Subjective Well-Being

The Science of Happiness and a Proposal for a National Index

Ed Diener
University of Illinois at Urbana-Champaign

One area of positive psychology analyzes subjective well-being (SWB), people's cognitive and affective evaluations of their lives. Progress has been made in understanding the components of SWB, the importance of adaptation and goals to feelings of well-being, the temperament underpinnings of SWB, and the cultural influences on well-being. Representative selection of respondents, naturalistic experience sampling measures, and other methodological refinements are now used to study SWB and could be used to produce national indicators of happiness.

For millennia thinkers have pondered the question, what is the good life? They have focused on criteria such as loving others, pleasure, or self-insight as the defining characteristics of quality of life. Another idea of what constitutes a good life, however, is that it is desirable for people themselves to think that they are living good lives. This subjective definition of quality of life is democratic in that it grants to each individual the right to decide whether his or her life is worthwhile. It is this approach to defining the good life that has come to be called "subjective well-being" (SWB) and in colloquial terms is sometimes labeled "happiness." SWB refers to people's evaluations of their lives—evaluations that are both affective and cognitive. People experience abundant SWB when they feel many pleasant and few unpleasant emotions, when they are engaged in interesting activities, when they experience many pleasures and few pains, and when they are satisfied with their lives. There are additional features of a valuable life and of mental health, but the field of SWB focuses on people's own evaluations of their lives.

Throughout the world, people are granting increasing importance to SWB. Inglehart (1990) proposed that as basic material needs are met, individuals move to a postmaterialistic phase in which they are concerned with self-fulfillment. Table 1 presents means from an international college sample of 7,204 respondents in 42 countries, signifying how students in diverse countries view happiness (see Suh, Diener, Oishi, & Triandis, 1998, for more information about this sample). Mean values are presented for how frequently the respondents reported thinking about SWB and for how important they believed SWB is. As can be seen, even in societies that are not fully westernized, students reported that happiness and life satisfaction were very important, and they thought about them often. Although there was a trend for respondents in the most westernized nations to grant SWB greater importance, mean levels of concern about happiness were high in all of the countries surveyed. Among the total sample, only 6% of respondents rated money as more important than happiness. Furthermore, fully 69% rated happiness at the top of the importance scale, and only 1% claimed to have never thought about it. Of the respondents, 62% rated life satisfaction at the top of the importance scale, and only 2% reported never having thought about it. As people throughout the world fulfill more of their basic material needs, it is likely that SWB will become an even more valued goal. Thus, although SWB is not sufficient for the good life (e.g., Diener, Sapyta, & Suh, 1998), it appears to be increasingly necessary for it.

I briefly describe selected findings on SWB. Because this article can present only a broad overview, readers are referred to other reviews of the field (e.g., Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Myers, 1992). Myers (2000, this issue) discusses several correlates of SWB. Readers interested in the connections of SWB to psychological phenomena such as emotion, the biology of pleasure, and self-report judgment processes are referred to Kahneman, Diener, and Schwarz (1999), Parducci (1995), and Strack, Argyle, and Schwarz (1991).

Defining and Measuring SWB

People's moods and emotions reflect on-line reactions to events happening to them. Each individual also makes broader judgments about his or her life as a whole, as well as about domains such as marriage and work. Thus, there are a number of separable components of SWB: life satisfaction (global judgments of one's life), satisfaction with important domains (e.g., work satisfaction), positive affect (experiencing many pleasant emotions and moods), and low levels of negative affect (experiencing few unpleasant emotions and moods). In the early research on SWB, researchers studying the facets of happiness usually relied on only a single self-report item to measure each construct.

My sincere thanks are extended to the following individuals for their perceptive comments: Frederick Kanfer, Eva Pomerantz, Harry C. Triandis, Alexander Grob, Larry Seidlitz, Andrew Clark, M. Joseph Sirgy, Howard Berenbaum, Ulrich Schimmack, Robert Biswas-Diener, Carol Diener, Eunkook Suh, Jonathan Lavav, and Daniel Kahneman.

Correspondence concerning this article should be addressed to Ed Diener, Department of Psychology, University of Illinois, 603 E. Daniel Street, Champaign, IL 61821. Electronic mail may be sent to ediener@s.psych.uiuc.edu.

Copyright 2000 by the American Psychological Association, Inc. 0003-066X/00/$5.00
Vol. 55, No. 1, 34–43 DOI: 10.1037//0003-066X.55.1.34

Ed Diener

For example, Andrews and Withey (1976) asked respondents, "How do you feel about your life as a whole?" Respondents were provided with a 7-point response scale ranging from *delighted* to *terrible*. Recent measures of SWB, however, contain multiple items. For example, the PANAS (Positive and Negative Affect Scale; Watson, Clark, & Tellegen, 1988) measures both positive and negative affect, each with 10 affect items, and the Satisfaction With Life Scale assesses life satisfaction with items such as "In most ways my life is close to my ideal" and "So far I have gotten the important things I want in life" (Pavot & Diener, 1993). Although the psychometric properties of these scales tend to be strong, they provide only one approach to assessing SWB.

In the past decade, researchers have used additional types of assessment to obtain a better gauge of long-term feelings. In the naturalistic experience-sampling method (ESM), for example, researchers assess respondents' SWB at random moments in their everyday lives, usually over a period of one to four weeks. Sandvik, Diener, and Seidlitz (1993) found that one-time self-reported life satisfaction, ESM measures of life satisfaction, reports by friends and relatives, and people's memories of positive versus negative life events intercorrelate at moderate-to-strong levels. Moum (1996) found that low life-satisfaction reports predicted suicide over the following five years. Lucas, Diener, and Suh (1996) found that SWB measures showed discriminant validity from other related constructs, such as optimism. Thus, there is reason to believe that the existing measures of SWB have some degree of validity (see Diener, 1994, for a review). Nevertheless, when and how the various measures differ have not been explored systematically. For example, Thomas and Diener (1990) found only a modest relation between global and on-line mood reports, but researchers do not yet understand what different factors influence the two types of measures.

Despite the encouraging findings, SWB measures can be contaminated by biases. For example, Schwarz and Strack (1999) demonstrated in a series of studies that global measures of life satisfaction can be influenced by mood at the moment of responding to the scale and by other situational factors. They also found that the ordering of items and other artifacts can influence reports of SWB. Eid and Diener (1999) found, however, that situational factors usually pale in comparison with long-term influences on well-being measures. Another potential problem is that people may respond to SWB scales in socially desirable ways. If they believe that happiness is normatively appropriate, they may report that they are happier than other types of assessments may indicate.

Although single-occasion self-reports of SWB have a degree of validity, and interesting conclusions have emerged from studies using them, the artifacts mentioned above suggest caution. For this reason, in the future researchers should more frequently combine other types of measures with one-time scales. Although based on self-report, the naturalistic ESM can circumvent some memory and other biases that occur in more global reports. Because people are randomly signaled at many points in time and their moods in their natural life settings are recorded, a more fine-grained record of their experience of well-being is obtained. ESM yields information on how SWB varies across situations and time. Kahneman (1999) argued that ESM ought to be the primary measure of SWB, and Stone, Schiffman, DeVries, and Frijters (1999) reviewed work in this area.

Additional methods, such as physiological measures, reports by informants, and memory and reaction-time measures, also should be included in complete assessments of SWB. Although SWB is by definition *subjective*, experience can manifest itself in physiology and other channels; self-report is not the only way to assess experience. Because different methods of measuring SWB can produce different scores, a battery of diverse measures will produce the most informative composite. Although each of the alternative measures has its own limitations, the strengths of the different types of measures are often complementary to each other. For example, in the memory measure developed by Sandvik et al. (1993), respondents are asked to generate as many positive and as many negative events from their lives as they can during a short timed period. Thus, with this method researchers can assess individual differences in the relative accessibility of memories for good and bad events and thereby can determine the valence-related structure of how respondents recall their lives.

In addition to using diverse assessment methods, researchers need to use measures of both pleasant and unpleasant affect, because both are major components of SWB. Bradburn and Caplovitz (1965) discovered that these two types of emotions, formerly believed to be polar opposites, form two separable factors that often correlate with different variables. Indeed, their findings provided a major

Table 1
Importance of Subjective Well-Being to College Students

Nation	How often do you think about?		How important is?		
	Life satisfaction	Happiness	Life satisfaction	Happiness	Money
Argentina	5.63	5.62	6.67	6.78	4.46
Australia	5.27	5.51	6.59	6.66	4.44
Bahrain	5.25	5.14	6.08	6.21	5.01
China	4.20	4.43	5.67	5.91	4.82
Germany	5.43	5.27	6.62	5.95	4.11
Greece	5.52	5.54	6.73	6.77	4.89
Hungary	5.43	5.59	6.43	6.57	4.30
India	4.74	5.20	5.75	5.97	4.81
Indonesia	5.17	5.78	6.16	6.63	4.89
Japan	4.27	4.74	6.02	6.31	4.70
Lithuania	5.31	5.38	6.18	6.62	5.23
Singapore	5.06	5.24	6.25	6.59	4.80
Slovenia	5.56	5.22	6.78	6.62	4.60
South Africa	5.53	5.75	6.44	6.61	5.00
Tanzania	4.46	4.61	5.06	5.45	5.17
Turkey	5.16	5.63	6.25	5.75	5.25
United States	5.19	5.45	6.39	6.58	4.68

Note. The 1 to 7 "How often do you think about?" scale was anchored by 1 (*never*), 4 (*sometimes*), and 7 (*very much, several times a day or more*). Importance ratings were reported on a 1–7 scale, where 1 was *of no importance whatsoever* and 7 was *extraordinarily important and valuable*.

impetus to study positive well-being, rather than assuming that it is only the absence of ill-being. Good life events and extraversion tend to correlate with pleasant emotions, whereas neuroticism and negative life events covary more strongly with negative emotions. Cacioppo, Gardner, and Berntson (1999) reviewed evidence indicating that separate biological systems subserve pleasant and unpleasant affect. Thus, it is desirable to measure them separately because different conclusions often emerge about the antecedents and consequences of these two types of affect. Although researchers can combine positive and negative affect into an "affect balance" or global "happiness" score, they may lose valuable information about the two types of affect.

In defining happiness, it is common sense to combine the frequency and intensity of pleasant emotions. That is, the people considered to be the happiest are those who are intensely happy more of the time. The findings of my colleagues and I contradict this commonsense notion, however. How much of the time a person experiences pleasant emotions is a better predictor than positive emotional intensity of how happy the person reports being (Diener, Sandvik, & Pavot, 1991). Further, emotional intensity forms a factor that is independent of SWB (Larsen & Diener, 1985). Thus, feeling pleasant emotions most of the time and infrequently experiencing unpleasant emotions, even if the pleasant emotions are only mild, is sufficient for high reports of happiness.

Although most people report being above neutral in mood the majority of the time (Diener & Diener, 1996), intense positive moments are rare even among the happiest individuals (Diener et al., 1991). Instead, happy people report mild-to-moderate pleasant emotions most of the time when alone or with others and when working or at leisure. One lesson from these findings is that if people seek ecstasy much of the time, whether it be in a career or a love relationship, they are likely to be disappointed. Even worse, they may move to the next relationship or job, seeking intense levels of happiness, which in fact are rarely long-lasting and are not necessary for happiness. People need to understand that intense experiences are not the cornerstone of a happy life. Furthermore, according to some theories of adaptation, such as that of Parducci (1995), highly pleasurable experiences may have the disadvantage of serving as a contrast point against which to compare other positive experiences, thus making the mild events less pleasurable.

Processes Underlying SWB: Adaptation, Goals, and Temperament

In a classic 1971 article, Brickman and Campbell suggested that all people labor on a "hedonic treadmill." As they rise in their accomplishments and possessions, their expectations also rise. Soon they habituate to the new level, and it no longer makes them happy. On the negative side, people are unhappy when they first encounter misfortune, but they soon adapt and it no longer makes them unhappy. On the basis of this reasoning, Brickman and Campbell proposed that people are destined to hedonic neutrality in the long run. Although an early study by Brickman, Coates, and

Janoff-Bulman (1978) on lottery winners and people with spinal cord injuries produced equivocal support for the notion of a hedonic treadmill, later data have accumulated to support adaptation. For example, Silver (1982) found that persons with spinal cord injuries were extremely unhappy immediately after the accident that produced their disability but quickly began to adapt. She found that within a matter of only eight weeks, positive emotions predominated over negative emotions in her respondents. During this period, respondents experienced a downward trend in unpleasant emotions and an upward trend in pleasant emotions, suggesting a return toward the baseline conditions of mood experienced by most people.

Researchers have also accumulated evidence that many life circumstances correlate with SWB at only modest levels, again supporting the idea of adaptation. For example, Campbell, Converse, and Rodgers (1976) estimated that 10 resources, including income, number of friends, religious faith, intelligence, and education, together accounted for only 15% of the variance in happiness. Campbell et al. and later investigators (e.g., Diener, Sandvik, Seidlitz, & Diener, 1993) have found small positive correlations within countries between income and SWB—rich people on average are slightly happier than poor people (Diener, Horwitz, & Emmons, 1985). In a similar vein, Diener, Wolsic, and Fujita (1995) found that a highly prized possession among college students, physical attractiveness, predicted only small amounts of variance in respondents' reports of pleasant affect, unpleasant affect, and life satisfaction. Perhaps even more striking, a number of studies showed that objective physical health, even among the elderly, is barely correlated with SWB (e.g., Okun & George, 1984).

Further studies revealed that people adapt to most conditions very quickly. For example, Suh, Diener, and Fujita (1996) found that in less than three months, the effects of many major life events (e.g., being fired or promoted) lost their impact on SWB. Stone and Neale (1984) examined the effects of a negative life event. They identified 17 men who experienced a severe, negative life event during participation in a daily mood study. The authors reported that "same-day associations were observed, but there was no strong evidence of changes in next-day mood. The results offer no support for 2-day or longer effects of daily, negative events" (Stone & Neale, 1984, p. 137). A concrete instance of this phenomenon from the laboratory of Randy Larsen (personal communication, 1990) is noteworthy. One of Larsen's participants in a study of mood suffered from cancer and was receiving chemotherapy treatments. During the study, physicians informed the participant that his cancer was in remission, and his mood skyrocketed. In two days, however, his affect returned to its former baseline! However, Winter, Lawton, Casten, and Sando (1999) found that marriage and widowhood were still producing heightened and lowered SWB, respectively, six to eight months after the event.

Brickman and Campbell's (1971) basic idea has stuck: People do react strongly to good and bad events, but they then tend to adapt over time and return to their original level of happiness. A societal manifestation of adaptation is contained in Myers's (2000) discussion of income and SWB over the past five decades. Income has risen dramatically in many nations since World War II, and yet SWB has been virtually flat in the United States and other highly developed countries (Oswald, 1997). Apparently, people's desires increase as their incomes rise, and they therefore adapt to higher levels of income, with no net increase in SWB. This interpretation is supported by Clark's (1998) finding that recent changes in pay predicted job satisfaction, whereas mean levels of pay did not.

Brickman and Campbell's (1971) theory has been refined in several ways. First, people may not adapt back to neutrality but may instead return to a positive set point. Diener and Diener (1995) noted that most SWB reports are in the positive range, above the neutral points of the scales. The means in Table 2 indicate this pattern—most nations average above 5.5, the midpoint of the scale. Cacioppo et al. (1999) suggested that there is a "positivity offset," meaning that there is a weak approach tendency in the absence of stimulation. Thus, the

Table 2
Mean Life Satisfaction and Income Across Nations

Nation	Life satisfaction	PPP 1992
Bulgaria	5.03	22
Russia	5.37	27
Belarus	5.52	30
Latvia	5.70	20
Romania	5.88	12
Estonia	6.00	27
Lithuania	6.01	16
Hungary	6.03	25
Turkey	6.41	22
Japan	6.53	87
Nigeria	6.59	6
Korea (South)	6.69	39
India	6.70	5
Portugal	7.07	44
Spain	7.15	57
Germany	7.22	89
Argentina	7.25	25
China (PRC)	7.29	9
Italy	7.30	77
Brazil	7.38	23
Chile	7.55	35
Norway	7.68	78
Finland	7.68	69
United States	7.73	100
Netherlands	7.77	76
Ireland	7.88	52
Canada	7.89	85
Denmark	8.16	81
Switzerland	8.36	96

Note. The life satisfaction question asked respondents how satisfied they were with their "life as a whole these days." Response options ranged from 1 (*dissatisfied*) to 10 (*satisfied*), and purchasing power parity (PPP) could range from 0 to 100. PRC = People's Republic of China.

set point first postulated by Brickman and Campbell actually might be in the positive range because humans are predisposed to feel predominantly pleasant affect if nothing bad is happening.

Another refinement of the hedonic treadmill idea is that the baseline level of happiness to which people return is influenced by their temperament. One reason to integrate personality with the concept of adaptation is that personality predispositions appear to be one of the strongest factors influencing long-term levels of SWB. As noted by La Rochefoucauld (1940), "happiness and misery depend as much on temperament as on fortune" (p. 23). Studies on adopted-away separated twins show that about half of the variance in current SWB in American society is due to heritability (Tellegen et al., 1988). The partial heritability of happiness is supported by research on early temperament that suggests that emotional reactivity emerges early in life and is moderately stable over time (e.g., Goldsmith, 1996). Further, in an ESM study in which respondents' moods were recorded in various naturally occurring situations, Diener and Larsen (1984) found that participants' average moods showed a substantial amount of consistency across both situations and time, suggesting that SWB is not a result only of situational factors. Although people's moods fluctuate from moment to moment, there is a strong degree of stability in mean levels of mood experienced, even over a period of years (e.g., Magnus & Diener, 1991) and across varying life circumstances (Costa, McCrae, & Zonderman, 1987). Laboratory studies also demonstrate that happy and unhappy people react differently to the same stimuli. For example, Rusting and Larsen (1997) demonstrated that extraverted individuals (those who appear to react more strongly to rewards) responded more intensely to positive than to negative pictures in a laboratory situation, whereas neurotic individuals reacted more strongly to negative photos.

The dynamic equilibrium model of Headey and Wearing (1992) combines adaptation with personality. They proposed that people maintain levels of pleasant affect and unpleasant affect that are determined by their personalities. Advantageous and disadvantageous events move individuals temporarily away from their personal baselines, but over time they return to them. For example, Winter et al. (1999) found that recent marriage affected positive affect (but not negative affect) and that recent widowhood affected negative affect (but not positive affect). In support of the idea of adaptation, however, they found that long-term marriage and widowhood did not influence levels of positive and negative effect. Headey and Wearing maintained that the separate baselines for positive affect and negative affect are determined by personality predispositions to extraversion and neuroticism, respectively. For example, Lucas, Diener, Grob, Suh, and Shao (1998) found that extraversion correlated with positive affect in virtually all of the 40 nations they examined. Headey and Wearing argued that events and circumstances do influence happiness, but in the long-term, the impact of personality will also exert itself.

Scientists are exploring why people adapt to conditions. Parducci (1995) offered a judgment theory of adaptation based on the fact that people's satisfaction with events depends on the distribution of events in this domain that they have experienced in the past. Parducci maintained that people react favorably to events that are better than the comparison point provided by the context of their past outcomes in this area, and they react negatively to events that are lower than this comparison point. Another interpretation of adaptation is offered by Kahneman (1999), who argued that people in good circumstances may be objectively happier than people in bad circumstances, but they may require greater levels of pleasure to declare themselves happy. Thus, people do not so much totally habituate to their conditions, according to Kahneman's view, as they adapt their expectations to the amount of pleasure they desire and the relative amount of happiness they report.

Another reason that people may adapt to new circumstances is that they change their expectancies and goals. Emmons (1986), Cantor and Sanderson (1999), and others have shown that making progress toward goals is related to SWB. Diener and Fujita (1999) found that having resources (e.g., money, physical attractiveness, or social skills) in areas related to one's goals is a more accurate predictor of happiness than having resources that are less related to one's important goals. My colleagues and I have also found that people feel better on days when they make progress toward ends that they value highly than they do on days when they are successful at achieving ends that they value less (Oishi, Diener, Suh, & Lucas, 1999). In another study, Oishi, Schimmack, and Diener (1999) found that high sensation seekers were more satisfied with days when they experienced pleasure and high arousal emotions, whereas low sensation seekers preferred contentment. Although some goals, such as seeking excitement, may be influenced by one's temperament, other goals are likely to be much more flexible. Thus, one determinant of people's adaptation to conditions often might be the extent to which they alter their goals when new circumstances prevail. Thus, goal flexibility may be a key to SWB in adverse circumstances.

Although the reasons for adaptation are not fully understood, it is clear that people do not habituate completely to all conditions. Frederick and Loewenstein (1999) concluded that people adapt rapidly to some circumstances (e.g., imprisonment), adapt slowly to other conditions (e.g., the death of a loved one), and adapt little or not at all to other conditions (e.g., noise and sex). Diener, Diener, and Diener (1995) reported substantial differences between nations in SWB, even though there has been ample time for people to adapt to the circumstances in these societies. Mehnert, Kraus, Nadler, and Boyd (1990) found that individuals who were born with disabilities reported somewhat lower levels of SWB than did persons without physical disabilities, and this differential was especially large for those with multiple handicaps. This indicates that people do not necessarily completely adapt to all circumstances, even after many years. Although personality is undoubtedly an important contributor to long-term levels of well-being, it is an exaggeration to conclude that circumstances have no influence. People's set points appear to move up or

down, depending on the favorability of long-term circumstances in their lives.

National and Cultural Patterns of SWB

A discussion of how societal variables influence SWB is available in Diener and Suh (in press). Table 2 presents the mean levels of life satisfaction for selected nations from the World Values Survey (World Values Study Group, 1994), conducted with representative samples of approximately 1,000 respondents per nation between 1990 and 1993. The purchasing power parity figure is the percentage of purchasing power (based on a standard "basket" of goods) that the average person in each country can buy with his or her yearly income, compared with the average purchasing power of individuals in the United States. The correlation between mean purchasing power income and mean life satisfaction was .62 across all nations in the survey. The finding that wealthier nations have higher levels of reported well-being has been replicated several times (see Diener & Suh, 1999). One reason that wealthy nations may be happier is that they are more likely to fulfill basic human needs for food, shelter, and health, as well as to have better human-rights records (Diener et al., 1995).

There were countries that were unexpectedly high or low in life satisfaction even after income was controlled. For example, mean levels of SWB in Brazil, Chile, and Argentina were higher than predicted by their wealth, and life-satisfaction rates in Eastern European nations and Russia were low, even after controlling for the incomes there. The higher-than-expected scores in Latin American nations may have been due to cultural factors, whereas the lower-than-expected scores in former communist countries may have been due to the political and economic turmoil occurring in these nations during the years of the survey. Japan appeared as an outlier, with high income and relatively low SWB. This is perhaps because Japan is a highly regulated society with strong conformity pressures and very high expectations.

The poorest nations in the survey—China, India, and Nigeria—did not show the extremely low SWB responses that characterized earlier studies of the poorest societies. Perhaps this is because levels of income are rising in these nations, and at the same time people there have lower expectations than in the West. The same general patterns in the World Values Survey were found in earlier surveys (see Diener et al., 1995, for analysis of the earlier surveys)—much variance in SWB is accounted for by the wealth of nations, but culture and political turmoil also have an influence.

In accord with the U.S. findings reported by Myers (2000), Diener and Oishi (in press) found that happiness has not increased regularly over the years in the nations where repeated surveys have been conducted, even though income has increased dramatically in most of these countries. Why does the wealth of nations correlate with mean levels of life satisfaction, whereas changes in income in the wealthiest nations produce no increases in happiness? A likely explanation is that there is a common set of economic desires around the world, and national income is highly correlated with whether these desires can be met. Because of global communication, it appears that the standard is set now by the wealthiest nations. People in China, India, and Nigeria want cars, refrigerators, VCRs, and the other possessions that they see on television. In other words, it may be that most people around the world now want many of the things that people in the West possess, and their life satisfaction is influenced to some degree by whether they are making progress toward obtaining these goods. Overall, increases in income in the wealthiest nations, however, do not raise levels of SWB because it is the rising living standard in these nations that influences people's level of desires. As income increases in the wealthiest nations, so does the evaluative standard.

One noteworthy finding is that variables often correlate differently with life satisfaction in dissimilar cultures. Individualistic cultures are those that stress the importance of the individual and his or her thoughts, choices, and feelings. In contrast, in collectivist cultures, people are more willing to sacrifice their desires to the will of the group. Diener and Diener (1995) found that self-esteem correlated more strongly with life satisfaction in individualistic than in collectivist societies. Thus, even a variable that seems intrinsically of great importance to westerners, self-respect, is not highly correlated with life satisfaction in some cultures. Another interesting national difference in the correlates of mental health was discovered by Eunkook Suh (1999). He found substantial differences in whether "congruence"—acting consistently across situations and in accord with one's "self"—predicts life satisfaction in South Korea versus in the United States. Suh discovered that congruence was much less important to SWB in Korea. Again, a variable that many western psychologists have viewed as crucial to mental health may be more culture bound than than they have believed.

Suh et al. (1998) also found large differences in whether people in different cultures rely on their feelings when making life-satisfaction judgments. When deciding how satisfied they are, people in individualistic nations find it natural to consult their affect, and feeling pleasant emotions frequently is a reasonable predictor of life satisfaction in these societies. In contrast, people in collectivist cultures tend to more often consult norms for whether they should be satisfied and to consider the social appraisals of family and friends in evaluating their lives. Thus, people differ markedly across societies in the factors they consider to be relevant to life satisfaction, perhaps because culture can have a pervasive influence on people's values and goals.

An interesting pattern reveals itself when individualistic and collectivistic nations are compared in terms of different indicators of well-being. In individualistic nations, there are reports of higher life satisfaction, and yet suicide rates also tend to be higher (Diener, 1996). Similarly, there are elevated rates of marital satisfaction in individualistic nations, and at the same time the divorce rates are high. It seems that people in individualistic societies say they are happy with their circumstances, yet they more often change them. How can these seemingly contra-

dictory findings be explained? It may be that when people in societies with more freedom are satisfied with their marriages or jobs, they stay with them, but individualists are more likely to change their circumstances when they are dissatisfied. People in collectivist societies are more likely to remain in bad marriages or bad jobs for the sake of others and because of norms, and marriage and job satisfaction thus are on average lower in these cultures even though divorce rates and job turnover are also low. Thus, people in a collectivist society may be more likely to sacrifice their personal happiness to do their duty. The sense of satisfaction from doing the right thing, however, may feel more rewarding when doing the right thing is congruent with a person's own desires and does not require explicit sacrifices.

The pattern of SWB findings across cultures may also be explained in part by levels of social support. The extended families in collectivist societies are more likely to interfere with people "following their bliss" but may also provide greater social support in troubled times. Fewer people in collectivist societies "do their own thing," but fewer individuals are left to fend for themselves. Although researchers cannot explain the paradoxical cultural findings with certainty, these findings do present a challenge to both individualistic and collectivist cultures. How can a society allow individuals the freedom to choose lives that are rewarding and spouses that are to their liking, and nevertheless ensure that families are cohesive enough to offer stable support? How can a society encourage people to attribute successes internally and still not feel failures too sharply? And how can a society permit individuals to do what they want and yet convince them to act in ways that are responsible to their families, friends, and communities?

Summary

SWB researchers formerly focused on *who* is happy (see Diener et al., 1999)—whether it be the married, the wealthy, spiritual individuals, or other demographic groups. The recent focus, however, has been on when and why people are happy and on what the processes are that influence SWB. Temperament and personality appear to be powerful factors influencing people's SWB, in part because individuals usually adapt to some degree to good and bad conditions. People do not seem to completely adapt to all conditions, but as of yet researchers have only a rudimentary understanding of when and why adaptation is more or less complete. People's values and goals seem intimately tied to what events are perceived as good and bad, and therefore a plausible hypothesis is that goal change is an inherent component of adaptation.

Cultural and societal factors influence SWB in several ways. First, some countries are better able to meet people's basic needs, such as for food, clean water, and health, and these nations evidence higher levels of SWB. Another effect of culture is to alter the correlates of SWB by influencing people's goals and values. Finally, variations in cultural influences on mean levels of SWB appear to result from variations in optimism and positivity, social support, coping patterns, and the degree of regulation of individual desires. The pervasiveness of societal influences on mean levels of SWB raises the question of how American culture is faring.

A National Index of SWB

I propose that the United States needs indicators of SWB that can be used to track happiness over time. Ideally, these indicators would include ESMs of nationally representative samples of respondents. National ESM surveys could provide valuable information on how frequently and intensely people feel satisfied and happy in various life circumstances and across types of situations. The SWB of individuals from various age groups, regions, occupational categories, and income levels could be compared, and policymakers and corporate leaders would therefore be more likely to consider SWB in their decisions. As long as national indicators focus on the production of goods and services, it is those factors that leaders are likely to consider. If a national indicator of SWB were available, policies could be judged partly by how they influenced happiness. Ideally, the national SWB indicators would include various components of SWB, such as pleasant affect, unpleasant affect, life satisfaction, fulfillment, and more specific states such as stress, affection, trust, and joy. The "Eurobarometer" surveys conducted in European nations could serve as a model for an index that could be implemented in the United States and conducted by either the federal government or a private survey agency such as Gallup. One value of national indicators is that researchers could determine which segments of society are least happy and perhaps fashion policies to aid them.

An important basic question to ask before specific policies aimed at improving SWB are considered is whether SWB is so dependent on temperament that policies cannot affect it. Despite the effects of adaptation, life circumstances do matter to SWB; happiness is not completely based on inborn temperament. The data for the least satisfied nation in the World Values Survey, Bulgaria, show that fully 60% of respondents were below the midpoint of the scale on life satisfaction, and 40% were below neutral for affect balance, meaning that they reported more negative than positive emotions. Further, findings on people with multiple disabilities, young widows, and people chronically exposed to noise indicate that humans do not completely adapt to all conditions. Conditions do matter to SWB, and some nations are superior to others when it comes to happiness. Furthermore, measures focused on specific domains, such as work or health, are more likely to be sensitive to changes in circumstances than are measures of life satisfaction, which is dependent on so many factors that any single area is likely to have a small impact. Thus, it is not a fruitless endeavor to monitor and enhance SWB—conditions in a society can influence it.

A fundamental question related to monitoring SWB is whether it is desirable to increase SWB; is it really a good thing? For example, some might worry that too much satisfaction will leave people unmotivated or that pleasant emotions will cause a shallow form of hedonism. All the evidence to date, however, suggests that these concerns are

unfounded—people high in SWB on average have a number of desirable qualities. There is some evidence that happy people participate more in community organizations, are more liked by others, are less likely to get divorced, tend to live slightly longer, perform better at work (e.g., Staw, Sutton, & Pelled, 1994; Veenhoven, 1988), and earn higher incomes (Diener, Nickerson, Lucas, & Sandvik, 2000). These findings are correlational, and psychologists have little understanding of why happy people might on average exhibit more desirable behaviors. Nevertheless, happy individuals seem on average to be more productive and sociable. Thus, high levels of SWB might be beneficial for a society, and no evidence indicates they would be harmful.

A national index of SWB would help inform postmaterialist Amerian society about the desirable balance of work, relationships, recreation, and spirituality. Although wealthy nations are on average happier, it is important to recognize that recent increases in income in the richest nations have not benefited SWB. Furthermore, only small advantages in SWB accrue to the most affluent members of wealthy societies. Thus, it may be that little can be gained in terms of SWB by individuals making more money. Another implication of the static levels of SWB in the United States is that people's expectations must remain at realistic levels. At the individual level, people must realize that feelings of wealth depend as much on the level of one's desires as on objective income. Lasting happiness may come, in part, from activities such as working for one's goals (e.g., Emmons, 1986), participating in close social relationships (Baumeister & Leary, 1995; Myers, 2000), experiencing renewable physical pleasures (Scitovsky, 1982), experiencing mental pleasures (Kubovy, 1999), and being involved in "flow" activities (Csikszentmihalyi, 1997). According to this view, further economic growth in the wealthiest societies may provide SWB to the extent that it enhances rewarding work activities in pursuit of meaningful goals. Quality of work life is likely to be at least as important to SWB as is income. Similarly, policies that foster close relationships and meaningful activities are likely to be more successful at enhancing SWB than policies designed exclusively to improve efficiency. To the extent that higher incomes allow people to engage in more rewarding activities, they will improve SWB. However, higher productivity could decrease levels of SWB if it requires long hours of boring work, high levels of stress, and little leisure time.

If national indicators of SWB were available on an annual basis, it would provide fascinating information that potentially could enlighten policy making, as well as individual choices. A host of interesting questions could be answered, such as the following: Are religious people happier? Are the effects of poverty on SWB moderated by the level of basic services, such as health and education, that are available? Do children of divorce suffer lower levels of SWB on a long-term basis? How is the rate at which people are able to save money related to SWB? Do ethnic minorities in some places have higher SWB than others? Does the relation of income to SWB depend on consumption, on *how* people spend their incomes? The above questions are meant to convey that a national SWB index might be used to answer questions from a broad spectrum of political viewpoints, not only queries raised by the political left or right. Ideally, a national index would include a panel component that followed the same individuals over time. An advantage of a national indicator of SWB would be that it would make clear in which domains people are more and less satisfied, thus suggesting where interventions might be most needed. Further, a national index would provide an educational function, alerting people to the factors that influence their SWB.

Conclusion

Psychologists' knowledge of SWB is rudimentary; a stronger scientific base is necessary to make unequivocal recommendations to societies and individuals about how to increase happiness. I hope, however, that the above review makes it clear that scientific knowledge about SWB is possible and desirable. Societies need to afford the same importance to SWB as they do now to economics: tracking the phenomenon, supporting research to understand it, and educating people about it. To create a better society where happiness is ubiquitous, a major scientific effort to understand quality of life is needed. If psychologists' institute a national survey to track SWB, it is more likely that it will become an outcome variable that is considered in policy decisions.

Nobody would claim that SWB is a sufficient condition for mental health, nor would psychologists choose to evaluate people's lives solely on the basis of whether they are happy; psychologists value additional characteristics. Nevertheless, in this democratic nation where the opinions of individuals are granted respect, people's own evaluations of their lives must figure prominently in assessing the success of American society.

REFERENCES

Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being.* New York: Plenum Press.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117,* 497–529.

Bradburn, N., & Caplovitz, D. (1965). *Reports of happiness.* Chicago: Aldine.

Brickman, P., & Campbell, D. T. (1971). Hedonic relativism and planning the good society. In M. H. Appley (Ed.), *Adaptation-level theory* (pp. 287–305). New York: Academic Press.

Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology, 36,* 917–927.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1999). The affect system has parallel and integrative processing components: Form follows function. *Journal of Personality and Social Psychology, 76,* 839–855.

Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life.* New York: Russell Sage Foundation.

Cantor, N., & Sanderson, C. A. (1999). Life task participation and well-being: The importance of taking part in daily life. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology.* New York: Russell Sage Foundation.

Clark, A. (1998). Are wages habit forming? Evidence from micro data. *Journal of Economic Behavior and Organization, 39,* 179–200.
Costa, P. T., McCrae, R. R., & Zonderman, A. B. (1987). Environmental and dispositional influences on well-being: Longitudinal follow-up of an American national sample. *British Journal of Psychology, 78,* 299–306.
Csikszentmihalyi, M. (1997). *Activity, experience, and personal growth.* Champaign, IL: Human Kinetics.
Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95,* 542–575.
Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research, 31,* 103–157.
Diener, E. (1996). Subjective well-being in cross-cultural perspective. In H. Grad, A. Blanco, & J. Georgas (Eds.), *Key issues in cross-cultural psychology* (pp. 319–330). Liese, the Netherlands: Swets & Zeitlinger.
Diener, E., & Diener, C. (1996). Most people are happy. *Psychological Science, 7,* 181–185.
Diener, E., & Diener, M. (1995). Cross cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68,* 653–663.
Diener, E., Diener, M., & Diener, C. (1995). Factors predicting the subjective well-being of nations. *Journal of Personality and Social Psychology, 69,* 851–864.
Diener, E., & Fujita, F. (1995). Resources, personal strivings, and subjective well-being: A nomothetic and idiographic approach. *Journal of Personality and Social Psychology, 68,* 926–935.
Diener, E., Horwitz, J., & Emmons, R. A. (1985). Happiness of the very wealthy. *Social Indicators Research, 16,* 263–274.
Diener, E., & Larsen, R. J. (1984). Temporal stability and cross-situational consistency of affective, behavioral, and cognitive responses. *Journal of Personality and Social Psychology, 47,* 580–592.
Diener, E., Nickerson, C., Lucas, R. E., & Sandvik, E. (2000). *The direction of influence between income and subjective well-being.* Manuscript submitted for publication, University of Illinois at Urbana-Champaign.
Diener, E., & Oishi, S. (in press). Income and subjective well-being across nations. In E. Diener & E. Suh (Eds.), *Subjective well-being across nations.* Cambridge, MA: MIT Press.
Diener, E., Sandvik, E., & Pavot, W. (1991). Happiness is the frequency, not the intensity, of positive versus negative affect. In F. Strack, M. Argyle, & N. Schwarz (Eds.), *Subjective well-being: An interdisciplinary perspective* (pp. 119–139). New York: Pergamon.
Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research, 28,* 195–223.
Diener, E., Sapyta, J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry, 9,* 33–37.
Diener, E., & Suh, E. (1999). Societies we live in: International comparisons. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 434–452). New York: Russell Sage Foundation.
Diener, E., & Suh, E. M. (Eds.). (in press). *Subjective well-being across cultures.* Cambridge, MA: MIT Press.
Diener, E., Suh, E., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125,* 276–302.
Diener, E., Wolsic, B., & Fujita, F. (1995). Physical attractiveness and subjective well-being. *Journal of Personality and Social Psychology, 69,* 120–129.
Eid, M., & Diener, E. (1999). Intraindividual variability in affect: Reliability, validity, and personality correlates. *Journal of Personality and Social Psychology, 76,* 662–676.
Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology, 51,* 1058–1068.
Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 302–329). New York: Russell Sage Foundation.
Goldsmith, H. H. (1996). Studying temperament via construction of the Toddler Behavior Assessment Questionnaire. *Child Development, 67,* 218–235.
Headey, B., & Wearing, A. (1992). *Understanding happiness: A theory of subjective well-being.* Melbourne, Victoria, Australia: Longman Cheshire.
Inglehart, R. (1990). *Culture shift in advanced industrial society.* Princeton, NJ: Princeton University Press.
Kahneman, D. (1999). Objective happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 3–25). New York: Russell Sage Foundation.
Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-being: The foundations of hedonic psychology.* New York: Russell Sage Foundation.
Kubovy, M. (1999). On the pleasures of the mind. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology.* (pp. 134–154). New York: Russell Sage Foundation.
La Rochefoucauld, F. (1940). *The maxims of Francois Duc de La Rochefoucauld* (F. G. Stevens, Trans.). London: Oxford University Press.
Larsen, R. J., & Diener, E. (1985). A multitrait–multimethod examination of affect structure: Hedonic level and emotional intensity. *Personality and Individual Differences, 6,* 631–636.
Lucas, R., Diener, E., Grob, A., Suh, E., & Shao, L. (1998). *Extraversion and pleasant affect: Analyses from 40 nations.* Manuscript submitted for publication, University of Illinois.
Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology, 71,* 616–628.
Magnus, K., & Diener, E. (1991, May). *A longitudinal analysis of personality, life events, and subjective well-being.* Paper presented at the 63rd Annual Meeting of the Midwestern Psychological Association, Chicago.
Mehnert, T., Kraus, H. H., Nadler, R., & Boyd, M. (1990). Correlates of life satisfaction in those with disabling conditions. *Rehabilitation Psychology, 35,* 3–17.
Moum, T. (1996, August). *Subjective well-being as a short- and long-term predictor of suicide in the general population.* Paper presented at the World Conference on Quality of Life, Prince George, British Columbia, Canada.
Myers, D. G. (1992). *The pursuit of happiness.* New York: Morrow.
Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist, 55,* 56–67.
Oishi, S., Diener, E., Suh, E., & Lucas, R. E. (1999). Values as a moderator in subjective well-being. *Journal of Personality, 67,* 157–184.
Oishi, S., Schimmack, U., & Diener, E. (1999). *Emotional experience and life satisfaction: Beyond the nomothetic approach to subjective well-being.* Manuscript submitted for publication, University of Illinois.
Okun, M. A., & George, L. K. (1984). Physician- and self-ratings of health, neuroticism and subjective well-being among men and women. *Personality and Individual Differences, 5,* 533–539.
Oswald, A. J. (1997). Happiness and economic performance. *Economic Journal, 107,* 1815–1831.
Parducci, A. (1995). *Happiness, pleasure, and judgment: The contextual theory and its applications.* Mahwah, NJ: Erlbaum.
Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment, 5,* 164–172.
Rusting, C. L., & Larsen, R. J. (1997). Extraversion, neuroticism, and susceptibility to negative and positive affect: A test of two theoretical models. *Personality and Individual Differences, 22,* 607–612.
Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality, 61,* 317–342.
Schwarz, N., & Strack, F. (1999). Reports of subjective well-being: Judgmental processes and their methodological implications. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 61–84). New York: Russell Sage Foundation.
Scitovsky, T. (1982). *The joyless economy.* New York: Oxford University Press.
Silver, R. L. (1982). *Coping with an undesirable life event: A study of early reactions to physical disability.* Unpublished doctoral dissertation. Northwestern University, Evanston, Illinois.
Staw, B. M., Sutton, R. I., & Pelled, L. H. (1994). Employee positive

emotion and favorable outcomes at the workplace. *Organization Science, 5,* 51–71.

Stone, A. A., & Neale, J. M. (1984). Effects of severe daily events on mood. *Journal of Personality and Social Psychology, 46,* 137–144.

Stone, A. A., Schiffman, S. S., DeVries, M., & Frijters, P. (1999). Rethinking self-report assessment methodologies: An argument for collecting ecologically valid, momentary measurements and selected results of EMA studies. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 26–39). New York: Russell Sage Foundation.

Strack, F., Argyle, M., & Schwarz, N. (Eds.). (1991). *Subjective well-being: An interdisciplinary perspective.* New York: Pergamon Press.

Suh, E. (1999). *Identity consistency, subjective well-being, and culture.* Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Suh, E., Diener, E., & Fujita, F. (1996). Events and subjective well-being: Only recent events matter. *Journal of Personality and Social Psychology, 70,* 1091–1102.

Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality and Social Psychology, 74,* 482–493.

Tellegen, A., Lykken, D. T., Bouchard, T. J., Wilcox, K. J., Segal, N. L., & Rich, S. (1988). Personality similarity in twins reared apart and together. *Journal of Personality and Social Psychology, 54,* 1031–1039.

Thomas, D., & Diener, E. (1990). Memory accuracy in the recall of emotion. *Journal of Personality and Social Psychology, 59,* 291–297.

Veenhoven, R. (1988). The utility of happiness. *Social Indicators Research, 20,* 333–354.

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

Winter, L., Lawton, M. P., Casten, R. J., & Sando, R. L. (1999). The relationship between external events and affect states in older people. *International Journal of Human Development and Aging, 50,* 1–12.

World Values Study Group. (1994). *World Values Survey, 1981–1994 and 1990–1993* [Computer file, ICPSR version]. Ann Arbor, MI: Institute for Social Research.