizations of health and well-being have been advanced, "positive psychology" has grown into a recognized specialization, empirical research has increased significantly, and theoretical disagreements have been debated vigorously (Jayawickreme, Forgeard, & Seligman, 2012; Lent, 2004; Ryan & Deci, 2001).

There has been a long running and still unresolved debate in the literature about how to properly conceptualize and measure health and well-being. Some of this debate dates back to the ancient Greeks (e.g., Aristotle was an active early participant), and lively disagreements continue on how best to measure the essential aspects of well-being and optimal life functioning (Jayawickreme et al., 2012; Lent, 2004). Clarifying the strengths and limitations of these various approaches will be important to advancing research on this subject. A search of the literature, however, found no comprehensive review of the instruments that have been developed to measure these constructs. Therefore, the present review was undertaken to identify and critically evaluate all the published well-being instruments that include a psychological component. To clarify the scope of the project, next we describe the primary theoretical approaches used in developing the instruments included in this review.

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Primary Approaches to Conceptualizing Well-Being

Prior to World War II, most conceptualizations of health were focused on the absence of disease and disability. In 1948, however, the World Health Organization (WHO) proposed a definition that viewed health as "a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity" (WHO, 1948). Nonetheless, most health care research and practice continued to rely on the traditional medical model that focused on reducing disease and disability, with little attention given to the nature of health and well-being. The medical model was very useful for developing effective treatments for many illnesses but fell short in addressing the growing body of research that suggested that the absence of pathology does not necessarily correlate with positive dimensions of health and well-being (e.g., Keyes, 2002). A variety of different conceptualizations of well-being were also being promoted during this time, and the proliferation of these approaches led to confusion as to how to properly define and measure positive health and functioning (Lent, 2004). These varying conceptualizations can be categorized into four broad approaches. The two most influential approaches in psychology have been the hedonic and eudaimonic schools (Lent, 2004; Ryan & Deci, 2001). Approaches emphasizing quality of life and wellness also have been influential in psychology, although not as much as they have been in medicine and counseling, respectively (Lent, 2004; Roscoe, 2009). Additional theoretical models have been proposed to explain relationships among components of well-being and explain the processes involved in developing and maintaining well-being (e.g., Jayawickreme et al., 2012; Lent, 2004). However, instruments for measuring new conceptualizations of well-being associated with these models have not been proposed.

The *hedonic* approaches to conceptualizing well-being focus on pleasure and happiness (Ryan & Deci, 2001). The most prominent hedonic model is known as subjective well-being, a tripartite model consisting of satisfaction with life, the absence of negative affect, and the presence of positive affect (Diener, Emmons, Larsen, & Griffin, 1985). Proponents of this perspective tend to conceptualize well-being in terms of all three of these constructs, although many researchers

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focus on life satisfaction alone when assessing well-being from this perspective.

The *eudaimonic* approaches to conceptualizing well-being suggest that psychological health is achieved by fulfilling one's potential, functioning at an optimal level, or realizing one's true nature (Lent, 2004). In contrast to the focus on affect and life satisfaction in the hedonic models, eudaimonic models tend to focus on a larger number of life domains, although they vary significantly regarding the fundamental elements that determine well-being. For example, one of the more prominent eudaimonic models is the psychological well-being model (Ryff, 1989; Ryff & Keyes, 1995), which suggests that well-being consists of six elements: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The eudaimonic model proposed by Ryan and Deci (2001), however, suggests that well-being is found in the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. Clearly these two models overlap, but they also illustrate the variation found within the eudaimonic approaches to understanding well-being.

A third category of approaches to conceptualizing well-being focuses on *quality of life* (QoL). The term QoL is often used interchangeably with well-being in the literature. For example, the authors who developed the Quality of Life Inventory use the terms quality of life, subjective well-being, and life satisfaction interchangeably (Frisch, Cornell, Villanueva, & Retzlaff, 1992). However, those studying QoL generally conceptualize well-being more broadly than either the hedonic or eudaimonic models and include physical, psychological, and social aspects of functioning. This approach has been influenced by a variety of disciplines including medicine, sociology, and psychology, and is often employed in medical contexts (Lent, 2004). In the area of oncology, for example, the measurement of QoL for patients with cancer has become highly developed (Cella & Stone, 2015). The WHO defines QoL as a "broad range concept affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment" (WHOQOL Group, 1998, p. 1570).

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A fourth category of conceptualizations of well-being is often referred to as *wellness*. Wellness approaches are rooted in the counseling literature and tend to be broader and less clearly defined than the approaches mentioned earlier (Roscoe, 2009). Similar to the situation for QoL, some authors use the term wellness interchangeably with well-being (Harari, Waehler, & Rogers, 2005; Hattie, Myers, & Sweeney, 2004). One early definition of wellness shares with eudaimonic approaches a focus on optimal functioning and defines wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable" (Dunn, 1961, p. 4, as cited in Palombi, 1992). Like well-being and QoL, conceptualizations of wellness emphasize that well-being is more than the absence of illness, although theories of wellness differ in the specific elements included. Nearly all scholars in this area agree on a multifaceted conceptualization of wellness as a holistic lifestyle and include multiple areas of health and functioning (e.g., physical or spiritual health, possessing an integrated personality; Palombi, 1992; Roscoe, 2009).

These four categories of approaches to understanding well-being have substantial similarities, with the broadest commonality being each construct's foundational interest in the positive dimension of human experience and functioning. Each category attempts to identify what constitutes "the good life" or optimal functioning for the human person (Ryan & Deci, 2001) even if they differ on the particular terms used, on the components of well-being, or the preferred measurement approach to operationalize well-being. Although there are important theoretical distinctions between these four categories, it is unclear the degree to which they represent unique phenomena. In fact, these various theoretical camps may be tapping into a similar, or perhaps the same, dimension of human experience, resulting in a proliferation of constructs that may complicate rather than clarify scientific understanding. This potential construct proliferation may be due in part to these different conceptualizations having risen out of different disciplines (i.e., hedonic and eudaimonic well-being primarily in psychology and sociology, QoL primarily in medicine, and wellness primarily in counseling). One of the purposes of this review is to begin to bridge these differences by examining the measurement of well-being from a comprehensive perspective that includes all these schools of thought.

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The Present Study

Measurement instruments have been developed for the multiple models that fall within each of the four categories of conceptualizations of well-being. These instruments are used in research and clinical settings as well as in public polling to assess the level of psychological health or well-being of individuals, groups, communities, and even whole societies (e.g., Gallup-Healthways, 2014; Huppert & So, 2013). Of course, the results of these polls, research studies, and individual clinical assessments might vary considerably depending on the instrument used. It is consequently important that users of these instruments are aware of the underlying conceptualizations on which particular instruments are based along with information regarding their psychometric properties so that they can take a critical approach to interpreting the data obtained with these instruments.

A literature search found two previous reviews of broadly focused well-being measures. McDowell (2010) provided an historical and philosophical overview of conceptualizations of well-being and reviewed nine instruments based primarily on hedonic and eudaimonic approaches. He addressed the limitations of the instruments, particularly with regard to their clinical utility and the precision of their item content for measuring the specific constructs the scales were designed to assess. Roscoe (2009) reviewed six instruments designed to measure wellness and came to similar conclusions regarding the difficulties of using existing measures to empirically evaluate theoretical conceptualizations of wellness. These reviews provided useful information on select instruments, but they included a small number of measures and did not cover the full range of approaches to conceptualizing well-being. In addition, several reviews have been conducted on QoL measures for patients with particular diseases (e.g., Cella & Tulsky [1990] reviewed 24 instruments used to measure QoL in cancer patients), but the applicability of these reviews is focused on specific patient populations. In the present review, we attempted to address these limitations by evaluating the full range of published instruments designed to measure well-being from a psychological perspective.

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Method

This review included self-administered instruments that were identified by their authors as measuring well-being, QoL, or wellness. Instruments were included if they measured psychological well-being, psychosocial well-being, or psycho-physical well-being, whereas instruments were excluded if they addressed either social, economic, or physical well-being alone without including a psychological component. Instruments designed to assess narrow, domain-specific aspects of well-being (e.g., spiritual well-being; Ellison, 1983) or instruments developed for narrowly defined populations (e.g., Hemophilia Well-Being Index; Remor, 2013) were excluded as these measures were designed specifically for individuals who share a particular characteristic or experience and were not intended to represent a full conceptualization of well-being for use with the general population. Measures designed specifically for children were also excluded due to the unique theoretical and measurement considerations for this group (for a review of these issues, see Huebner, 2004). Single-item measures of well-being were included in this review due to their use in some of the most influential empirical studies on the topic (e.g., Ryff et al., 2007).

The search for well-being, QoL, and wellness instruments was conducted using online databases including PsycINFO, Medline, and Google Scholar. In addition to the terms well-being, quality of life, and wellness, four additional search terms (flourishing, psychological well-being, life satisfaction, and happiness) were used in combination with "measurement" in an attempt to capture all relevant instruments. Reference lists from published reviews of the psychological well-being literature (e.g., Lent, 2004; McDowell, 2010; Roscoe, 2009) were also examined to identify any additional instruments. Use of these procedures yielded 1,519 publications. These publications were then examined to determine if they actually described a well-being instrument and they met the inclusionary and exclusionary criteria described in the previous paragraph. In cases where it was unclear whether an instrument fully met the criteria, the authors discussed the evidence until consensus was reached. For example, some instruments, such as the Positive Affect and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), are often used along with

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instruments that are specifically designed to measure well-being, but were not themselves explicitly designed as stand-alone measures of well-being; these were consequently excluded from this review. Use of these procedures resulted in the identification of 42 instruments.

To maintain a uniform approach to presenting information, psychometric data from the original publication of an instrument are reported. In cases where an original instrument had been revised, only the revised instrument was included in this review (e.g., the Psychological General Well-Being Index–Revised; Revicki, Leidy, & Howland, 1996). Some instruments were originally presented without psychometric data; in these cases, data reported are from the *Mental Measurements Yearbook* (Farmer, 2005; Lonborg, 2007) or from the earliest publication that reported psychometric data for an instrument (e.g., the Wellness Inventory; Palombi, 1992).

Results

Overall Observations

A total of 42 instruments were identified as meeting the inclusion criteria for this review. Most of these instruments were placed into one of the four categories of well-being approaches (i.e., hedonic, eudaimonic, QoL, or wellness) based on the authors' explicit identification of their instrument with one of these approaches. All of the wellness and QoL measures were identified in this way. Most of the hedonic and eudaimonic measures were also explicitly identified with one of these two approaches. Several were not, however, although their implicit association with either the hedonic or eudaimonic approaches was clear, and they were placed into the appropriate category as a result (i.e., the five single-item measures in the hedonic category; the Flourishing Scale and the Social Well-Being Scale in the eudaimonic category). A fifth category of composite measures was formed because the authors did not associate them with a particular theoretical approach to well-being and they combined aspects of hedonic and eudaimonic approaches along with aspects of QoL and/or wellness approaches.

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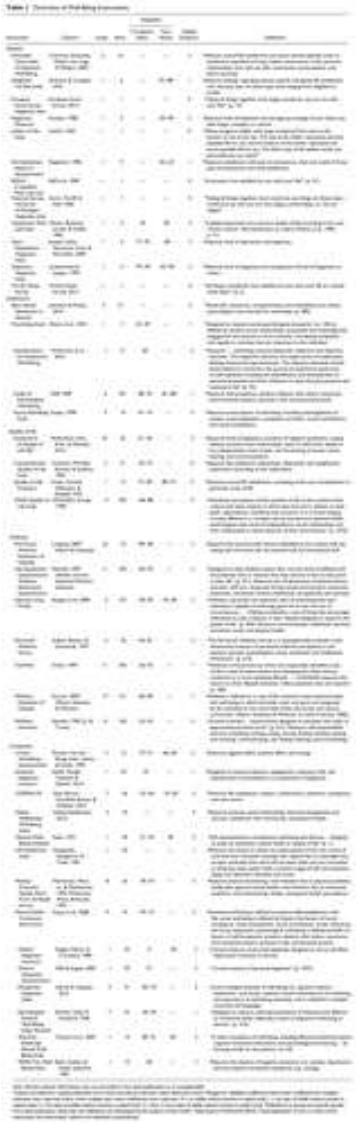
A variety of authors working over several decades developed the various instruments included in this review (see Table 1). Diener, Keyes, Cummins, Myers, Sweeney, and the WHO were the only authors or organizations to have published two instruments, and no author published three or more instruments. The publication dates for the instruments suggest that interest in measuring well-being increased in the late 1980s and has continued to receive significant attention since that time (the earliest measure was published in 1960 and the most recent measure in 2014).

Table 1. Overview of Well-Being Instruments



Note. Dashes indicate information was not provided in the cited publication or is nonapplicable.

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[a]Citation provided for original publication from which the data are derived, unless otherwise noted. [b]Ranges for reliability coefficients listed when coefficients for multiple subscales were reported and/or when multiple test–retest coefficients were reported. [c]0 = *no validity evidence present in original study*; 1 = *one type of validity evidence present in original study*; 2 = *two types of validity evidence present in original study*; 3 = *three or more types of validity evidence present in original study*. [d]Definitions in quotes are directly quoted from cited publication; otherwise, the definitions are developed by the authors of this review. [e]Data found in McDowell (2010). [f]Cited publication is from a review of the instrument; the instruments' authors are indicated in parentheses.

The instruments varied significantly in length, although most were relatively brief: The number of items across instruments ranged from one to 135; 81% included 36 items or fewer, and the median number of items was 19. Five measures included only a single item, and all of these were hedonic instruments that measured life satisfaction or happiness. These single items have often been used in large scale surveys and tend to include straightforward statements that directly refer to global life satisfaction or happiness. No reliability or validity evidence was found for any of these measures.

Most of the reliability coefficients reported for the instruments were obtained using convenience samples (76%), with the remainder using a random sampling technique and/or a nationally or internationally representative sample. Of the samples, 43% were composed of university students and 38% included participants from outside the United States.

The reliability coefficients reported for the instruments varied widely, and were frequently at levels too low for many research and clinical purposes (reliability coefficients of .70 or greater are commonly considered adequate for research purposes, whereas coefficients of .90 or greater are considered adequate for many clinical purposes; Nunnally & Bernstein, 1994). Reported Cronbach's alpha internal consistency coefficients ranged from .39 to .98. Only 33% of the reports of instruments included estimates of test–retest reliability, and these ranged from .19 to .98.

Definitions of the constructs assessed by each instrument are provided in the final column of Table 1. The reports of these instruments varied significantly in terms of their explicit operational definitions of the constructs they were attempting to measure. In some cases, verbatim definitions are provided, whereas paraphrased

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definitions are provided when succinct definitions could not be found. In the case of the single-item measures, the item itself typically provided the clearest definition of the construct measured. Definitional issues are discussed in more detail in the next section.

There was substantial variability in the amount and types of validity evidence presented regarding the instruments. Tests of validity included examinations of convergent, discriminant, predictive, and content validity as well as exploratory and confirmatory factor analyses. To illustrate the range in the types of validity evidence presented across these instruments, reports of instruments that included no validity evidence were assigned a 0, instruments with one type of validity evidence reported were assigned a 1, instruments with two types of validity evidence were assigned a 2, and instruments with three or more types of validity evidence were assigned a 3 (see Table 1). This rating illustrates the variability in the ways validity was addressed across these instruments, but the amount and quality of the validity evidence presented for these instruments varied greatly and are not reflected in these ratings. Given that most modern psychometricians consider construct validity to be the overarching concern that subsumes all other types of validity evidence (Messick, 1995), and given that there is significant lack of clarity about the nature of the construct or constructs measured by well-being instruments, reporting more specific information regarding the amount and quality of the validity evidence regarding these instruments was viewed as premature and potentially misleading. These issues are discussed more extensively below.

Table S1 (available online at tcp.sagepub.com/supplemental) provides a listing of the constructs assessed by all the instruments taken as a whole. Many of the subscales in the instruments had slightly different titles but appeared to measure very similar constructs; in these cases, the subscales were placed into the category that most closely matched the item content of the subscale (e.g., the Social Functioning subscale in the Medical Outcome Studies Short-Form 36 as well as all five subscales in the Social Well-Being Scale were categorized in the "social well-being" factor). In the interest of parsimony, subscales that measured different constructs that fell under a somewhat broader category were also combined (e.g., the Psychological General Well-Being Index–Revised subscales for Anxiety

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and Depressed Mood are placed under the "negative affect" factor). In a small number of cases, reports of instruments did not include a definition or sample items for individual subscales (e.g., the Breathing and Sensing subscales of the Wellness Inventory), and they were not included in the tabulation presented in Table S1 as a result. Therefore, Table S1 illustrates the general domains assessed by existing well-being instruments but does not provide an exhaustive account of the specific elements measured across all the instruments. To further organize the factors identified through this analysis, the individual factors were also grouped into biological, psychological, or sociocultural domains of functioning, although it was not always possible to clearly categorize the subscales (e.g., the Vitality/Energy subscales usually focused on physical energy but also referred to mental energy in some instruments).

Taken together, the number of factors measured across the instruments ranged from one to 11, with the Wellness Evaluation of Lifestyle and the Pemperton Happiness Index assessing 11 factors and the Satisfaction With Life Scale, the Social Well-Being Scale, and all of the single-item measures assessing one factor. Positive affect was the most commonly measured factor (in 21 of the 42 instruments), whereas the factor "social role limitations" was measured in just one instrument.

Examination of Instruments by General Category

Hedonic instruments

A total of 12 instruments were categorized as falling into the hedonic approach to conceptualizing well-being; five of these contained a single item. Test–retest reliability was reported for 50% of the instruments (range = .55–.98), and Cronbach's alpha was reported for 57% of the multi-item measures (range = .77–.94). No validity evidence was reported for the single-item measures, whereas 71% of the multi-item instruments reported at least two types of validity evidence.

All of the instruments in this category included a measure of life satisfaction or positive/negative affect. All the instruments measuring

life satisfaction assessed global satisfaction, although some also assessed satisfaction in specific life domains. The Happiness Measures and the Subjective Happiness Scale measure the positive and negative affective components of subjective well-being but do not measure life satisfaction. Only one instrument (i.e., the Short Depression-Happiness Scale) assessed both life satisfaction and positive affect, and no instrument was found that measured life satisfaction, positive affect, and negative affect, the three components that are included in the most prominent hedonic approach to conceptualizing well-being (Diener et al., 1985).

Eudaimonic instruments

Five instruments were identified as being based on a eudaimonic conceptualization of well-being. These instruments tend to be relatively brief with no more than 21 items, except for the Scale of Psychological Well-Being (120 items). Four of the five instruments reported internal consistency coefficients (range = .41–.93). Test–retest reliability was reported only for the Scale of Psychological Well-Being (range = .81–.88 across the subscales). All of these measures presented some validity evidence, with 60% presenting at least two types.

The eudaimonic instruments are much more heterogeneous in their definitions of well-being compared with the hedonic instruments. All the measures shared an emphasis on the fulfillment of human potential and/or optimal functioning, but there was no consensus regarding the critical components of this conceptualization of well-being (see Table S1). Several of these instruments included factors that would appear to fall outside common conceptualizations of eudaimonia. For example, most of the items on the Social Acceptance and Social Actualization subscales of Keyes's (1998) Social Well-Being Scale inquire about respondents' judgments or attitudes regarding others in society or society as a whole (e.g., beliefs regarding others' kindness or society's progress), factors that are not usually included in definitions of eudaimonic well-being or optimal functioning.

No single factor was found in common across the five eudaimonic instruments. Environmental mastery, purpose or meaning in life, and positive relations with others were the most common

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factors and were included in three out of the five scales. Only two factors were measured exclusively in a single instrument (i.e., self-worth/self-esteem in the Scale of Psychological Well-Being, and achievement in the Questionnaire for Eudaimonic Well-Being). Four of the five eudaimonic instruments included at least one socially oriented factor, whereas none included a biologically oriented factor.

Quality-of-life instruments

The four instruments whose authors specifically identified them as QoL measures varied significantly in length (range = 17–100 items). Internal consistency coefficients ranged from .39 to .96, and no data regarding test–retest reliability were reported for any of these instruments. The amount and type of validity evidence reported for these scales also varied significantly.

All the measures in this category were explicitly identified as measuring QoL or were specifically based on the literature in this area. The Quality of Life Inventory would also fit in the hedonic category as it only measures life satisfaction, but it was placed in this category because of its identification with QoL. Except for this instrument, the other three measures are more comprehensive than most of the instruments in other categories. Three of the four instruments include at least two factors in each of the three biopsychosocial categories, and all of them measure positive affect, negative affect, and positive relations with others. Three of the four instruments also measure global life satisfaction. The Comprehensive Quality of Life Scale offers a unique contribution in the measurement of life satisfaction by asking respondents to rate (a) their satisfaction with each of seven life domains and (b) the importance they place on each domain in their personal lives.

Wellness instruments

The seven instruments whose authors specifically identified them as wellness measures tend to include a larger number of items than most of the other well-being instruments—only two of these had less than 100 items (range = 36–135). Two of these instruments (the Wellness Evaluation of Lifestyle [WEL] and Five Factor Wellness Evaluation of Lifestyle [5F-WEL]) were developed by the same authors

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and are very similar in content and theoretical orientation, with the only differences being number of items and factor structure. Internal consistency was reported for all instruments (range = .52–.98), and test–retest reliability was reported for only one measure. Some form of validity evidence was presented for all of these instruments, with 71% reporting at least two types of validity evidence.

There was significant variability in the conceptualizations of wellness used to develop these measures. Some of these instruments defined wellness primarily in terms of a process that is oriented toward personal improvement (e.g., TestWell, Wellness Inventory), whereas others defined wellness as an optimal state of well-being or a way of life oriented toward optimal well-being (e.g., Optimal Living Profile, WEL, 5F-WEL). These measures also tended to incorporate factors that extend beyond those included in the other categories of well-being instruments (e.g., intellectual wellness, spiritual wellness). Some factors were unique to these instruments such as nutrition, physical fitness, spirituality, and occupational wellness, and these four factors were also the most commonly measured across the wellness instruments. Except for the Wellness Inventory and the Life Assessment Questionnaire, all the instruments measured at least one biological, psychological, and one social factor, although fewer social factors were represented within this group of instruments. No single factor was included in all these instruments, yet all of them measured spirituality except for the Wellness Inventory. Similar to the eudaimonic measures, none of the wellness instruments included assessments of life satisfaction or positive/negative affect.

Composite instruments

A total of 14 instruments were identified as composite measures of well-being because their authors did not identify them as belonging in one of the previous categories, and they combined aspects of hedonic and eudaimonic approaches as well as aspects of QoL and/or wellness approaches. These instruments were all relatively brief (range = 10–36 items). Internal consistency coefficients were presented for 86% of these instruments (range = .44–.95), and test–retest reliability data were presented for 36% of these instruments (range = .19–.85). Validity evidence was presented for 93% of the

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instruments, with 71% presenting at least two types of validity evidence.

Like the eudaimonic, QoL, and wellness measures, there was significant variability in the constructs assessed by the composite instruments. The conceptualization of well-being underlying these instruments was also generally broader than was the case for the hedonic and eudaimonic measures. The majority of these instruments included biological factors (79%), and over half (57%) included social factors. Overall, 43% included at least one biological, psychological, and social factor. The total number of factors measured by each instrument ranged from three to 11, and 93% measured positive affect, 71% measured vitality/energy and negative affect, 57% measured global life satisfaction, and 50% measured purpose/meaning in life. The Pemperton Happiness Index was the most comprehensive composite measure (11 factors), whereas the 12-Item Well-Being Questionnaire was the least comprehensive (three factors).

Discussion

The number of instruments developed to measure various aspects of well-being has been steadily growing. These instruments are also being applied in a variety of research, clinical, and public policy arenas, suggesting that positive conceptualizations of health and well-being are useful for an increasing number of purposes. A wide variety of perspectives have been applied to measure the construct of well-being, however, and the literature remains unsettled regarding many aspects of this topic. There are several important issues that researchers, clinicians, and public policy makers need to consider when using these instruments.

The comprehensive approach taken in this review resulted in the identification of a wide variety of instruments that were designed to measure various aspects of health and well-being. The range of instruments and the variety in their underlying conceptualizations suggest that there is little or no consensus as to what constitutes well-being and how it should be measured. This review found not only wide divergence across the different theoretical conceptualizations of well-being, but also divergence in how well-being is operationalized within particular theoretical categories. Constructs such as life satisfaction,

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positive affect, and positive relations with others are assessed by many of the instruments, but no single construct was found to be included in more than one half of the instruments (although positive affect was included in 50% of the instruments). This was also generally the case within the four broad theoretical approaches to conceptualizing well-being. The hedonic measures tended to share greater similarity in terms of the conceptualization of well-being, but the eudaimonic, QoL, and wellness measures varied considerably even when compared to other measures within the same category. This was the case for the composite measures as well. Clearly, there is significant diversity of thought when it comes to defining and measuring the construct of well-being.

Diversity in the way well-being is conceptualized and measured is also reflected in the terms used to identify the various measures and their subscales. In some cases, different terms were used to refer to a very similar conceptualization of well-being (e.g., the use of "happiness" appears indistinguishable from "life satisfaction" in the European Social Survey, 2014; Renger et al., 2000, p. 404, noted that "wellness represents the optimum state of well-being" with regard to the Optimal Living Profile). There appeared to be no distinction between the terms "quality of life" and "subjective well-being" in the Quality of Life Inventory (Frisch et al., 1992), but this scale also appears to measure life satisfaction, which is usually thought of as related to the hedonic conceptualization of well-being rather than the QoL approach. The inconsistent use of terminology and definitions is likely to lead to confusion for researchers, clinicians, and policy makers who investigate health and well-being and base decisions on data obtained with these instruments.

The most comprehensive measures of well-being we reviewed tended to be those designed to measure QoL. All but one of the QoL instruments measured a variety of factors in each of the three biopsychosocial domains which may make these instruments useful for researchers and clinicians seeking a comprehensive assessment of health and well-being. These instruments were generally developed out of the medical field, which may be why physical functioning and perhaps also social and vocational functioning were included in these measures.

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The construct of life satisfaction was the focus of many of the instruments included in this review and was frequently used as the operationalization of well-being. This approach has important advantages but also limitations. Given the lack of agreement on how to conceptualize well-being, inquiring about one's subjective global assessment of one's level of life satisfaction avoids the thorny issues related to defining the construct, a major advantage considering the state of the literature in this area. Nonetheless, researchers hold a variety of views about whether ratings of life satisfaction reflect well-being, one's present emotional state, a general personality characteristic such as optimism or extraversion, or some other construct (Jayawickreme et al., 2012). The varying viewpoints on what comprises life satisfaction and well-being is also reflected in the wide range of instruments included in this review, the majority of which do not assess life satisfaction specifically.

Taken as a whole, the well-being measures reviewed tend to be oriented toward intrapsychic dimensions of functioning. The major exception are the hedonic measures, most of which focus on global life satisfaction, which presumably includes external factors as well as intrapsychic functioning (i.e., respondents are usually asked to rate their life satisfaction as a whole and they are free to choose their own criteria for making their ratings). Nonetheless, the reviewed instruments as a whole do not specifically emphasize factors that are often considered important to well-being, such as ability to satisfy basic needs or adequacy of financial income. The level of functioning of one's family system is also largely excluded from these instruments, an omission that may reflect a Western individualistic orientation to conceptualizing health and well-being. Thus, the instruments may be less relevant for use in cultures that emphasize the health and well-being of one's family or community. Sexual health and sexuality are other important aspects of many people's lives that are generally excluded from consideration in these instruments. In addition, few of the instruments measure socioeconomic and sociocultural factors related to an individual's experience of systemic oppression or marginalization as it relates to well-being. This review was, of course, limited to measures that included some aspect of psychological well-being, and intrapsychic functioning was likely emphasized in this group of instruments as a result. Nonetheless, the specific factors included in these instruments raise questions regarding the cultural sensitivity and

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the content-related validity of these measures as a whole. These questions have not received extensive examination in the empirical research on these instruments.

For many of the measures, the evidence available to evaluate their psychometric characteristics was limited. The reliability coefficients for several instruments were low and sometimes lower than what is recommended even for research purposes. The degree of evidence provided to document the validity of several instruments was minimal, and there seemed to be a reliance on face validity in many cases. This is generally a larger problem when the instruments are used for clinical or social policy purposes than for research purposes, although focusing more on these issues would obviously also advance research on the nature and measurement of well-being.

The limitations of this review need to be taken into account because they affect the results. First, although extensive efforts were made to include all published instruments that met the inclusion criteria, it is certainly possible that some instruments were not found. The exclusion of domain-specific, population-specific, and child- and adolescent-specific instruments also may have inadvertently excluded instruments that provide a more comprehensive or fundamentally different approach to measuring well-being. The attempt to include all self-report instruments that assessed psychological well-being, including those beyond the usual focus on hedonic and eudaimonic approaches (i.e., that also addressed QoL and wellness), had the advantage of making broad observations at more general levels of analysis, but the ability to conduct detailed analyses of particular instruments was limited as a result (e.g., a more detailed examination of the psychometric characteristics of items, subscales, and scales).

Conclusions and Suggestions for Future Research

Clearly there is still significant work to do regarding the measurement of well-being. In fact, a substantial amount of research still needs to be conducted before greater consensus will be reached on how well-being can be measured in a valid manner. The literature reviewed does not suggest consensus regarding an exemplary instrument for measuring well-being. The only area one might consider to present an exemplary measurement approach is within the hedonic

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approach to conceptualizing well-being. Within this school of thought, there are very well established measures for assessing life satisfaction (e.g., Satisfaction With Life Scale; Diener et al., 1985) where respondents are given the responsibility to interpret the meaning of life satisfaction for themselves. Presumably individuals respond to these questions by identifying the criteria that are important to them and then rate their satisfaction with those elements on the basis of whatever intuitive or explicit factors they choose. This approach has the major advantage of avoiding the difficult definitional issues discussed earlier, although it leaves open questions about exactly what is being measured by these approaches. For researchers, clinicians, and policy makers needing information regarding the particular components that contribute to life satisfaction or well-being, a variety of measures are available that capture important physical, psychological, and social aspects of health and well-being. It is unclear, however, what range of components should be included, and there appears to be no single instrument that captures WHO's (1948) multidimensional conceptualization of health that refers to "a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity."

More research is needed to identify the important biopsychosocial components of well-being and whether there are aspects of health and well-being that can be reliably differentiated from constructs such as life satisfaction, happiness, QoL, and wellness. This research would be aided by greater consensus regarding criteria for identifying individuals with high and low levels of well-being. One proposed solution was offered by Keyes (2002) who distinguished between individuals who are "flourishing" and those who are "languishing" based on their scores on measures of affect, psychological well-being (i.e., Ryff's psychological well-being model; Ryff, 1989), and social well-being (Keyes, 1998). Keyes's criteria for placing individuals into these two groups were not made independently, however, but were based on specific theories and measures of well-being. Nonetheless, investigations into the characteristics, circumstances, and life experiences of individuals in groups such as these could help uncover predictors and outcomes of well-being that would help clarify the nature of the construct. Another approach to clarifying the important components of well-being is to test the process models of well-being that have been proposed by

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researchers such as Lent (2004) and Jayawickreme et al. (2012). Testing these models in various configurations through structural equation modeling and other procedures may help identify constructs that are more appropriately conceptualized as inputs of well-being, mediators and moderators of well-being, or outcomes of well-being.

The cross-cultural validity of these constructs is also an open question at this point, and more research that measures well-being across sociocultural groups might be very helpful for clarifying the nature of well-being. For example, future research might employ multiple approaches to measuring well-being along with individual difference variables such as personality and psychopathology in diverse samples that include a variety of sociocultural subgroups (e.g., based on race/ethnicity, socioeconomic status, age, religion/spirituality, or ability status). Fine-grained examinations of these data might clarify the extent to which particular conceptualizations of well-being are generalizable across individuals and subgroups.

The results of this review also suggest a need for greater discussion and theoretical clarification across schools of thought within psychology as well as across well-being researchers from the medical and behavioral science discipline. Doing so may help clarify relationships among physical health and functioning, psychological well-being, family and community functioning, vocational and economic well-being, and perhaps several additional variables. Such an approach may ultimately provide a much more comprehensive understanding of health and well-being that will be useful across a variety of human service professions as well as for guiding social policy and public health interventions. Greater clarity about the nature and measurement of well-being will better equip health care researchers and clinicians to identify and address deficits in well-being, increase public understanding about well-being and how to develop it, and provide clearer direction for policy makers interested in promoting societal well-being. The importance of the clinical, psychoeducational, and social policy implications of these questions suggests that this research should be a priority.

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Table S1 is available online at tcp.sagepub.com/supplemental.

References

Adams T., Bezner J., Steinhardt M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion*, 11(3), 208-218.

Andrews F. M., Crandall R. (1976). The validity of measures of self-reported well-being. *Social Indicators Research*, 3(1), 1-19.

Argyle M., Martin M., Crossland J. (1989). Happiness as a function of personality and social encounters. In Forgas J. P., Innes J. M. (Eds.), *Recent advances in social psychology: An international perspective* (pp. 189-203). Amsterdam, Netherlands: Elsevier.

Bech P., Gudex C., Staehr Johansen K. (1996). The WHO (Ten) Well-Being Index: Validation in diabetes. *Psychotherapy and Psychosomatics*, 65(4), 183-190.

Bech P., Olsen L. R., Kjoller M., Rasmussen N. K. (2003). Measuring well-being rather than the absence of distress symptoms: A comparison of the SF-36 mental health subscale and the WHO-Five Well-Being Scale. *International Journal of Methods in Psychiatric Research*, 12(2), 85-91.

Cantril H. (1965). *The patterns of human concern*. New Brunswick, NJ: Rutgers University Press.

Cella D., Stone A. A. (2015). Health-related quality of life measurement in oncology: Advances and opportunities. *American Psychologist*, 70 (2), 175-185. doi:10.1037/a0037821

Cella D. F., Tulsky D. S. (1990). Measuring quality of life today: Methodological aspects. *Oncology*, 4(5), 29-38.

Cummins R. A., Eckersley R., Pallant J., Van Vugt J., Misajon R. (2003). Developing a national index of subjective wellbeing: The Australian unity wellbeing index. *Social Indicators Research*, 64(2), 159-190.

Cummins R. A., McCabe M. P., Romeo Y., Gullone E. (1994). Validity studies the Comprehensive Quality of Life Scale (COMQOL): Instrument development and psychometric evaluation on college staff and students. *Educational and Psychological Measurement*, 54(2), 372-382. doi:10.1177/0013164494054002011

Diener E. D., Emmons R. A., Larsen R. J., Griffin S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75.

Diener E., Wirtz D., Tov W., Kim-Prieto C., Choi D., Oishi S., Biswas-Diener R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. doi:10.1007/s11205-009-9493-y

Ellison C. W. (1983). Spiritual well-being: Conceptualization and measurement. *Journal of Psychology & Theology*, 11(4), 330-340.

European Social Survey. (2014). *ESS Round 7 Source Questionnaire (Measurement instrument)*. London, UK: ESS ERIC Headquarters, Centre for Comparative Social Surveys, City University London. Retrieved from http://www.europeansocialsurvey.org/"methodology/questionnaire/ Google Scholar

Farmer R. F. (2005). Test review of the Wellness Evaluation of Lifestyle. In Spies R. A., Plake B. S. (Eds.), *The sixteenth mental measurements yearbook*. Retrieved from https://marketplace.unl.edu/buros/ Google Scholar

Fazio A. F. (1977). *A concurrent validational study of the NCHS General Well-Being Schedule*. Hyattsville, MD: U.S. Department of Health, Education, and Welfare, Public Health Service, Health Resources Administration, National Center for Health Statistics.

Fordyce M. W. (1988). A review of research on the Happiness Measures: A sixty second index of happiness and mental health. *Social Indicators Research*, 20(4), 355-381.

The Counseling Psychologist, Vol 44, No. 5 (2016): pg. 730-757. DOI.

Frisch M. B., Cornell J., Villanueva M., Retzlaff P. J. (1992). Clinical validation of the Quality of Life Inventory. A measure of life satisfaction for use in treatment planning and outcome assessment. *Psychological Assessment*, 4(1), 92-101.

Gallup-Healthways. (2014). *Gallup-Healthways Global Well-Being Index*. Retrieved from http://www.well-beingindex.com/

Gatt J. M., Burton K. L., Schofield P. R., Bryant R. A., Williams L. M. (2014). The heritability of mental health and wellbeing defined using COMPAS-W, a new composite measure of wellbeing. *Psychiatry Research*, 219(1), 204-13. doi:10.1016/j.psychres.2014.04.033

Gurin G., Veroff J., Feld S. (1960). *Americans view their mental health: A nationwide interview survey*. New York, NY: Basic Books.

Hagedorn J. W. (1996). Happiness and self-deception: An old question examined by a new measure of subjective well-being. *Social Indicators Research*, 38(2), 139-160.

Harari M. J., Waehler C. A., Rogers J. R. (2005). An empirical investigation of a theoretically based measure of perceived wellness. *Journal of Counseling Psychology*, 52(1), 93-103.

Hattie J. A., Myers J. E., Sweeney T. J. (2004). A factor structure of wellness: Theory, assessment, analysis, and practice. *Journal of Counseling and Development*, 82(3), 354-364.

Hervás G., Vázquez C. (2013). Construction and validation of a measure of integrative well-being in seven languages: The Pemberton happiness index. *Health and Quality of Life Outcomes*, 11, 66. doi:10.1186/1477-7525-11-66

Hills P., Argyle M. (2002). The oxford happiness questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, 33(7), 1073-1082.

Huebner E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, 66(1-2), 3-33.

Huppert F. A., So T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837-861. doi:10.1007/s11205-011-9966-7

Jayawickreme E., Forgeard M. J. C., Seligman M. E. P. (2012). The engine of well-being. *Review of General Psychology*, 16(4), 327-342. doi:10.1037/a002799

Johnston M. M., Finney S. J. (2010). Measuring basic needs satisfaction: Evaluating previous research and conducting new psychometric evaluations of the Basic Needs Satisfaction in General scale. *Contemporary Educational Psychology*, 35(4), 280-296. doi:10.1016/j.cedpsych.2010.04.003

Joseph S., Linley P. A., Harwood J., Lewis C. A., McCollam P. (2004). Rapid assessment of well-being: The Short Depression-Happiness Scale (SDHS). *Psychology and Psychotherapy: Theory, Research and Practice*, 77(4), 463-478.

Keyes C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, 61(2), 121-140.

Keyes C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207-222.

Keyes C. L. (2005). The subjective well-being of America's youth: Toward a comprehensive assessment. *Adolescent & Family Health*, 4, 3-11.

Keyes C. L., Wissing M., Potgieter J. P., Temane M., Kruger A., van Rooy S. (2008). Evaluation of the Mental Health Continuum-Short Form (MHC-SF) in Setswana-speaking South Africans. *Clinical Psychology & Psychotherapy*, 15(3), 181-192. doi:10.1002/cpp.572

Lent R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 51(4), 482-509. doi:10.1037/0022-0167.51.4.482

Lonborg S. (2007). Test review of the Five Factor Wellness Inventory. In Geisinger K. F., Spies R. A., Carlson J. F., Plake B. S. (Eds.), *The seventeenth mental measurements yearbook*. Retrieved from https://marketplace.unl.edu/buros/

Lyubomirsky S., Lepper H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46(2), 137-155.

McDowell I. (2010). Measures of self-perceived well-being. *Journal of Psychosomatic Research*, 69(1), 69-79. doi:10.1016/j.jpsychores.2009.07.002

McHorney C. A., Ware J. E., Lu J. F., Sherbourne C. D. (1994). The MOS 36-item Short-Form Health Survey (SF-36): III. Tests of data quality, scaling assumptions, and reliability across diverse patient groups. *Medical Care*, 32(1), 40-66.

McHorney C. A., Ware J. E., Raczek A. E. (1993). The MOS 36-item Short-Form Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. *Medical Care*, 31(3), 247-263.

Messick S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50, 741-749. doi:10.1037/0003-066x.50.9.741

Myers J. E., Luecht R. M., Sweeney T. J. (2004). The factor structure of wellness: Reexamining theoretical and empirical models underlying the Wellness Evaluation of Lifestyle (WEL) and the five-factor WEL. *Measurement and Evaluation in Counseling and Development*, 26, 194-208.

Neugarten B. L., Havighurst R. J., Tobin S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology Journal of Gerontology*, 16(2), 134-143.

Nunnally J. C., Bernstein I. H. (1994). The assessment of reliability. *Psychometric Theory*, 3, 248-292.

Owen T. R. (1999). The reliability and validity of a wellness inventory. *American Journal of Health Promotion*, 13(3), 180-182.

Palombi B. J. (1992). Psychometric properties of wellness instruments. *Journal of Counseling and Development*, 71(2), 221-225.

Pouwer F., Van Der Ploeg H. M., Ader H. J., Heine R. J., Snoek F. J. (1999). The 12-Item Well-Being Questionnaire: An evaluation of its validity and reliability in Dutch people with diabetes. *Diabetes Care*, 22(12), 2004-2010.

Remor E. (2013). Development and psychometric testing of the Hemophilia Well-Being Index. *International Journal of*

Behavioral Medicine, 20(4), 609-617. doi:10.1007/s12529-012-9261-2

Renger R. F., Midyett S. J., Soto Mas F. G., Erin T. D., McDermott H. M., Papenfuss R. L., . . . Hewitt M. J. (2000). Optimal Living Profile: An inventory to assess health and wellness. *American Journal of Health Behavior*, 24(6), 403-412.

Revicki D. A., Leidy N. K., Howland L. (1996). Evaluating the psychometric characteristics of the Psychological General Well-Being Index with a new response scale. *Quality of Life Research*, 5(4), 419-425.

Richardson J., Iezzi A., Khan M. A., Maxwell A. (2014). Validity and reliability of the Assessment of Quality of Life (AQOL)–8D multi-attribute utility instrument. *Patient*, 7(1), 85-96. doi:10.1007/s40271-013-0036-x

Roscoe L. J. (2009). Wellness: A review of theory and measurement for counselors. *Journal of Counseling and Development*, 87(2), 216-226.

Ryan R. M., Deci E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.

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(6), 1069-1081.

Ryff C., Almeida D. M., Ayanian J. S., Carr D. S., Cleary P. D., Coe C., . . . Williams D. (2007). *National Survey of Midlife Development in the United States (MIDUS II), 2004-2006*, Phone Questionnaire (Measurement instrument). Retrieved from http://doi.org/10.3886/ICPSR04652.v6

Ryff C. D., Keyes C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.

Tennant R., Hiller L., Fishwick R., Platt S., Joseph S., Weich S., . . . Stewart-Brown S. (2007). The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5, 63-75. doi:10.1186/1477-7525-5-63

Ware J. E., Sherbourne C. D. (1992). The MOS 36-item Short-Form Health Survey (SF-36). I. Conceptual framework and item selection. *Medical Care*, 30(6), 473-483.

Waterman A. S., Schwartz S. J., Zamboanga B. L., Ravert R. D., Williams M. K., Bede Agocha V., . . . Brent Donnellan M. (2010). The Questionnaire for Eudaimonic Well-Being: Psychometric properties, demographic comparisons, and evidence of validity. *Journal of Positive Psychology*, 5(1), 41-61. doi:10.1080/17439760903435208

Watson D., Clark L. A., Tellegen A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.

WHOQOL Group. (1998). The World Health Organization Quality of Life Assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine*, 46(12), 1569-1585.

World Health Organization. (1948). Charter. Geneva, Switzerland: Author.

World Values Survey. (2012). World Values Survey Wave 6 (2010-2012) (Measurement instrument). Retrieved from http://www.worldvaluessurvey.us/WVSDocumentationWV6.jsp

Zabihi R., Ketabi S., Tavakoli M., Ghadiri M. (2014). Examining the internal consistency reliability and construct validity of the Authentic Happiness Inventory (AHI) among Iranian EFL learners. *Current Psychology*, 33(3), 377-392. doi:10.1007/s12144-014-9217-6

Author Biographies

Philip J. Cooke is a doctoral candidate in counseling psychology at Marquette University. His research interests include the psychosocial well-being of gender and sexual minorities, and the promotion of well-being for minority populations through psychotherapy.

Timothy P. Melchert is a member of the counseling psychology faculty at Marquette University. He received his PhD in counseling psychology from the University of Wisconsin-Madison.

Korey Connor is a doctoral candidate in counseling psychology at Marquette University. He received his MA from the University of St. Thomas. His research interests include psychological well-being and integrative models of well-being in particular.

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