Cultural Differences in Subjective Well-Being: How and Why

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Abstract

We review cultural differences in subjective well-being (SWB). Cultures can differ in the (i) structure of SWB (i.e., the interrelationships among positive affect, negative affect, and life satisfaction); (ii) mean levels of SWB; and (iii) the correlates of SWB. Some studies suggest that East-West differences in SWB are mediated by cultural differences in values, self-construals, relational beliefs, and dialectical beliefs. However, more empirical tests of mediation are needed. Finally, we discuss remaining challenges in culture and SWB research. These include assessment of measurement equivalence, establishing mediated moderation of cultural constructs, expansion of research beyond the East-West axis, and operationalizing culture beyond the self-endorsement of values and beliefs.

Keywords: well-being, culture, emotion, values, beliefs, self-construal

Nearly every year, it seems, rankings of the "happiest" countries are updated, released, and publicized. Although these rankings fluctuate from year to year, some of the highest levels of well-being are consistently observed in Northern Europe and some of the lowest in Africa (e.g. Helliwell, Layard, & Sachs, 2017). Why do societies differ in well-being? The contrast between Northern Europe and Africa draws attention to the importance of economic development and sociopolitical stability. Indeed, societies that are characterized by greater wealth and social stability have higher average levels of life satisfaction than those faring less well on these factors (Stevenson & Wolfers, 2008; Tov, Diener, Ng, Kesebir, & Harter, 2009). Broad socioeconomic factors such as per capita gross domestic product (GDP), life expectancy, and perceived corruption collectively account for 20% to 75% of the variance in national well-being depending on the measure used (Helliwell, Huang, & Wang, 2017). Levels of well-being are higher in economically developed nations in part because people are better able to meet basic needs for food, comfort, and security (Diener, Ng, Harter, & Arora, 2010). Citizens in wealthy countries also tend to experience greater freedom of choice and expression (Inglehart, Foa, Peterson, & Welzel, 2008; Tov & Diener, 2008). Nevertheless, a considerable proportion of variance in national well-being remains unaccounted for by socioeconomic development. This is not surprising considering that societies differ on a host of other variables such as climate, geography, population density, as well as cultural values, beliefs, and practices.

In this chapter, we examine cultural differences in well-being and review the work that has been done to account for these differences. To ask how culture influences well-being is distinct from asking how economic development or climate influences well-being. Severe poverty and harsh climates can reduce well-being by making it difficult for people to meet basic needs (Fischer & van de Vliert, 2011). In contrast, the effect of culture on well-being needs to be

understood in the context of a system of values, beliefs, and practices that tend to be organized around certain themes (e.g., individualism); it requires an understanding of the shared logic that underlies people's assumptions, perceptions, and inclinations to feel and behave a certain way. Although we distinguish cultural variables from economic and ecological variables, we also agree that they shape and mutually influence each other in significant ways (Cohen, 2001; Fiske, Kitayama, Markus, & Nisbett, 1998; Inglehart, 1997). For example, increasing societal wealth may alter one's dependence on kinship ties, enabling a more individualistic culture to emerge (Triandis, 1989). However, a cultural analysis of well-being may often require observations and theoretical tools that differ from a strictly economic analysis of well-being. It forces us to consider factors beyond basic needs that shape happiness and life satisfaction around the world. As governments and international organizations develop indicators of well-being to inform public policy (Diener & Tov, 2012; Organisation for Economic Co-operation and Development, 2017), the influence of cultural values and beliefs on people's well-being—including their understanding of what constitutes happiness and satisfaction—should be carefully studied and factored into the interpretation of self-reported well-being (National Research Council, 2013) as well as the design of policies and interventions aimed at improving well-being. For example, the efforts of North American school systems to promote the self-esteem of students (Heine, Lehman, Markus, & Kitayama, 1999) assume a particular view of the healthy, well-adjusted person that may not be shared in other cultures.We will begin by defining what we mean by the terms *well-being* and *culture*. Then we discuss in what sense cultures differ in well-being (i.e., *how* do cultures differ). We also consider the factors that mediate cultural differences in well-being (i.e., *why* do cultures differ). Because the question of *how* cultures differ in well-being has been addressed previously (Tov & Diener, 2007, 2013; Scollon & Tov, 2012), we review this

area selectively and devote more discussion to the question of *why* cultures differ. Much of our review reflects the existing body of research, which is dominated by comparisons of Westerners (i.e., people of European or North American cultural heritage) with Easterners (i.e., people of Asian--especially East Asian cultural heritage). Very few studies have examined respondents from other world regions (e.g., Latin America, Africa, the Middle East)--at least not to the degree that East-West differences have been investigated. We later discuss the limitations that this underrepresentation may have for our understanding of how culture shapes well-being. We also discuss future directions that are needed to advance the field of culture and well-being.

Subjective Well-Being

We conceptualize well-being within the paradigm of *subjective* well-being (SWB; Diener, 1984; Diener et al., 1999), which refers to the various ways that people evaluate and experience their lives in a positive manner. A person with high levels of SWB would ideally experience (i) positive emotions frequently, (ii) negative emotions infrequently, and (iii) evaluate their life as a whole as very satisfying. Thus SWB entails affective experiences as well as cognitive judgments (life satisfaction or life evaluation). Although the three components of SWB are typically correlated with each other, they are known to have distinct correlates (Tay & Diener, 2011). Thus how cultures differ in SWB may depend on which component is considered.(See Maddux, this volume, for a more detailed discussion.)

Culture and Possible Mediators of Cultural Differences in Well-Being

We define *culture* as a system or pattern of beliefs, values, and practices shared and socially transmitted among people in a relatively enduring context (Markus & Kitayama, 2010; Triandis, 1994). Because "context" can be conceptualized in different ways (e.g., home versus work, city, nation, or world region), and people typically operate in multiple contexts, a single

individual can be influenced by multiple systems and subsystems of culture. Thus it is possible to speak of individuals who are "bicultural", whose thoughts, feelings, and behavior may shift depending on the cultural context or cultural knowledge that is most salient to them at a particular moment (Hong, Morris, Chiu, & Benet-Martinez, 2000). Because cultural influences on psychological processes are not fixed, scholars have admonished against equating culture with whole groups of people (Markus & Kitayama, 2010). Although this point is well-taken, much research has relied on comparisons between different groups (e.g., Easterners versus Westerners) to test the hypothesized effects of culture on well-being. Such studies need not imply that the effects of culture are fixed; instead, group differences can be viewed as differences in central tendencies (average levels of behavior) while allowing for both interindividual and *intra*individual variability among people in the same cultural group. Group comparisons should not be the only tool employed by cultural psychologists; nevertheless, they can be extremely informative especially when potential mediators are measured and tested. Four types of constructs have been studied as mediators of cultural differences in well-being.

Individualist-Collectivist Values

Triandis (1994, 1995, 2001) conceptualized *individualism* and *collectivism* as two major cultural patterns ("syndromes") that differ in the extent to which the individual (versus one's in-group) serves as the primary reference for thought, feelings, and behavior. Individualist cultures emphasize personal goals over in-group goals; behavior is based primarily on one's personal attitudes and preferences. Collectivist cultures emphasize in-group goals over personal goals; behavior is based primarily on in-group norms. Triandis (2001) suggested that child rearing practices tend to support the dominant cultural syndrome. Individualist cultures emphasize independence, exploration, creativity, and self-reliance. Collectivist cultures emphasize

conformity, obedience, security, and reliability. Cross-cultural psychologists have usually

measured individualist and collectivist *values* as opposed to norms and practices (but see House,

Hanges, Javidan, Dorfman, & Gupta, 2004). For example, participants might rate how important

it is to have freedom in how they approach their jobs (Hofstede, 2001). Individualist values tend

to be endorsed more strongly in North America, Western Europe, and Northern Europe;

collectivist values tend to be endorsed more strongly in Asia, Latin America, and Africa (Diener

& Diener, 1995; Hofstede, 2001; House et al., 2004).

Self-Construal

Cultures differ in the aspects of the self that are most salient to the individual (Triandis,

1989). For example, Markus and Kitayama (1991) proposed that Western cultures cultivate an

independent self-construal that views the self as an autonomous entity, distinct and separable

from others. The independent self consists of a unique configuration of personal attributes that is

stable across situations. In contrast, many non-Western cultures cultivate an *interdependent self-*

construal that views the self as an entity that is fundamentally connected to others and

contextually embedded. The interdependent self is organized with reference to how others in a

relationship are thinking, feeling, and behaving; it consists of multiple configurations of personal

attributes that shift according social roles. The distinction between independent and

interdependent self-construals has obvious parallels with individualism-collectivism (Brewer &

Chen, 2007; Triandis & Gelfand, 1998). However, not all scholars view them as synonymous

terms (Fiske et al., 1998; Vignoles et al., 2016). Therefore, we consider self-construals separately

from individualist and collectivist values.

Relational Beliefs

A few studies have tested beliefs about one's relationship with others as mediators of cultural differences in well-being. These include the extent to which one is fulfilling parental expectations or feels responsible for the happiness of others. Although such beliefs might be taken as indicators of collectivism there are different varieties of collectivism such as horizontal and vertical collectivism (Triandis & Gelfand, 1998), in-group collectivism (House et al., 2004), and relational collectivism (Brewer & Chen, 2007). The relational beliefs that have been studied thus far in culture and well-being research might reflect one or more of these forms of collectivism. Alternatively they might be specific to a particular cultural area (East Asia but not Latin America). We consider these beliefs separately from collectivist values and interdependent self-construal.

Dialectical Beliefs

Naïve dialecticism refers to lay beliefs about change and contradiction (Peng & Nisbett, 1999; Spencer-Rodgers, Williams, & Peng, 2010). High levels of dialectical thinking are characterized by the belief that the universe is not static but constantly in flux, alternating between opposite states (e.g., hot becomes cold). This understanding encourages a greater tolerance for contradiction; an acceptance of the idea that objects, events, and states of being often consist of opposing elements. If happiness often turns into sadness (and vice versa), then it makes sense that a person could be described as *both* happy and sad. A growing body of research suggests that people of East Asian cultural heritage tend to hold dialectical beliefs more strongly than those of Western cultural heritage (Spencer-Rodgers et al., 2010). The origin of such differences may be rooted in distinct philosophical traditions. Eastern philosophies such as Taoism stress the mutual dependence of contrasting states: "Thus Something and Nothing produce each other; The difficult and the easy complement each other" (Lao Tzu, 1963, II, 5-6).

In contrast, Western philosophers such as Aristotle emphasized the law of noncontradiction--that "A is B" and "A is not B" cannot both be true (Peng & Nisbett, 1999). Beliefs about change and contradiction may influence how positive and negative emotions are experienced in different cultures.

Cultural Differences in SWB

Cultures can differ in SWB in three ways . First, cultures differ in how strongly the components of SWB (positive affect, negative affect, and life satisfaction) correlate with each other; we refer to this as differences in structure.(See also Maddux, this volume) Second, cultures differ in mean levels of SWB such that some societies are "happier" than others. Third, cultures differ in the correlates of well-being with certain factors covarying more strongly in one cultural context versus another.

The Structure of SWB

Past research emphasized the independence of positive affect (PA) and negative affect (NA; Bradburn, 1969; Watson, Clark, & Tellegen, 1988), suggesting that the experience of PA and NA were unrelated. However, inconsistent relations between PA and NA could be due to differences in how affect is measured. Self-report affect scales vary in their response formats (Russell & Carroll, 1999). Some scales measure how *often* emotions are felt (frequency), others measure how *strongly* they are felt (intensity). Correlations between PA and NA are also weakened by measurement error. When these factors are taken into account, measures of PA and NA tend to be inversely related (Barrett & Russell, 1998; Green, Goldman, & Salovey, 1993) especially when frequency rather than the intensity is measured (Diener, Larsen, Levine, & Emmons, 1985).

Nevertheless, the inverse relation between PA and NA varies across nations (Schimmack, Oishi, & Diener, 2002), indicating that the degree to which emotional experiences are uniformly positive or negative may depend on cultural context. The correlation between PA and NA tends to be *less* negative among Easterners than Westerners, suggesting that the former tend to experience mixtures of positive and negative emotions to a greater degree. A similar pattern has been observed *within* bicultural Asian Canadians in an experience sampling study (Perunovic, Heller, & Rafaeli, 2007). When Asian Canadians recently spoke an Asian language or identified with an Asian culture, their momentary feelings of PA were less correlated with their feelings of NA. However, when they recently spoke a non-Asian language or identified with a Western culture, PA and NA were more inversely correlated. That Asian Canadians' language use and identity can fluctuate across situations may reflect the different cultural contexts they experience (e.g., with family versus at school) on a daily basis.

Cultural differences in the relation between PA and NA may be influenced by levels of individualism-collectivism. Western cultures tend to be more individualistic, and the negative correlation between PA and NA is stronger in individualist (versus collectivist) nations (Schimmack et al., 2002). In the case of the United States, a history of voluntary settlement by Europeans in America may have shaped a culture in which independence and self-reliance are strongly valued (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006; Sims, Tsai, Jiang, Wang, Fung, & Zhang, 2015). Settlers to a new frontier may be self-selected. That is, people with certain values, personality traits, or genetic predispositions may be more inclined to leave their homelands to pursue a better life elsewhere. Alternatively, the harsh frontier environment itself may foster individualistic behavior—putting a premium on self-protection and self-reliance (Kitayama et al., 2006).

Whether the attributes of settlers are self-selected or shaped by environment, the tendency to maximize PA and minimize NA may have been functional in such circumstances—helping settlers to endure, explore, and transform the wild terrain to suit their needs. Sims et al. (2015) proposed that the cultural legacy of voluntary settlement by European settlers influenced the emotion regulation strategies of their American descendants. In contrast, East Asians—at least those without such a cultural history (see Kitayama et al., 2006)—may not share the goal of maximizing PA as it has the potential to be socially disruptive to one's in-group. East Asians may instead be more tolerant of negative experiences, especially if it preserves social harmony. Thus, European Americans may exhibit a stronger desire to maximize PA and minimize NA compared with East Asians, which in turn should result in a stronger inverse relation between PA and NA. In support of this hypothesis, Sims et al. (2015) showed first that European American students endorsed individualist (versus collectivist) values more strongly than Chinese students from Hong Kong and the mainland. Second, individualist values were associated with a greater desire to experience higher levels of PA relative to NA. Third, cultural differences in the PA-NA correlation were significantly accounted for by the desire to maximize PA and minimize NA. Thus, PA and NA tend to be experienced as opposing states in European American students in part because individualist values may encourage the maximization of PA (and minimization of NA), which in turn influences how they regulate and pursue emotional experiences. Among Chinese students, the desire to maximize PA/minimize NA may conflict with collectivist values. With less motivation to up-regulate PA and down-regulate NA, Chinese students may experience a greater mixture of emotions in daily life.

One problem with the voluntary settlement theory is that it does not explain why on average, PA and NA are inversely related in individualistic countries *other than* the US

Moreover, even after controlling for individualism-collectivism, PA-NA correlations were still weaker in Asian countries (Schimmack et al., 2002), suggesting that other elements of culture may be involved. For example, in a successful situation, Japanese participants reported more mixed emotions than European American participants (Miyamoto, Uchida, & Ellsworth, 2010). This difference was partly mediated by a greater sense of responsibility for the feelings of others on the part of Japanese participants. For the latter group, success was often accompanied by feelings of happiness but also fear of troubling others. Dialectical beliefs may also account for cultural differences in mixed affective experiences. Stronger dialecticism among East Asians may lead them to seek balance between PA and NA, or at the very least tolerate feelings of NA along with PA over a period of time. Consistent with this hypothesis, Chinese students reported a greater tendency to experience a mixture of PA and NA than European American students (Spencer-Rodgers et al., 2010), and this difference was mediated by differences in dialectical beliefs.

In addition to cultural differences in the correlation between PA and NA, there are also cultural differences in the extent to which emotions are associated with life satisfaction (LS). Compared with collectivist cultures, individualist cultures place more emphasis on internal feelings, attitudes, and preferences as guides for action and decision-making (Triandis, 1995). As a result, affective experiences correlate more strongly with judgments of LS in individualist cultures (Suh, Diener, Oishi, & Triandis, 1998). In contrast, people in collectivist cultures considered both their feelings and the normative desirability of LS in their society. If high levels of LS are undesirable in one's society, those in collectivist cultures may not report high LS despite frequent feelings of PA.

Mean Levels of SWB

In most societies around the world--except those marred by extreme poverty and social instability--people report levels of well-being that are slightly above neutral, implying that most people are at least mildly "happy" (Diener & Diener, 1996). Still, there is considerable cultural variation in average levels of SWB. East Asians often report lower levels of SWB than Westerners (for a review, see Tov & Diener, 2007). These differences have been attributed to individualism-collectivism. Individualist countries tend to report higher levels of SWB than collectivist countries even after controlling for national wealth (Diener, Diener, & Diener, 1995; Fischer & Boer, 2011). However, the exact process by which individualistic values influence mean levels of SWB remain unclear. Fischer and Boer (2011) suggested that individualist cultures promote and facilitate greater autonomy for people to pursue their personal goals. Individualist countries offer greater protection for the rights and liberties of their citizens (Diener et al., 1995). Although greater autonomy and freedom are associated with higher levels of well-being (Helliwell et al., 2017; Inglehart et al., 2008; Tay & Diener, 2011), researchers have not formally tested the extent to which these constructs mediate the relation between individualism and SWB.

A closely related view is that self-construals may promote or limit the experience and expression of SWB. Again, it seems autonomy may be a mechanism through which this occurs. Those with an independent self-construal might feel free to express their internal attitudes and feelings or pursue their personal interests. In contrast, those with an interdependent self-construal may feel more restricted because they are often guided by a consideration for the reaction of others (Markus & Kitayama, 1991). Compared with US participants, for instance, Taiwanese participants tended to rate their self-worth as more contingent on the approval of others (Liu,

Chiu, & Chang, 2017). This contingency partially mediated the cultural difference in SWB: Taiwanese who were more sensitive to others' approval reported lower levels of well-being.

Oishi and Sullivan (2005) did not examine self-construals per se--but they asked students to rate the extent to which their parents had specific expectations for their academic and social development. Compared with European American students, (i) Asian American students reported that their parents had more specific expectations; (ii) the more specific expectations were, the less likely students felt they were fulfilling them; and (iii) lower perceived fulfillment was associated with lower LS. In other words, the specificity of parental expectations and their perceived fulfillment mediated cultural differences in life satisfaction.

Dialectical beliefs may also influence average levels of well-being. Ng and Hynie (2016) reasoned that a potential cost of holding contradictory beliefs is that everyday decisions may be more difficult to make. Indecision may have negative effects on SWB because more effort is expended on making the decision and even after it is made, one is less likely to be satisfied. Ng and Hynie provided support for this hypothesis in a study of East Asian and European Canadians. The former reported higher levels of dialecticism and chronic indecisiveness, and lower levels of LS. Importantly, the indirect effect from culture to dialecticism to indecisiveness to LS was significant. In other words, East Asian Canadians were less satisfied than European Canadians in part because their greater tolerance for contradiction may impede the confidence with which they make decisions in daily life. Dialectical beliefs might also influence whether people attempt to increase (up-regulate) or decrease (down-regulate) the frequency, intensity, or duration of certain emotions. Miyamoto and Ma (2011) examined dialectical beliefs about positive emotions (e.g., whether something bad might happen if one continued to feel happy). Asian students endorsed dialectical beliefs more than European American students; these beliefs

in turn were associated with a greater tendency to *dampen* rather than savor PA. In another study, students rated their emotions twice: just after learning their grade on an exam and again the following day. Among those who did well on the exam, European Americans maintained their PA the next day to a greater extent than Asians, and this difference was partially mediated by dialectical beliefs. Thus, Asian students' greater dialecticism resulted in a larger drop in PA the next day. This finding suggests that dialecticism fosters cultural differences in emotion regulation strategies, which may then create differences in average levels of PA. It also offers some insight into why the experience of PA and NA tends to be less polarized among Easterners than Westerners (see Structure of SWB).

Correlates of SWB

Several studies have reported cultural differences in the correlates of SWB. Examples include self-esteem, relationship harmony, self-consistency, and emotion regulation.

Self-esteem. Though self-esteem is generally associated with greater SWB (Diener et al., 1999), the magnitude of this relation varies across cultures. Correlations between self-esteem and LS tend to be larger in Western samples than in East Asian samples (Kwan, Bond, & Singelis, 1997; Park & Huebner, 2005). Various explanations have been offered. Westerners tend to possess an independent self-construal in which unique traits and abilities are defining elements of the self (Heine et al., 1999; Kwan et al., 1997; Markus & Kitayama, 1991). In contrast, East Asians tend to possess an interdependent self-construal in which social roles and obligations are more salient than individual attributes. More broadly, Westerners may endorse individualist values such as self-reliance and self-actualization (Triandis, 1995). Personal accomplishments are important, and measures of individualism correlate with valuing achievement (Oishi, Schimmack, Diener, & Suh, 1998). Thus, self-esteem should be highly desirable in individualist

cultures as an indicator that one has successfully distinguished oneself from others. Indeed, when individualism is specifically examined (instead of East-West regional differences), self-esteem and LS correlate more strongly in individualist than in collectivist societies (Diener & Diener, 1995; Oishi, Diener, Lucas, & Suh, 1999).

Relationship harmony. Several studies have found that relationship harmony and attaining goals that made close others happy were more consistently associated with SWB for Asians and Asian Americans than for European Americans (Kang, Shaver, Sue, Min, & Jing, 2003; Kwan et al., 1997; Oishi & Diener, 2001). These findings are consistent with the idea that Asian cultures tend to value collectivism or promote an interdependent self-construal. Harmonious relationships are critical in a culture in which one is dependent on and prioritizes the needs of one's in-group. However, the previous studies did not test whether collectivist values or interdependent self-construals *mediated* cultural differences in the effect of relationship harmony on SWB. It would be valuable to conduct such tests. A larger cross-national study did *not* find, for example, that satisfaction with family had a greater impact on LS in collectivist (versus individualist) countries (Diener & Diener, 1995).

Self-consistency. Another correlate of SWB that may be culturally dependent is self-consistency. For example, a person who is equally kind to friends, family, and strangers is more self-consistent than one who is only kind to friends. Self-consistency was a much stronger predictor of SWB for US participants (absolute r's = .27 to .50) than for Korean participants (absolute r's $\leq$ .22; Suh, 2002). These differences might reflect different cultural goals and affordances. For example, individualist cultures encourage and enable consistency by valuing the needs and interest of the individual. Collectivist cultures, on the other hand, prioritize the needs and interest of one's in-group. Because the in-group can shift in salience (e.g., friends, family,

work colleagues; Triandis, 1995), adaptability rather than consistency may be valued more in collectivist cultures. Self-consistency also implies that the self as a unique, stable configuration of attributes (i.e., an independent self) has been successfully achieved. Such consistency may be of less importance in cultures that view the self as contextualized and organized by one's relationships (i.e., an interdependent self; Markus & Kitayama, 1991). Yet another possible factor is dialectical beliefs. Consistency may be less of a mandate in dialectical cultures that cultivate a view of the world as constantly changing and alternating between opposing states. English and Chen (2007) showed that dialectical beliefs were associated with less consistency. These beliefs also mediated differences between Asian American and European Americans in self-consistency. To date, however, it is unknown whether dialecticism (or individualism or self-construals) *account for* cultural differences in the effects of self-consistency on SWB. Moreover, although Easterners tend to be less consistent across relationships, they tend to be as consistent as Westerners *within* their relationships (English & Chen, 2007; Koh, Scollon, & Wirtz, 2014). How within-relationship consistency affects SWB across cultures remains to be investigated.

Emotion regulation. How emotions are chronically regulated may have implications for SWB. The tendency to reappraise events in a more positive or less negative manner is positively associated with LS, whereas the tendency to suppress emotional expression is negatively associated with LS (Gross & John, 2003). However, the negative effects of emotional suppression may not generalize across culture. For example, suppression tends to be associated with depression and NA among European Americans but not among people of Eastern cultural heritage (Butler, Lee, & Gross, 2007; Cheung & Park, 2010; Su, Lee, & Oishi, 2013). Because Easterners tend to construe the self as interdependent, they may be relatively more inclined than Westerners to consider the reaction of others prior to a course of action. For example, when

Japanese and American participants watched a stressful film with an experimenter present, Japanese participants tended to smile more than Americans (Ekman, 1999). No cultural difference was observed when participants watched the film alone: Both groups expressed negative emotion, suggesting that Japanese may have been masking their negative emotions when the experimenter was present. The controlled expression of emotion may facilitate the goals of an interdependent self (e.g., maintaining social harmony) and therefore, be less detrimental to well-being. Cheung and Park (2010) did find that suppression was weakly associated with depression among people with an interdependent self-construal; however they did not examine whether this mediated the ethnic difference they observed between Asian Americans and European Americans. Su et al. (2013) observed that the tendency to suppress positive disengaged emotions (e.g., pride, feelings of superiority) was associated with greater depression among European American but not Chinese Singaporean participants. Moreover, the moderating effect of culture was mediated by independent self-construalIn both groups, an independent self-construal was associated with lower levels of depression. However, European Americans who suppressed feelings of pride and superiority construed the self as less independent. In contrast, suppression was unrelated to independent self-construal among Chinese Singaporeans. These results suggest that for Americans, feelings of pride may signal to the self that one has successfully distinguished oneself from others in a positive way. The suppression of pride and feelings of superiority removes this signal to the self, leading European Americans to construe themselves as less independent.

Additional Issues, Limitations, and Future Directions

Culture and well-being research has grown greatly since the seminal paper by Diener and Diener (1995). Despite this growth, we must acknowledge some limitations in the existing body

of research. Some of these could be viewed as challenges faced by the broader fields of cultural

and cross-cultural psychology (Triandis, 2007; Fiske et al., 1998).

Measurement Issues

Cross-cultural research is challenging for many reasons--not least of which is ensuring

equivalence of measurement. When scales are translated into different languages, there is a risk

that the meaning of an item is altered. Very often, translated measures are back-translated into

the original language to check that meaning has been retained (Brislin, 1970). A failure to back-

translate may have contributed to the finding that Tanzania ranked 2nd out of 70 countries on

happiness but 70th on life satisfaction in the World Values Survey (Tov & Au, 2013). Technical

notes suggested problems with the Kiswahili translation of *happiness*. The World Values Survey

also measures happiness and life satisfaction using single items, which can intensify the impact

of problematic translations. Vittersø, Røysamb, and Diener (2002) examined responses to the

five-item Satisfaction with Life Scale across 41 nations. In most countries, item responses were

strongly intercorrelated suggesting that the concept of life satisfaction may be similarly

understood across cultures. However, responses were less consistent in poorer countries—which

could reflect a lack of familiarity with responding to survey items.

Response styles are another potential threat to the validity of cross-cultural comparisons.

Chen, Lee, and Stevenson (1995) observed a tendency for East Asian participants to select the

midpoint of the scale, whereas North American participants were more likely to give extreme

responses (i.e., select the endpoints). However, this pattern has not been consistently observed on

measures of well-being (Diener, Suh, Smith, Shao, 1995). Furthermore, adjustments for response

styles do not seem to alter cross-cultural comparisons drastically (e.g., Chen et al., 1995; Tsai et

al., 2006; but see Schimmack, Oishi, & Diener, 2005). If a person tends to give high (or low)

ratings across items, this effect might be removed by ipsatizing item responses (subtracting the person's mean response from each item response). Tsai et al. (2006) found that cultural differences between Hong Kong Chinese and European Americans were largely consistent whether raw scores or ipsatized scores were compared.

Factor analytic methods can be used to evaluate the equivalence of measures across cultures. If responses to five items measuring LS are strongly correlated with each other, a factor analysis should reveal that the items all "load" onto a single factor. That is, the items have so much in common with each other that they probably measure the same construct. People who are truly satisfied with life should agree with items such as "I am satisfied with life" and "The conditions of my life are excellent" (Diener, Emmons, Larsen, & Griffin, 1985). A factor thus represents the underlying construct (e.g., life satisfaction) that influences responses to the items; and the item loading represents how much an item correlates with or is influenced by that underlying construct. If the satisfied people neither agree nor disagree with an item such as "I often feel cheerful", its loading on the LS factor will be lower than items that they *do* agree with. This would suggest that the cheerfulness item may be measuring something other than life satisfaction.

In cross-cultural research, multigroup confirmatory factor analysis (CFA) can be used to evaluate different levels of measurement invariance (Chen, 2008; Cheung & Rensvold, 2000). This approach essentially involves a comparison of the factor analytic results across two or more groups.Configural invariance is established when items intended to measure the same construct (e.g., LS) load onto the same factor in each cultural group studied. If five of the LS items load onto the same factor in the US, but only two of the items load together in China, this might suggest that the scale is not measuring the same construct in both cultures. That said, configural

invariance has been established across many nations for scales measuring LS (Lucas & Diener, 2008; Vittersø et al., 2002), PA and NA (Kuppens, Ceulemans, Timmerman, Diener, & Kim-Prieto, 2006; Lucas & Diener, 2008).

A higher level of invariance (*metric invariance*) exists when items not only load onto the same factors across cultures, but their loadings also are equivalent in *magnitude*. An item like "The conditions of my life are excellent" might load significantly with other LS items onto a common factor among both Easterners and Westerners, but the loading could be stronger for one group than the other. Although such an item informs us of how satisfied people are in both groups, a stronger loading among Westerners than Easterners, for example, might suggest that LS is based more heavily on the conditions of one's life among the former than the latter.

A still higher level of invariance (*scalar invariance*) exists when items have equivalent points of origin or intercepts. How a person rates the LS items (i.e., their observed responses) should reflect how satisfied with life they really are (i.e., their latent or true level of LS). Ideally, an Easterner and a Westerner who are equally satisfied with life (i.e., their latent LS is equivalent) should give the same ratings on the LS items. However, cultural norms such as modesty or self-criticism (Heine et al., 1999; Kim, Chiu, Peng, Cai, & Tov, 2010; Oishi, 2006) may lead Easterners to give *lower* ratings than Westerners even when they are equally satisfied with life. The item might still distinguish Easterners and Westerners who are satisfied versus dissatisfied with life, but the item intercepts would be lower for Easterners. Thus an Easterner and a Westerner might both be extremely satisfied but the Easterner rates her LS as '5' and the Westerner as '7' on a 7-point scale. Both may be slightly dissatisfied with life, but the Easterner

rates her LS a '2' and the Westerner a '4'. In other words, cultural differences in the item

intercepts but not the item loadings indicate a bias that is uniform across levels of latent LS.[1]

Different levels of invariance may affect the validity of cross-cultural comparisons in

different ways (Chen, 2008). If items measuring self-esteem load more strongly onto a common

factor among Westerners than Easterners (lack of metric invariance), this could inflate the slope

of self-esteem on LS in the former relative to the latter. If item responses overestimate the true

level of LS in Western samples, but underestimate it in Eastern samples (lack of scalar

invariance), this could artificially inflate mean differences between the two groups. As the use of

advanced psychometric methods in cross-cultural research increases, the measurement invariance

of scales measuring culture or SWB should be investigated more closely. It remains to be seen

whether previously reported cultural differences in mean levels and correlates of SWB still hold

when measurement equivalence is verified.

Identifying the Mechanisms Underlying Cultural Differences in SWB

Matsumoto and Yoo (2006) discussed the progression of cross-cultural research from

early observations of group differences in behavior to the measurement of cultural dimensions

(e.g., individualism-collectivism) along which countries could be discriminated. The next phase

of cross-cultural research should involve studies that link the major dimensions or elements of

culture to group differences in behavior. In other words, there is a need for studies that identify

the "active cultural ingredients" (Matsumoto & Yoo, 2006) or mediators underlying group

differences in psychological processes. As we reviewed earlier, a number of researchers have

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[1] In actuality, we cannot observe a person's true or latent level of life satisfaction, we can only improve our estimate of it by improving the reliability and validity of items in the scale. Suppose a LS scale possesses high test-retest reliability and is validated by showing high correlations between self-reported LS and informant reported LS (e.g., close others rating how satisfied they think the respondent is). This LS scale will provide a better estimate of a person's true level of LS than a scale with poorer reliability and validity evidence. Such a scale might then be used as a standard to evaluate other scales and items.

identified mediators of cultural differences in SWB structure and mean levels. Notwithstanding these important contributions, more work is needed on several fronts.

First, few studies have identified mediators of cultural differences in the *correlates* of SWB. Though Eastern and Western samples differ in the extent to which self-esteem, self-consistency, relationship harmony, and emotional suppression correlate with SWB, the cultural processes accounting for these differences are not well understood and deserve more attention. What are needed are tests of *mediated moderation*--showing that the moderating effect of cultural group operates through its effect on another variable. For example, research has suggested that (i) self-esteem has a stronger effect on SWB in Western (versus Eastern) samples because (ii) individualist cultures place more value on positive self-worth, and (iii) Western countries score higher on individualism (Diener & Diener, 1995; Kwan et al., 1997; Oishi et al., 1999; Park & Huebner, 2005). What awaits is a formal test of mediation to investigate whether the East-West group difference is accounted for differences in individualism in the respective cultural areas (see Yuki, Sato, Takemura, & Oishi, 2013, for a closely related analysis). If the difference is fully accounted for by variation in individualism, the next step might be to identify the specific aspects of individualism (e.g., self-reliance, uniqueness, self-expression, etc.; Vignoles et al., 2016) that moderate the effects of self-esteem. If the difference is not fully accounted for, then factors other than individualistic values should be considered.

Second, although some researchers have evoked individualism and self-construals as explanations for cultural differences in SWB, they have not always measured these constructs directly and tested whether they mediate cultural differences in the hypothesized manner (for exceptions see Liu et al, 2017; Sims et al., 2015; Su et al., 2013). In the case of East-West comparisons, this is a critical point because these cultures vary on other types of values, beliefs,

and practices. We have noted how dialectical beliefs also mediate cultural differences in the structure and mean levels of SWB (Miyamoto & Ma, 2011; Miyamoto et al., 2010; Ng & Hynie, 2016; Spencer-Rodgers et al., 2010). It may be that values, self-construals, and dialectical beliefs each account for some differences but not others. This could be learned from studies that assess some or all of these constructs, enabling their mediating effects to be compared.

Third, other elements of culture can be investigated as mediators. For instance, the types of emotions that people desire to feel (ideal affect) vary across cultures. Whereas European Americans tend to desire high-arousal PA (e.g., enthusiasm), Hong Kong Chinese tend to desire low-arousal PA (e.g., calm; Tsai, Knutson, & Fung, 2006). Cultural differences in ideal affect (i.e., what people want to feel) may underlie differences in actual affect (i.e., the emotions people actually feel) by influencing the way people regulate their emotions. This is suggested by Miyamoto and Ma's (2011) study in which prolonged happiness was less desirable among Asian students than European American students, and those who held such beliefs experienced PA for a shorter duration after doing well on an exam. Moreover, discrepancies between ideal and actual PA may be associated with depression in culturally distinct ways. For European Americans, discrepancies in actual versus ideal high-arousal PA but not low-arousal PA predicted depression; for Hong Kong Chinese, the reverse pattern was observed (Tsai et al., 2006). The emotions people *want* to feel may be shaped by their goals and values (Tsai, Miao, Seppala, Fung, & Yeung, 2007). People who value power, for example, desire to feel anger and pride (Tamir et al., 2016). The latter emotions may be helpful when confronting others or asserting oneself—both of which support the goal of maintaining one's position over others. Thus, ideal affect may mediate the relation between values and actual affective experience (as well as SWB more generally).

We have largely focused on values, self-construals, and beliefs. Nevertheless, cultural practices--the way people *actually* behave and interact in a society--may also mediate group differences in SWB. For example, child-rearing practices emphasize self-enhancement in the US but self-criticism in Japan (Heine et al., 1999). Whereas European American mothers may try to cultivate their child's self-esteem, Japanese mothers may draw attention to their child's shortcomings. These different practices may be related to individualism-collectivism, but not entirely. It is not clear, for instance, that self-criticism is a fundamental aspect of all collectivist cultures (see next section). Differences in self-enhancement and self-criticism may explain the tendency for European American participants to base their weekly satisfaction on their *best* day of the week, whereas Japanese participants base it on their *worst* day of the week (Oishi, 2002). This hypothesis remains to be tested.

Moving Beyond East-West Differences

As evident from our review, research on cultural differences in SWB draws heavily from comparisons of Easterners and Westerners. Tov and Au (2013) examined the representation of nations in the World Database of Happiness (Veenhoven, n.d.)--the most comprehensive collection of survey data on well-being. Almost 70% of the data come from European and North American nations, and 15% from Asian nations. Though we certainly need more well-being studies in Asia (the region encompasses a wide swath from the Middle East to East Asia), the proportion of data from Latin America (9%) and Africa (6%) is even less. By comparison, 61% of the world population lives in the Asian region, 14% in Africa, and 9% in Latin America (Tov & Au, 2013). Thus the Asian and African regions are underrepresented in the current database on well-being. This imbalance reflects the longer history of population surveys conducted in the West.

Expanding research outside of the East-West axis will critically advance theory on culture and well-being. Researchers draw heavily on constructs such as individualism-collectivism or independent-interdependent self-construals to develop hypotheses about how culture influences well-being. Western cultures are typically viewed as individualist and promoting an independent self-construal. The remaining regions of the world are presumably collectivist and interdependent. However, there is tremendous diversity in the "non-Western" world. For example, although Latin America and Asia are thought to promote collectivist values and interdependent self-construals (Hofstede, 2001; Markus & Kitayama, 1991; Triandis, 1995), average levels of SWB in many Latin American countries are higher than they are in Asia (Helliwell et al., 2017). Clearly there are important differences among Asian, Latin American, and African cultures, both within and between regions. A recent cross-national study revealed *several* distinct aspects of independence and interdependence that were measured by self-construal scales (Vignoles et al., 2016). African, Asian, and Latin American samples were similar in their emphasis on receptiveness to others. Nonetheless, relative to the other two groups, African samples emphasized self-interest more, whereas Latin American samples emphasized self-expression and uniqueness more. How these varieties of independence-interdependence influence the structure, mean-levels, and the correlates of well-being in Africa and Latin America would enrich our understanding of how culture shapes well-being. It is also important to acknowledge that a great deal of diversity exists *within* African, Latin American, and Asian countries—each with unique histories (e.g., colonization, political transformations) and unique mixtures of indigenous and immigrant populations.

Operationalizing Culture

Cross-cultural researchers (e.g., Hofstede, 2001; Triandis, 1995) have noted that cultural dimensions such as individualism-collectivism are meant to be descriptions of societies rather than individuals. This distinction may apply to the concept of culture more generally as a *system* of shared beliefs, values, and practices. Yet, cross-cultural psychologists often measure cultural values and self-construals by administering scales to individuals. Are researchers studying "culture" or are they studying individuals with specific values and beliefs?

The meaning of a construct measured at the individual level may not be equivalent to one measured at the societal level. For instance, in one study, individuals who endorsed collectivist values reported higher levels of well-being (Bettencourt & Dorr, 1997). In contrast, collectivist *nations* often yield lower levels of SWB than individualist nations (Diener et al., 1995; Fischer & Boer, 2011). Such discrepancies do not necessarily imply that individual-level measures of culture are useless. They simply suggest that the equivalence of measures across levels of analysis should be empirically scrutinized and not just assumed. Other studies have observed higher levels of SWB among *individuals* who possess an independent self-construal or individualistic values (Benet-Martínez & Karakitapoğlu-Aygün, 2003; Su et al., 2013), consistent with the nation-level findings. Occasional discrepancies could be due to variations in the specific measures of cultural orientation employed. Some scales may emphasize certain aspects of independence/interdependence and de-emphasize other aspects (Vignoles et al., 2016).

Our review has focused on the self-endorsement of cultural values and beliefs. However, other approaches are worth acknowledging. Instead of asking participants to rate their personal values and beliefs, they could be asked to rate the *perceived cultural importance* of various values, beliefs, and norms in their society (Wan, Chiu, Tam, Lee, Lau, & Peng, 2007). The perceived *congruence* between the values of the individual and those of his or her society may

enhance SWB beyond personal endorsement. Supporting this idea, extraverted individuals are happier if they live in extraverted countries (i.e., societies characterized by high mean levels of extraversion; Fulmer, Gelfand, Kruglanski, Kim-Prieto, Diener, Pierro, & Higgins, 2010).

Other scholars have suggested that cultural differences may not always manifest in the values that people consciously endorse. Markus and Kitayama (2010) noted that the expression of cultural values and beliefs may be more tacit than is typically appreciated. An alternative to operationalizing culture through self-report measures might be to code cultural products such as books, movies, and newspapers for distinctive features and themes. Oishi, Graham, Kesebir, and Galinha (2013) examined the definition of happiness in dictionaries from 30 nations. In the majority of nations (80%), happiness was defined as luck or fortune. However, SWB was higher in countries that defined happiness not as luck but as state of pleasure, satisfaction, or contentment. The authors suggested that in countries where happiness is *not* viewed as luck, people may assume it is a state attainable through personal actions and decision-making.

Finally, we have not said much about the influence of religion on SWB. If culture is a system of shared beliefs, values, and practices, then it seems that religions qualify as a form of culture (Cohen, 2009). Religiosity is associated with greater SWB--in part because religious individuals tend to report higher levels of social support and purpose in life (Diener, Tay, & Myers, 2011). Religious groups also differ in their beliefs about the world (Safdar, Lewis, Greenglass, & Daneshpour, 2009), and world views such *social cynicism* and *reward for application* are associated with LS (Chen, Lam, Wu, Ng, Buchtel, Guan, & Deng, 2016). More directly, religious teachings may influence the type of emotions people want to feel. Relative to Christian Americans, Buddhist Americans value low-arousal PA more and high-arousal PA less (Tsai, Miao, & Seppala, 2007); these differences are independent of ethnicity. In addition, a

content analysis of English-language self-help books published in the US revealed that Buddhist books emphasized low-arousal PA more than Christian books, whereas the reverse was observed for high-arousal PA. This study reinforces the potential utility of studying cultural products.

Conclusion

Cultural values and beliefs influence SWB by shaping the structure and interrelationships among PA, NA, and LS, mean levels of SWB, and the correlates of SWB across cultural contexts. Since our last review (Tov & Diener, 2007), there have been many promising developments and directions in studies of culture and well-being. Advanced statistical methods to evaluate measurement equivalence have become more popular; future applications to scales measuring culture and SWB could alter some of the cultural differences we have noted above.. Researchers are also asking important questions about the mechanisms underlying cultural differences in SWB. Some mediators that have already been examined are dialectical beliefs, individualist-collectivist values, and self-construals. However, more research in this area is needed. Specific aspects of individualism or self-construals should be measured and tested. There has also been an increase in cross-national collaborations (e.g., Saucier et al., 2015), and with this, we hope, more comparative studies of culture and SWB that involve Latin American and African countries. Finally, alternative ways of operationalizing culture (e.g., cultural practices, perceived cultural importance, cultural products, religious beliefs, world views) can expand our understanding of how culture influences SWB.

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