Personality, Culture, and Subjective Well-being: Emotional and Cognitive Evaluations of Life

Ed Diener,¹ Shigehiro Oishi,² and Richard E. Lucas³

¹Department of Psychology, University of Illinois, Champaign, Illinois 61820; e-mail: ediener@s.psych.uiuc.edu

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■ Abstract Subjective well-being (SWB), people's emotional and cognitive evaluations of their lives, includes what lay people call happiness, peace, fulfillment, and life satisfaction. Personality dispositions such as extraversion, neuroticism, and self-esteem can markedly influence levels of SWB. Although personality can explain a significant amount of the variability in SWB, life circumstances also influence long-term levels. Cultural variables explain differences in mean levels of SWB and appear to be due to objective factors such as wealth, to norms dictating appropriate feelings and how important SWB is considered to be, and to the relative approach versus avoidance tendencies of societies. Culture can also moderate which variables most influence SWB. Although it is challenging to assess SWB across societies, the measures have some degree of cross-cultural validity. Although nations can be evaluated by their levels of SWB, there are still many open questions in this area.

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²Department of Psychology, University of Minnesota, Minneapolis, Minnesota 55455; e-mail: soishi@tc.umn.edu

³Department of Psychology, Michigan State University, East Lansing, Michigan 48824; e-mail: lucasri@msu.edu

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INTRODUCTION

Defining Subjective Well-Being

The field of subjective well-being (SWB) comprises the scientific analysis of how people evaluate their lives—both at the moment and for longer periods such as for the past year. These evaluations include people's emotional reactions to events, their moods, and judgments they form about their life satisfaction, fulfillment, and satisfaction with domains such as marriage and work. Thus, SWB concerns the study of what lay people might call happiness or satisfaction. General reviews of SWB can be found in Argyle (2001), Diener (1984), Diener et al. (1999), and Kahneman et al. (1999).

Everyone's moods, emotions, and self-evaluative judgments fluctuate over time; SWB researchers study these fluctuations but also examine the longer-term mean level differences that exist between individuals and societies. Although each of the components of SWB reflects people's evaluations of what is happening in their lives, the facets of SWB such as positive affect, lack of negative affect, and life satisfaction show some degree of independence (Andrews & Withey 1976, Lucas et al. 1996) and therefore should be measured and studied individually. In many cases, however, researchers continue to measure a single aspect of well-being or ill-being such as depression or life satisfaction, and therefore those are the data that are available for this review.

History of Research on Subjective Well-Being

Several different lines of research come together in the history of the field of SWB. A major influence on the field came from sociologists and quality of life researchers who conduct surveys to determine how demographic factors such as income and marriage influence SWB (e.g., Bradburn 1969, Andrews & Withey 1976, Campbell et al. 1976).

Another influence on the field came from researchers working in the area of mental health, who wanted to extend the idea of mental health beyond the absence of symptoms of depression and distress to also include the presence of happiness and life satisfaction (e.g., Jahoda 1958). Yet another influence was from personality psychologists who studied the personalities of happy and unhappy people (e.g., Wessman & Ricks 1966). Finally, social and cognitive psychologists studied how adaptation and varying standards influence people's feelings of well-being (e.g., Brickman & Campbell 1971, Parducci 1995). These various strands were brought together in integrative reviews by Diener (1984) and Veenhoven (1984). Because of the diverse influences on the field, a variety of methods such as surveys, laboratory experiments, and intensive studies of individuals have all been commonplace.

There are a number of theoretical traditions that have contributed to our understanding of SWB. Humanistic psychology stimulated the interest in positive well-being. A number of factors such as temperament (Lykken & Tellegen 1996), adaptation to conditions (Lucas et al. 2002), and goal striving (Emmons 1986) substantially influence levels of SWB. However, there is currently no single conceptual scheme that unites the field, although attempts at unification have been made (e.g., Diener & Lucas 2000).

SWB is measured in a variety of ways. For the emotional components, for example feelings of joy and contentment, broad survey measures have been used (e.g., "In general how happy are you?"), as well as experience sampling of moods and emotions over time and informant reports from family and friends. The cognitive component of SWB has been assessed with life satisfaction surveys and also with measures of satisfaction and fulfillment in various life domains such as marriage, work, and leisure (see Sandvik et al. 1993 for a description of alternative methods of measurement of SWB).

The Importance of Subjective Well-Being

SWB is one measure of the quality of life of an individual and of societies. Philosophers have debated the nature of the good life for millennia, and one conclusion that has emerged from this debate is that the good life is happy (although philosophers often differ on the definition of happiness). We consider positive SWB to be necessary for the good life and good society, but not sufficient for it. It is hard to imagine that a dissatisfied and depressed culture would be an ideal society, no matter how desirable it is in other respects. A person or society that has high SWB, however, might still be missing an ingredient such as fairness, which people might consider to be essential to a high quality of life. Diener & Suh (1998), working from the philosophical notion of utility, suggested that SWB is one of three major ways to assess the quality of life of societies, along with economic and social indicators. How people feel and think about their own lives is essential to understanding well-being in any society that grants importance not just to the opinions of experts or leaders, but to all people in the society. We therefore maintain that abundant SWB is a necessary, but not sufficient, characteristic of the good society and the good life. As such, the area of SWB is of fundamental importance to the behavioral sciences.

Structure of the Review

In this chapter we focus on two interrelated factors that influence SWB—personality and culture. These two domains are intertwined in that both culture and personality are influenced by social learning, genetics, and their interactions, and both have significant influences on SWB. The parallels between culture and personality are obvious. Both can influence mean levels of SWB, as well as moderate the factors that correlate with people's experiences of well-being. Furthermore, culture can influence personality, and vice-versa. Thus, both levels of analysis are fundamental to our understanding of SWB and are covered in this review.

One aspect of the literature that we do not review concerns the outcomes of SWB—the benefits and costs of the experience of feeling good about one's life. Lyubomirsky et al. (2001) reviewed evidence showing that happiness and high chronic levels of positive affect have benefits in terms of marital quality, income, creativity, sociability, and productivity. However, little is known about how either personality or culture moderates these outcomes. Most of the research has been conducted in western nations, and very little is known about how temperament might alter the benefits of high SWB. Therefore, we eagerly anticipate the time when sufficient empirical work will be available to allow an informative review of this domain. The challenge is to disentangle predictors and consequences of SWB; thus far this has been approached with long-term longitudinal designs and with experimental research in which emotions are manipulated and the results observed.

PERSONALITY AND SUBJECTIVE WELL-BEING

Major Characteristics that Influence Subjective Well-Being

Early SWB researchers focused on identifying the external conditions that lead to satisfying lives. For example, in his influential article entitled "Correlates of Avowed Happiness," Wilson (1967) catalogued the various demographic factors that were related to SWB measures. Yet after decades of research, psychologists came to realize that external factors often have only a modest impact on well-being reports (for a review see Diener et al. 1999). Demographic factors such as health, income, educational background, and marital status account for only a small amount of the variance in well-being measures. Research instead shows that SWB is fairly stable over time, that it rebounds after major life events, and that it is often strongly correlated with stable personality traits. Thus, many researchers have turned their attention towards understanding the relations between personality and SWB.

Although many personality traits have been linked with SWB (see DeNeve & Cooper 1998 for a review), much theoretical and empirical work has focused on the moderate to strong correlations between SWB and the traits of extraversion and neuroticism (Costa & McCrae 1980, Tellegen 1985, Headey & Wearing

1992, Watson & Clark 1992). Lucas & Fujita (2000), for example, conducted a meta-analytic review and found that on average, extraversion correlated .38 with pleasant affect at the zero-order level. Furthermore, when multiple, diverse methods of measurement were used to model the association between extraversion and pleasant affect, the correlation often approached .80. Fujita (1991) found similarly strong correlations when he used structural equation modeling techniques to assess the strength of the correlation between neuroticism and negative affect. Because of the consistency of these findings, many researchers have suggested that extraversion and neuroticism provide the primary links between personality and SWB.

Yet, as DeNeve & Cooper (1998) showed, focusing solely on extraversion and neuroticism may oversimplify the complicated pattern of associations among personality and SWB. There are a number of broad dimensions and narrower traits that have exhibited consistent correlations with SWB constructs. For example, DeNeve & Cooper showed that the Big Five dimensions of agreeableness and conscientiousness correlated approximately .20 with SWB measures, and a number of narrow traits such as repressive defensiveness, trust, locus of control, desire for control, and hardiness all exhibited moderate correlations with SWB. It is clear that these and other traits such as self-esteem and dispositional optimism are related to SWB (Lucas et al. 1996). What is unclear is whether these narrower traits uniquely predict SWB once the shared variance with traits such as extraversion and neuroticism is controlled.

It is also likely that additional nontrait features of personality are related to SWB constructs. Emmons (1986) showed that various features of one's goals (including the existence of important goals, progress towards those goals, and conflict among different goals) can have important implications for emotional and cognitive well-being; other researchers (e.g., Cantor & Sanderson 1999, Higgins et al. 1999, Scheier & Carver 1993) have suggested that the way we approach our goals influences SWB. In addition, researchers have suggested that having a coherent sense of one's personality and acting in accordance with that personality are positively related to well-being (e.g., Donahue et al. 1993, Sheldon et al. 1997), though these findings might not generalize to less individualistic cultures (Suh 1999).

Whether researchers focus on traits or on other nontrait personality factors, they must be careful not to make inferences about causal priority from correlational data. Most studies of personality and well-being are correlational, and although researchers often assume that stable personality traits must influence what they believe to be the more transient feelings of well-being (e.g., Eysenck & Eysenck 1985), there is evidence that the reverse causal direction may be true. For example, Cunningham (1988) and Isen (1987) have shown that inducing pleasant moods can lead to greater feelings of sociability, which is a defining characteristic of the extraversion trait. Thus, it is possible that chronically high levels of positive affect might induce greater sociability. Therefore, researchers must focus attention on determining the causal direction of the observed personality and SWB associations.

This will require developing strong theories about the processes underlying the relations, as well as collecting longitudinal data.

Personality Theories of Subjective Well-Being

Individual differences in both personality and SWB emerge early in life, are stable over time, and have a moderate to strong genetic component (see Diener & Lucas 1999 for a review). These findings have led some to conclude that SWB is primarily determined by our inborn predispositions (e.g., Lykken & Tellegen 1996). Others have argued that the importance of inborn traits may depend on the types of questions we ask about SWB. For example, Lucas et al. (2002a) argued that by looking at SWB within individuals over time, researchers will find that life events and life changes have important implications for well-being beyond the effects of personality. Yet, regardless of the origins of individual differences, personality and SWB researchers must develop precise theories that can explain why certain individuals are chronically happier and more satisfied with their lives. Temperament theories of personality and SWB have been focused primarily on three aspects of individual differences in well-being: (a) baseline levels of affective and cognitive well-being, (b) emotional reactivity, and (c) cognitive processing of emotional information. For example, Headey & Wearing (1992) proposed the Dynamic Equilibrium Model, in which individuals have unique baseline levels of well-being that are determined by their personality. Specifically, they argued that individuals with certain personalities are likely to experience certain types of events—extraverts may be more likely than introverts to get married or to get a high-status job—and these events influence an individual's average level of well-being. Unusual events can move a person above or below this baseline level, but according to Headey & Wearing, the individual will eventually return to baseline as events normalize.

Other researchers have argued that average differences in well-being are due to differences in emotional reactivity. Based on Gray's (1970, 1991) theory of personality, scientists such as Tellegen (1985) and Larsen (e.g., Larsen & Ketelaar 1989, 1991; Rusting & Larsen 1997) argued that extraverts are more reactive to pleasant emotional stimuli than are introverts, and neurotic individuals are more reactive to unpleasant emotional stimuli than are stable individuals. Although there has been some support for individual differences in reactivity in laboratory studies (e.g., Larsen & Ketelaar 1989, 1991; Rusting & Larsen 1997), evidence of real-world reactivity assessed in experience-sampling studies has been mixed (see e.g., Gable et al. 2000, Lucas et al. 2002b), and the small differences in reactivity that have been found do not account for all of the covariance between personality and SWB.

A final temperament variable that might explain the relations between personality and SWB is the way people process emotional information. Rusting (1998) reviewed evidence that the personality traits of extraversion and neuroticism, as well as long-term affective traits and momentary affective states, are related to individual differences in the processing of emotional content. There is evidence that

people are more likely to perceive, attend to, and remember emotionally congruent or trait-congruent information better than incongruent information. For example, Derryberry & Reed (1994) found that extraverts were slower than introverts to shift their attention away from rewarding stimuli. Tamir et al. (2002) found that extraverts more quickly related events to their motives when they were in a positive mood, whereas introverts did so more quickly when they were in a negative or neutral mood.

Diener & Lucas (1999) reviewed a number of additional theoretical explanations for individual differences in SWB, including emotion-socialization models and goal models. However, these models are often more useful in explaining the long-term stability and consistency of SWB than the specific links between personality traits and well-being.

Personality-Based Causes of Subjective Well-Being

Most theories explaining the personality—well-being relation have focused on the direct effects of personality on emotional and cognitive well-being. However, it is also likely that there are indirect or interactional effects, such that different events and life circumstances affect well-being differently depending on one's personality. For example, although extraverts are generally happier than introverts, Kette (1991) found that extraverted prisoners were less happy than introverted prisoners. This suggests that the situational features of prison were not congruent with an extraverted disposition. Oishi et al. (2001) illustrated the interaction between personality and situations more directly: They used a daily diary study to show that the experience of physical pleasure was more strongly related to daily satisfaction among high sensation-seekers than among low sensation-seekers. Other researchers have found, however, that extraverts do not react any differently than introverts to social and nonsocial situations and life circumstances (e.g., Diener et al. 1984, Lucas 2001, Pavot et al. 1990).

Moscowitz & Coté (1995; also see Coté & Moscowitz 2000) attempted to resolve the discrepant findings by positing that it is not the congruence between personality and situations that is important for affect, but the congruence between personality and behaviors. They showed that experiencing trait-congruent or trait-incongruent situations was not related to differential levels of affect. For example, extraverts are not necessarily happier in social situations. However, for certain traits (agreeableness, dominance, and quarrelsomeness in one study; agreeableness and neuroticism in another), engaging in trait-congruent behaviors was associated with higher levels of positive affect, and trait-incongruent behaviors were associated with higher levels of negative affect. For example, dominant people are likely to report higher SWB when they are behaving in a dominant manner.

Oishi et al. (1999b) suggested that values play an important interactive role in the associations between personality and well-being. They found that values moderated the relation between specific domain satisfactions and overall life satisfaction and values moderated the effect of daily activities on daily satisfaction. People high

in achievement orientation are more likely to take academic success into account than are low sensation seekers when evaluating their satisfaction with their day. Together, these studies suggest that it is necessary to examine units of analysis beyond simple traits and situations to find interactive effects of personality on SWB.

CULTURE AND SUBJECTIVE WELL-BEING

Differences in Mean Levels of Subjective Well-Being Between Nations

Many of the findings on culture and SWB parallel the conclusions on personality and SWB. International surveys of life satisfaction show consistent mean level differences across nations (e.g., Inglehart & Klingemann 2000, Veenhoven 1993). For instance, between the years 1958 and 1987 Japanese life satisfaction fluctuated around 6 on a 10-point scale (Veenhoven 1993). Denmark's national average life satisfaction, on the other hand, fluctuated around a value of 8. Cultural differences parallel to the international differences have been observed within the United States across different ethnic groups. For instance, Oishi (2001a) found that European Americans were significantly more satisfied with their lives than Asian Americans. Similarly, Okazaki (2000) observed that Asian Americans reported higher levels of depression and anxiety than did European Americans. Thus, there are differences between nations, and between ethnic groups within nations.

The Causes of Societal Mean Level Differences in Subjective Well-Being

Many studies are based on the analysis of nations rather than cultures per se because data are collected within each country. However, nations are often aligned with cultures because of their historical development, although obviously there is not a perfect match (e.g., Hermans & Kempen 1998). A comprehensive examination of the effects of culture on well-being can be found in Diener & Suh (2000). A number of factors might explain why societies differ in mean levels of SWB (Diener & Lucas 2000). In the following section we review several variables that appear promising in explaining nation-level differences. In our opinion societal differences in mean SWB are likely to be overdetermined—to be due to several factors, not to any single one.

Wealth and Related Predictors

Diener et al. (1995) found large differences in SWB between nations, which correlated substantially with the average levels of income in those nations. Diener & Biswas-Diener (2002) reviewed a number of studies that report correlations in the neighborhood of .60 to .70 between the wealth of nations and their mean levels of SWB. When we realize that wealthy nations are likely to score higher on human rights, equality, longevity, and democratic governance, the strong relation between

wealth and SWB of societies is not surprising. Although attempts have been made to disentangle the effects on SWB of income and the various social indicators that co-occur in wealthier versus poorer nations, these have not been successful because of the high intercorrelation of the predictors and the limited sample size of nations available for such analyses. For example, Diener et al. (1995) concluded that individualism was crucial to the higher happiness levels of wealthy nations, but Schyns (1998) failed to replicate this pattern. Such attempts seem unlikely to achieve a replicable conclusion until we study a larger number of nations and have longitudinal measures of key variables.

Income is most strongly related to SWB at very low levels of money, where small increments in wealth can have a substantial impact. For example, among respondents in the slums of Calcutta, Biswas-Diener & Diener (2001) report a strong correlation of .45 between income and life satisfaction. Diener & Biswas-Diener (2002) report that the correlation between income and SWB is much smaller in economically developed nations. At the between-nation level, Inglehart & Klingemann (2000) report a curvilinear relation similar to that found for individuals (Diener et al. 1993), in which income differences matter most to SWB at low levels of wealth. One explanation for why income matters most at low levels is based on the idea that at low levels of income, increases are likely to be related to inherent human needs, for example obtaining food and shelter, whereas at high levels of income, increases simply lead to the purchase of more luxury items (Veenhoven 1991). The hypothesis is that SWB results from meeting innate and universal human needs and not from meeting desires that are not related to needs. In sum, the explanation for why higher SWB is reported in wealthy nations is unclear, but the finding itself has been replicated many times.

Other Causes of Differences Between Cultures

Social psychological research in North America has demonstrated that self-serving bias occurs in various social judgments ranging from attributions (Zuckerman 1979) to reports of personality (Dunning et al. 1989). Self-serving biases are deviations from reality that put the respondent in a more favorable light than is warranted by the facts. One self-serving bias is self-enhancement, which refers to rating oneself as relatively better compared to how one rates others. Such selfserving biases, however, occur less frequently among East Asians and are weaker when they do occur (e.g., Heine et al. 2000). In contrast, researchers have found self-critical tendencies in self-evaluations and attributions among East Asians (see Heine et al. 1999). Thus, cultural difference in self-enhancement might be one factor causing cultural differences in mean levels of well-being. Oishi & Diener (2001c) found that European Americans overestimated the number of anagram tasks they solved a week earlier, whereas Asian Americans underestimated the number. In a daily diary study, Oishi (2001a) found that European Americans' life satisfaction judgment of the week as a whole was significantly higher than the average of their daily satisfaction during the same seven days, whereas Asian Americans' life satisfaction of the week as a whole was almost identical to the average of their daily satisfaction.

In a related vein, recent research revealed cultural differences in approach versus avoidance orientation (Lee et al. 2000, Briley & Wyer 2002). For instance, Lee et al. (2000) demonstrated that thinking about one's group membership, which is a chronic collectivist tendency, made people focus on negative consequences (i.e., avoidance or loss focus), whereas thinking about one's self independent of others, which is a chronic individualist tendency, made people focus on positive consequences (i.e., approach or gain focus). In the context of SWB research, Elliot et al. (2001) found that Asian Americans, South Koreans, and Russians pursued more avoidance goals than did European Americans. In sum, cultural factors such as self-enhancement versus self-criticism and approach versus avoidance goals play a role in understanding mean differences in SWB across nations.

Tradeoffs Between Subjective Well-Being and Other Values

An intriguing finding emerging from the field of SWB is that there are tradeoffs that seem inherent in certain societal patterns: cultural strategies that have both costs and benefits. For example, individualistic nations have high mean levels of reported SWB and at the same time also manifest the highest levels of suicide and divorce (Diener 1996). It might be that the very same freedom arising from lowered social restraints on behavior can lead to happiness when things are going well, but can lead to higher levels of pathology such as suicide when things are going poorly. Marginal individuals such as those with mental illness or mental handicaps might have a harder time in individualistic societies than in collectivist ones, whereas people with a large number of strengths and resources might enjoy the individualistic lifestyle more. It is also possible that people who fail to achieve happiness in individualistic nations are more likely to commit suicide because they feel like failures and are less constrained by normative expectations.

Another manifestation of tradeoffs is in the finding that people are sometimes willing to sacrifice immediate happiness for the sake of achieving other goals that are valued in their culture. For example, Asakawa & Csikszentmihalyi (1998) found, using an experience-sampling method, that Asian-American students were more likely to be happy when they were engaging in an activity that was related to important future goals (e.g., academic achievement), whereas Caucasian students were happy when engaging in an activity that was important to them at that moment. Interestingly, Caucasian students tended to be less happy when engaging in an activity that was related to important future goals. Oishi & Diener (2001c) also found that European Americans tended to switch to another task when they did not do one task well, whereas Asian Americans tended to stick with the task that they did not do well on, in order to master it (also see Heine et al. 2001). The decision led to greater future enjoyment of the task of their choice among European Americans than among Asians. This strategy of switching activities when a person does not do well might be a good one in terms of maintaining positive moods.

However, this might not be an ideal strategy in the long run when individuals need to acquire new skills. Similarly, Kim-Prieto (2002) found that Asian-American students were more likely than Caucasian students to choose achievement goals despite the immediate hedonic consequences.

Diener (2000) reported that people in various societies differentially value happiness. Although respondents in all countries said that happiness and life satisfaction are important, those in Latin American countries gave higher importance ratings to SWB than did those in certain other societies, for example those in the Pacific Rim of Asia. These findings are consistent with the idea that people in certain East Asian nations are more likely to sacrifice positive emotions to achieve other goals they deem important, for example achievement. One open question is whether achieving these other goals ultimately leads to higher levels of life satisfaction even though positive moods might be sacrificed in the short run. If people in some cultures are more willing to give up happiness, defined as positive emotions, to obtain valued goals, they might in the long run nevertheless achieve high levels of life satisfaction.

Measurement Validity Across Cultures

Assessing SWB across cultures presents formidable challenges. The existing research suggests that cross-cultural comparisons of SWB have some degree of validity. Scollon et al. (2002a) compared the convergence of several different types of measures of positive affect and negative affect across five cultures. They found that global reports of emotion, experience-sampling-moment reports of mood, and retrospective memories of emotions tended to converge in terms of the relative positions of the cultures. Similarly, Balatsky & Diener (1993) found that memory for good events versus bad events converged with reports of life satisfaction among Russians. Oettingen & Seligman (1990) found that observational coding of smiling led to similar conclusions about the relative depression rates of East Germans versus West Germans, as did ratings of attributions for events found in newspaper articles. Although the multi-method studies to date are encouraging, much more work in this direction is needed.

One concern in cross-cultural research is whether response artifacts such as social desirability or impression management might differentially influence reports of SWB across cultures. Findings to date are somewhat encouraging, but do indicate that for some groups impression management might influence responses more than for other cultural and age groups (Okazaki 2000, Park et al. 1988). Diener et al. (1993) studied differences in responding due to humility, number use (e.g., the desire to use the middle of the scale), and other artifacts, and concluded that these potential contaminants were not necessarily a serious problem in the cross-cultural measurement of SWB. However, Byrne & Campbell (1999) found that different item-response characteristics can influence depression scores across cultures. Because of issues related to cross-cultural measurement, we recommend that investigators continue to use methods that can help assess artifacts and

begin using multimethod assessment to guard against various types of measurement error. For example, researchers can use on-line experience sampling (discussed below), recall for good and bad events (e.g., Balatsky & Diener 1993), informant reports, and biological measures such as cortisol. The reader is referred to Sandvik et al. (1993) for a discussion of the convergence of the measurement methods.

One issue is whether measures imported from western nations are valid in nonwestern cultures. Vittersø et al. (2002), for example, found that reports of life satisfaction were less reliable in poorer nations, and therefore the correlation between life satisfaction and the per capita wealth of nations decreased when a correction was made for reliability. In addition, Vittersø et al. found a slightly different structure for the life satisfaction items across cultures. These results indicate that cross-cultural investigators need to examine the factor structure of their scales across cultures, as well as scale reliability. More sophisticated methods of examining participants' responses, such as item-response theory (e.g., Byrne & Campbell 1999) can also be used to carefully examine whether people respond to items in a similar way across cultures.

Scollon et al. (2002b) included indigenous emotion words when they assessed positive and negative affect in five cultures. They found that the indigenous words loaded highly on the emotion factors derived from the western emotion words and in fact sometimes loaded most highly of any emotions on the positive and negative affect factors. This finding suggests that the value of including indigenous emotion words might in part be that they are excellent measures of the underlying emotion factors. It is noteworthy that in all five cultures, Scollon et al. (2001) found a strong two-factor structure for emotions, representing positive and negative affect.

Top-down versus bottom-up influences on SWB (Diener 1984) refer to broad personality and cognitive factors that influence SWB versus events and circumstances that can influence SWB. Leonardi et al. (1999) suggest that different measures may differentially reflect top-down versus bottom-up processes. One example of a top-down factor is positivity, the tendency to view things in a positive light if sufficient leeway is given to do so. An interesting cross-cultural finding suggests that the degree of positivity varies across cultures, is most likely to influence broad, global reports of SWB, and is less likely to influence more specific and concrete reports. Diener et al. (2000) found that when satisfaction with broad domains such as recreation and education was compared to satisfaction with narrower domains such as television and one's professors, the difference predicted life satisfaction. Further, the broad domains were rated as more satisfying than the narrow domains in those nations where life satisfaction was said to be most desirable. The authors interpreted this finding to mean that when satisfaction with specific aspects of life was assessed, the reports depended more on a bottom-up assessment of the rated domain, whereas when satisfaction with broad domains was queried, the reports were driven more by top-down dispositions that vary across cultures. Oishi & Diener (2001a) replicated these findings at the individual level and showed that even controlling for extraversion and neuroticism, individuals high in global life satisfaction evaluated global domains (e.g., social relationships) as more satisfying than those low in life satisfaction, given the same level of satisfaction with the specific, corresponding domains (e.g., friendships and family relationships).

A recent trend in emotion research is to access affect at random moments over time with what is called the "experience-sampling method." These on-line reports of emotion can be averaged to give an indication of people's emotions in their everyday lives. It appears that recalled reports of emotion are influenced by people's expectations and self-concept, not just their on-line experiences of emotion. Wirtz et al. (2001) found that students' memories of their emotions on spring break were predicted by their expectations prior to the vacation, even when the on-line emotional experiences during spring break were controlled. Extending this finding to the cross-cultural context, Scollon et al. (2002a) found that within each of the five cultures they studied, global self-reports of emotional experience predicted recalled emotions over and above on-line measures of emotion. Taken together, these findings suggest that global reports of emotions and life satisfaction, as well as reports of recalled emotions, are likely to reflect not only the on-line experience of emotions but also people's self-concepts and the normative value of the experiences within that culture.

The research to date on cross-cultural measurement of SWB is encouraging. At the same time, researchers need to be alert to the multiple processes that can differentially influence scores across cultures and use multimethod measurement when possible. In addition, much more focused research on the meaning of SWB scores in different cultures is needed.

Different Correlates of Subjective Well-Being Across Cultures

As the evidence for the valid measurement of SWB accumulated, researchers started to examine the processes influencing SWB across cultures. The first question was whether correlates of satisfied people would be the same across cultures. Diener & Diener (1995) examined this question by comparing the size of correlations between various domain satisfactions and global life satisfaction. Although there was no cultural difference in the size of correlation between satisfaction with friends, family, and global life satisfaction, they found a significant cultural difference in the size of correlation between satisfaction with self and global life satisfaction. Whereas satisfaction with the self was strongly correlated with life satisfaction in highly industrialized, individualistic western nations (e.g., Finland, Canada), satisfaction with the self was less correlated with global life satisfaction in less industrialized, collectivist nations such as Cameroon and India, especially for women. Similarly, Oishi et al. (1999a) found that satisfaction with self and one's freedom was a significantly stronger predictor of life satisfaction in nations high in individualism than those low in individualism. This was the case even after controlling for national wealth. In addition, consistent with Maslow's need hierarchy, the correlation between financial satisfaction and global life satisfaction was stronger in poor nations than in wealthier nations. In other words, the picture of satisfied people is similar in one sense (they tend to be satisfied with their family and friendships), but dissimilar in another (satisfied people are not necessarily self-satisfied people or people with a lot of freedom in some cultures).

Suh et al. (1998) showed that the role of internal attributes such as emotions in life satisfaction judgments differs across cultures. In individualistic nations satisfied people are often people who report experiencing a lot of positive emotions. However, this tendency was weaker in collectivist nations such as China and India. Suh et al. theorized that cultural differences exist along the dimension of subjectivism; in most individualist nations it is assumed that listening to oneself gives one answers. On the other hand, in collectivist cultures, in particular East Asian cultures, it is assumed that paying attention to social norms is important and should enter satisfaction judgments. Suh & Diener (2001) in follow-up studies found that perceived acceptance by parents and friends contributed to the life satisfaction of Asian Americans as much as emotions, whereas perceived acceptance by others did not have any additional predictive value over and above emotions in the life satisfaction of European Americans.

Similarly, Oishi & Diener (2001b) found that the type of people who experienced positive changes in well-being differed between Asian Americans and European Americans. European Americans who experienced positive changes in well-being over time achieved the goals they were pursuing for fun and enjoyment (see also Sheldon & Kasser 1998). However, Asian Americans and Japanese who experienced positive changes in well-being achieved the goals that they were pursuing to make others happy. Mesquita & Karasawa (2002) found that Japanese reports of the experience of pleasant emotions were better predicted from relationship concerns than from independent self concerns, whereas European Americans' experience of pleasant emotions was better predicted from self-concerns than from relationship concerns (see also Kitayama et al. 2000). The findings suggest that there are multiple pathways to well-being and they are somewhat different across cultures, depending on internalized cultural values. It is interesting to note that even when there was no cultural difference in explicit goal motivations measured by self-reports, predictors of well-being varied across cultures (Oishi & Diener 2001b). Thus, what makes people happy might be the fulfillment of cultural values, which they do not necessarily endorse at the explicit level (see Heine et al. 2002).

Another important issue is the degree of cross-situational consistency versus situation specificity in SWB. In the U.S. Sheldon and colleagues (Sheldon et al. 1997) found that satisfied people view themselves as consistent across different social roles and situations. For example, Americans who reported being satisfied with their lives viewed themselves as "friendly" to friends, strangers, and coworkers alike. However, Suh (1999) demonstrated that perceived cross-situational consistency of self-concept did not have a strong correlation with life satisfaction in Korea, and consistency was negatively related to likeability and social skills as reported by friends and family members. In addition, Oishi (2001b) found in an experience-sampling study that the well-being of Japanese students is much

more context dependent than the well-being of Americans. That is, Japanese emotional experience differed to a greater degree across different situations (e.g., with a romantic partner versus with a stranger) than did the experience of European Americans. These findings again point to cultural variations in SWB due to the varying importance placed on consistency and field independence versus flexibility and context appropriateness (e.g., Nisbett et al. 2001, Heine & Lehman 1997).

Another interesting area of research examines whether across cultures the number of avoidance goals is related to negative well-being. Elliot et al. (2001) found that the number of avoidance goals was not as detrimental to the well-being of Asian Americans, Koreans, and Russians as to the well-being of European Americans. Similarly, Heine & Lehman (1999) found that the discrepancy between ideal and actual self was a stronger predictor of depression among European Canadians than among Japanese. It appears therefore that an avoidance focus has a more detrimental effect on well-being in a culture in which positive thinking is valued than in a culture in which vigilance is valued.

Universal Versus Variable Causes of Subjective Well-Being

A current debate in the field of SWB concerns whether there are human universals for happiness or whether its causes vary according to culture. In the section above we showed that the correlates of SWB vary across society; in this section we report evidence that supports the idea that there are certain variables that correlate with SWB across cultures. Veenhoven (1991) is one proponent of the idea that some societies are more "livable" because they fulfill more universal human needs such as for food, water, shelter, and so forth. In support of the universal livability idea, Veenhoven found that the nations' mean life satisfaction was correlated .84 with their gross national product per capita. Spector et al. (2001) found that locus of control correlated with subjective well-being across all the nations they studied. One challenge, however, is to determine what are the universal human needs.

One universalistic approach derives from humanistic theories of psychology. For example, Ryff (1989) relied on humanism in asserting that there are six universal needs—for autonomy, growth, relationships, purpose in life, environmental mastery, and self-acceptance. Ryff found that the degree to which people reported fulfilling these needs correlated with their reported life satisfaction. Diener et al. (1998), however, suggested that the needs of humanistic psychologists might be weighted toward western values and found that they correlated with life satisfaction more strongly in the United States than in South Korea or China (Sapyta 1997).

An approach to SWB based on inherent and universal human needs is the Self-Determination Theory of Deci & Ryan (2000). This theory posits three basic psychological needs—autonomy, competence, and relatedness—and predicts that fulfillment of these needs is essential for well-being. Deci, Ryan, and their colleagues found that fulfillment of these needs, which they refer to as "intrinsic," such as autonomy, competence, and relatedness, is related to SWB in diverse nations such as the United States, Bulgaria, Germany, South Korea, and Russia

(Chirkov & Ryan 2001, Deci et al. 2002, Ryan et al. 1999, Schmuck et al. 2000, Sheldon et al. 2001). It seems reasonable, of course, to suggest that there are both universal and culture-specific causes of SWB. The empirical challenge is to identify these two types of variables and determine the degree to which universal needs are channeled by the culture.

The question of the universality of the causes of SWB is of immense applied importance. If people can be happy once their universal needs are fulfilled, then the road to high SWB seems clear. If, however, a never-ending spiral of desires and rising standards can influence SWB, then simply fulfilling everyone's basic needs will not be a guarantee of universal happiness. Finally, to the degree that goals and values that are culture specific can influence what leads to SWB, the quest for the "good society" must consider the degree to which specific cultural values are fulfilled.

Studying the Heterogeneity of Cultural Effects

A major critique to existing cross-cultural research is the lack of attention to withinculture variation (Hong et al. 2000, Matsumoto 1999). In typical cross-cultural studies researchers compare a sample from one nation or ethnic group with a sample from another. One fundamental assumption in such research is that members of a cultural group share key experiences that lead to psychological tendencies, albeit in varying degrees, in all or most members of the societies. This assumption is perhaps too strong; for example, there are certainly self-critical Americans and self-promoting Japanese. Furthermore, past studies reveal a surprisingly small difference among cultures in values and self-concept (see Oyserman et al. 2002). Thus, Hong et al. (2000) advocate the dynamic social constructionist approach to cultural psychology, which first assumes the universal presence of lay theories about the self and world and, second, assumes that cultural differences exist in terms of the relative chronic accessibility of each theory. This approach does not require the assumption of within-culture homogeneity and models well the cultural, individual, and situational changes in salient values and self-concept (see Briley & Wyer 2002, Suh & Diener 2001).

Another approach to the problem of within-culture variability is a statistical one. Recently, Eid & Diener (2001) applied multigroup latent class analysis to emotional experiences among Americans, Australians, Chinese, and Taiwanese. Through this analysis they identified the existence of five classes of respondents within each nation (e.g., one class of subjects who reported that positive emotions are very desirable and another class who reported that positive emotions are neither desirable nor undesirable, etc.). Although there was a class of people who reported positive emotions to be very desirable in all four nations, the proportion of the sample belonging in this class varied dramatically across cultures. Multigroup latent class provides an analysis of the homogeneity of the structure of emotions, norms, and other variables across individuals within cultures, as well as revealing how groups of individuals are similar and different across cultures. Thus, it is a

promising technique that can reveal elements of universality across cultures, as well as variations within the cultures.

EFFECT SIZES OF PERSONALITY AND CULTURE

How large are personality and cultural effects on SWB? Matsumoto et al. (2001) argue that we should always examine culture effect sizes—and that sometimes they are quite small. Scollon et al. (2002a) found that differences between individuals within cultures accounted for much more variance in affect than did culture. Nevertheless, culture accounted for a significant amount of variance in positive emotions, although not in negative emotions. However, the samples of Scollon et al. were restricted to college students living in urban areas, and therefore their results might not indicate the full range of SWB that might be due to culture. Therefore, we examined the amount of variance in the World Value Survey II (Inglehart et al. 1998) (which consists of national probability samples from 43 nations) that was due to persons within nations versus between-nation differences. Fifteen percent of the variance in life satisfaction, 12% of the variance in satisfaction with health, and 12% of the variance in financial satisfaction was due to between-nation differences. In our International College Sample (see Suh et al. 1998) we also computed the amount of variance owing to nations (N = 39) versus individuals within nations. Twelve percent of the variance in life satisfaction, 18% of the variance in positive emotions, and 11% of the variance in negative emotions was due to between-nation differences. It appears that individual differences within societies produce a large source of variance in SWB but that between-nation differences are far from trivial.

In addition to examining mean-level cultural differences, we can also analyze how cultural change alters average levels of SWB. For example, Inglehart & Klingemann (2000) report very low levels of SWB in the former communist nations of Europe and Asia. The societal dislocations occurring in those countries when their political and economic systems were transformed led to large declines in SWB. The effects of culture change are potentially quite important and deserve much more research.

CONCLUSIONS

There are substantial individual differences in SWB, as well as mean level differences between cultures. We have begun to understand why such differences occur. For example, there are dispositional differences that predispose people to more or less positive affect, and genetics and early rearing seem to contribute to such differences. At the cultural level norms in nations for feeling positive emotions relate to the amount of pleasant emotions reported in those countries.

Are the causes of high SWB universal or are they particular to the culture one lives in? Perhaps both. Some ubiquitous needs such as for temperature control, food, health, environmental control, and social relationships might be necessary for SWB. These needs may be so likely to drive people's desires and goals that

they almost inevitably have some impact on SWB. However, there also appear to be differences in goals and values between individuals, and between cultures, that lead to distinct predictors of SWB.

Is there a good culture, and are some cultures bad, as asserted by Edgerton (1992)? It appears that some cultures produce higher levels of SWB than do others. It seems unlikely that the low levels of SWB found in very poor nations and in the former Soviet bloc countries are merely measurement artifacts. At the same time, some differences in SWB between nations appear to be due to the fact that people differentially value SWB. Thus, people may trade some amount of positive emotions in order to obtain other things they value.

Do people want to be happy, or do they want other valued goals more than happiness? Do they want those other goals because they will make them happy? We suggest that people all over the world most want to be happy by achieving the things they value. Proving this assertion represents one research goal of the future.

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