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The psychology of subjective well-being

In the last few decades there has been something of a revolution in the scientific study of happiness.¹ A combination of radical new thinking and sophisticated methodology has allowed psychologists to add substantially to our understanding of this concept that has historically been the domain of philosophers and theologians. For the first time, we are able to measure happiness. And we have learned much about the biological and social factors that contribute to happiness. Perhaps just as important, we

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have debunked many myths about it – such as that young people are happy and the elderly are sad, or that money is the secret to it. Above all, we have begun to learn the lesson that happiness is more than an emotional pleasantries – that it is a psychological tonic that promotes well-being in many domains of life.

The importance of using the scientific method in the study of happiness can be illustrated by referring to the work of Bertrand Russell, one of the greatest minds of the twentieth century. Russell, in his analysis of subjective well-being in *The Conquest of Happiness*, maintained that the majority of people are unhappy, in part because they compare themselves to others who appear superior to them. However, contemporary researchers have discovered that most people, at least in modern Western nations, consider themselves to be happy. Further-

1 For an in-depth study of the research on subjective well-being, see Ed Diener, "Subjective Well-Being," *Psychological Bulletin* 95 (1984): 542 – 575; Ed Diener, Eunkook M. Suh, Richard E. Lucas, and Heidi L. Smith, "Subjective Well-Being: Three Decades of Progress," *Psychological Bulletin* 125 (1999): 276 – 302; Ed Diener and Eunkook M. Suh, eds., *Culture and Subjective Well-Being* (Cambridge, Mass.: MIT Press, 2000); and Daniel Kahneman, Ed Diener, and Norbert Schwarz, eds., *Well-Being: The Foundations of Hedonic Psychology* (New York: The Russell Sage Foundation, 1999).

more, scientists have found that people can draw strength from upward social comparisons because these offer hope and inspiration. Another error drawn from Russell's work is his contention that children make people happy: researchers have found little evidence that people with children are, on average, happier than those without.

The lesson here is simply that we need the scientific method to complement our analytical efforts to understand happiness, and we hope to demonstrate in this essay that scientific research has indeed helped advance this understanding. In its infancy, psychological research on happiness consisted largely of simple descriptive studies, such as comparisons between the happiness of men and women. Only recently, in the last fifty years, have behavioral scientists undertaken a serious empirical examination of happiness. By employing testable hypotheses, longitudinal designs, controlled experiential studies, and multiple measurement methods, researchers have been able to explain aspects of subjective well-being more definitively than the less formal approaches common in the past were equipped to.

All attempts to comprehend, explain, and predict happiness presuppose that researchers can define and measure it. Many psychologists tend to tackle the sticky problem of defining happiness by looking at subjective well-being, that is, people's evaluations of their own lives, including both cognitive and emotional components. Most researchers focus on three components of subjective well-being: positive affect – the presence of pleasant emotions such as joy, contentment, and affection; negative affect – the relative absence of unpleasant emotions such as fear, anger, and sadness; and personal judgments about satisfac-

tion. Taking the three components of subjective well-being together, a happy person is someone who is frequently cheerful, only occasionally sad, and generally satisfied with his or her life. Satisfaction judgments can be general (“Overall, I am satisfied with my life”) or specific (“I am satisfied with my marriage”). These judgments of life, work, marriage, school, and other domains can be based on past emotional experience or emotional memories, but can also involve explicit goals, values, and standards of comparison.

Psychologists' attempts to measure abstract concepts (such as intelligence in IQ tests) have frequently come under criticism, and the efforts of subjective-well-being researchers are no exception. The good news is that the measurement of happiness is not only possible, it is also sophisticated. Most researchers rely on a multi-method approach that employs a variety of assessment techniques. This avoids the failures associated with any single method and also capitalizes on the different assessment techniques' sensitivities to different aspects of happiness. Still, the most common, and most commonsense, way to measure happiness is through self-report surveys.

Researchers have developed a number of surveys that ask people about their relative levels of satisfaction, as well as the frequency and intensity of their emotions. Friends, family members, and roommates can also evaluate the happiness of a person close to them. This 'informant report' method produces reasonable correlations with self-report measures and protects against measurement artifacts that can arise when only one assessment is used.

To evaluate emotional experience as it occurs in everyday life, researchers have developed a technique known as experience sampling. In this assessment

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procedure, research participants carry palmtop computers that sound an alarm at random times throughout the day. Participants then complete short online surveys about their current emotional state and activities. The resulting data set allows subjective-well-being researchers to plot emotional peaks and troughs over days and weeks, and to analyze these in relation to the environments in which they occurred.

Yet another method of assessing subjective well-being is through people's rapid recall of positive versus negative memories. Biological methods – such as those that measure heart rate, galvanic skin response, startle reflex, hormone levels, and neurological activity – have been helpful in validating the more widely used measurements of happiness. Together, these methods produce a fairly valid portrait of people's experiences of well-being.

The happiness timeline, one of the most exciting breakthroughs in subjective-well-being research, was the direct result of multi-method assessment. Researchers noticed that when study participants completed surveys about emotion in the moment versus in retrospect, somewhat different patterns of happiness emerged. So subjective-well-being researchers now examine happiness as a phenomenon that can be separated into distinct temporal components, including emotional reactions and retrospective recall.

Economists, sociologists, and policymakers are fond of studying poverty and other objective indicators of quality of life. Subjective-well-being researchers, on the other hand, are primarily interested in the individual's cognitive and emotional response to his or her circumstances. Because people show varying resilience, values, and ability to thrive emotionally – even in harsh conditions

– objective indicators cannot be the last word in quality-of-life assessment. For example, the dramatic increases in wealth since World War II, while unquestionably raising 'quality of life,' have been accompanied by almost no increase in happiness in many rich nations. One reason for this surprising finding could be that there is a disparity between the material benefits of economic growth in developed nations and people's emotional reactions to them.

The second sequential component to happiness is the phenomenon of retrospective recall. Whereas objective events and emotional responses may change day to day and moment to moment, retrospective recall involves longer-lasting impressions. Despite the intuitive notion that memory neatly documents our past in organized mental files, memory is often selective and deceptive. Experience-sampling studies have shown that personal beliefs can influence memory. In one study, female participants who said that women are more emotional while menstruating were likely to retrospectively report being more emotional than they actually were during their own menstrual cycle. Other findings from recall studies suggest that for short time periods after particular events people try to recall their actual experiences, whereas for longer periods they tend to rely on ready-made answers such as their self-concept of how they normally feel.

There are far-reaching implications to the finding that people's direct emotional experience of a particular event and their emotional memory of it do not always match well. Take the example of the family vacation: most are filled with a mix of pleasure and annoyance, with doses of cheer, affection, anger, and frustration. Research shows that how a person remembers her vacation is not simply an aggregate of all the emotional

highs minus all the lows. Instead, people use a host of cognitive shortcuts that includes an evaluation of the best moments and the most recent moments, and are influenced by prior expectations of how they imagined beforehand the situation would turn out. What this means, in practical terms, is that despite long lines at the airport, sunburns, and disappointing meals, people often misremember their vacations as more idyllic than they actually were. In the end, happiness, whether a matter of pleasant emotions or pleasant memories, is made up of several temporal facets that are only modestly related to one another.

One of the most encouraging results from subjective-well-being research is the finding that most people are happy – perhaps a surprising finding in the face of media reports on the rising use of Prozac and the high suicide rate in Scandinavia. But in dozens of studies of emotion and life satisfaction conducted in countries around the world, the majority of respondents report feeling slightly positive most of the time. One possible explanation for the prevalence of happiness is that people are evolutionarily geared toward a mildly positive emotional tone. Whereas negative emotions such as fear tend to limit behavioral repertoires to narrow fight-flight-fright patterns, positive emotions appear to lead to expanding important repertoires of thoughts and actions such as increased sociability, higher motivation, and goal-oriented activity.

But for all this understanding of the architecture of emotional well-being, the most compelling question remains: What causes happiness?

One of the main factors contributing to subjective well-being is personality. Extroversion and neuroticism, in particular, are strongly tied to emotional expe-

rience. Studies show that people who are highly extroverted – that is, who are more socially outgoing and exhibit more sensitivity to rewards – tend to experience higher levels of positive emotion such as joy and enthusiasm, even when they are alone. On the other hand, neurotic people are prone to experiencing more anxiety, guilt, and depression. Personality traits such as extroversion and neuroticism, both strongly influenced by genes, emerge early in life and remain somewhat stable over time. The idea that happiness hinges on heredity is supported, in part, by studies of twins who exhibit similar emotional patterns even when they have been raised apart. This does not mean, however, that happiness is solely the result of a genetic blueprint. Just as cholesterol levels have a genetic basis but can still be altered by diet, happiness levels can change according to life circumstances, activities, and patterns of thinking.

Another factor influencing subjective well-being is adaptation. Humans have a remarkable ability to adapt to both positive and negative life circumstances. One fascinating and frequently cited study conducted with spinal cord injury patients showed that within eight weeks of their injury they adapted emotionally to their condition so that their happiness was stronger than their negative emotions such as fear and anger. Other research has shown that people can adapt to a wide range of good and bad life events in less than two months. Although adaptation can offer hope to people who have experienced a tragedy, there are some events to which people are slow or unable to adapt completely. Unemployment, for example, appears to take a long-lasting emotional toll: people frequently show lower levels of life satisfaction even after they procure a new job. We also find that it takes the

average widow many years after her spouse's death to regain her former levels of life satisfaction. (Interestingly, men are more affected by labor market events such as unemployment, and women are more affected by family events such as the birth of a child and divorce.) Thus, although people have a tremendous capacity to adapt over time, they do not adapt completely to all conditions.

Another crucial factor in subjective well-being is social relationships. Having intimate, trusting social relationships appears to be necessary for happiness. Comparisons of the happiest and least happy people show that the dimension in which the happiest people are similar is having high-quality friendships, family support, or romantic relationships; the happiest folks all had strong social attachments. A study comparing the subjective well-being of pavement dwellers in Calcutta to that of their homeless counterparts in the United States produced surprising results related to social relations.

The slum dwellers of Calcutta live in shocking material deprivation: they own few possessions, earn little money, endure harsh weather conditions, and suffer from a complete lack of privacy and a lack of access to quality health care, clean water, and nutritious food. The American homeless, by contrast, have relatively easy access to shelter, free food, coats, blankets, and hygiene products. Despite their relative material prosperity, however, the homeless in America reported lower levels of subjective well-being than the pavement dwellers in Calcutta. A closer look at the data showed that a large part of the relative life satisfaction of the Calcutta sample was due to the pavement dwellers' high-quality social relationships; cultural and economic factors doom many Indians

to collective poverty with their families, while many American homeless people are often estranged from their friends and loved ones. Although good relationships cannot guarantee subjective well-being, there appears to be little happiness without them.

While personality, adaptation, and high-quality social relations are probably universal factors underlying levels of happiness, recent research has shown there are causes of subjective well-being that vary from culture to culture and from person to person.

One of the most common ways psychologists conceptualize culture is by discussing societies in terms of individualism and collectivism. Individualists are people who, culturally speaking, emphasize the value of personal freedom and tend to put personal goals above group goals when the two are in conflict. Western industrialized countries tend to be individualistic, with the United States anchoring the extreme end of the spectrum. Collectivists, on the other hand, emphasize social harmony and tend to sacrifice personal goals to group goals when the two are in conflict. India and Ghana are examples of collectivist nations. The two types of cultures prescribe different routes for achieving subjective well-being. Collectivist cultures, for example, are more likely to emphasize fitting in and fulfilling the duties associated with one's social roles, whereas individualist cultures are more likely to promote enjoyment and personal experience.

A clever study conducted with Asian, Asian-American, and European-American university students illustrates the point that different cultural groups may look for happiness in different sources. The students were brought into the research laboratory and were asked to shoot baskets into a miniature hoop.

They had ten opportunities to make baskets and their accuracy was recorded. Later they were again brought to the laboratory, but this time they could choose between shooting baskets or trying to score bull's-eyes in darts. The fun-loving European-American students who performed well the first time around generally chose to continue playing basketball. The European-American students who performed poorly were more likely to give darts a go. By contrast, the mastery-oriented Asian and Asian-American students who performed well at basketball the previous week chose to move on and attempt to master the new activity. Those Asian and Asian-American students who performed poorly the week before chose to stick with basketball in an attempt to improve. It is important to note that the moods of the Asian and Asian-American students in this study suffered relative to the moods of the European-American students; the Asian and Asian-American students traded goodness of mood for mastery, showing a willingness to exchange short-term pleasure for long-term satisfaction.

The bottom line with cultural prescriptions is that people in different cultures often approach happiness via different routes. Collectivists are more likely to achieve subjective well-being through activities that promote mastery and group harmony, whereas individualists are more likely to receive a larger emotional paycheck from activities that are pleasant and showcase their individual talents. Therefore, a good society is, to some degree, one that allows people to succeed in various endeavors congruent with their individual and collective values.

Subjective-well-being researchers have also discovered much about what does *not* cause happiness. The first three de-

acades of happiness research were largely devoted to the examination of possible demographic variables that correlated with feeling good. Researchers looked at income, sex, age, employment, religiosity, intelligence, health, geography, and education to determine who is happy. Interestingly, many of these variables, which constitute a significant share of the popular theory on happiness, are the least important to it.

Age, gender, ethnicity, education, and beauty seem, on average, only slightly related to happiness. Religiosity shows small correlations with happiness, but current methodology is insufficient to determine whether this is because of the social and psychological benefits of belonging to a social community, because of the reassuring nature of church beliefs, or because of divine intervention. Health is slightly more important, with extremely poor health often leading to misery if it interferes with daily functioning, but good health being no guarantee of happiness.

The happiness variable that seems to grab the most media attention is money. But simply put, money is usually, at best, only mildly important to happiness. Large surveys of people from scores of countries around the world show that people are happier in wealthy industrialized countries such as Canada and Sweden than in poor nonindustrialized countries such as Kenya and Bangladesh. This finding, which is frequently replicated in international surveys, suggests that more money, at the national level, may be important, perhaps because it translates into better utilities and infrastructure, less corruption, improved health care, efficient food distribution, opportunities for employment, and lower crime rates.

Once basic needs have been met, however, increases in income do little to af-

fect happiness. If a nation has achieved a moderate level of economic prosperity, little increase in subjective well-being is seen as that society grows richer still. Research on groups living a materially simple lifestyle – from the Maasai in Kenya, to the Amish in America, to the seal hunters in Greenland – shows that these societies exhibit positive levels of subjective well-being despite the absence of swimming pools, dishwashers, and Harry Potter. In fact, a growing body of research suggests that materialism can actually be toxic to happiness. In one such study, people who reported that they valued money more than love were less satisfied with their lives than those who favored love. In the end, having money is probably mildly beneficial to happiness, while focusing on money as a major goal is detrimental.

Now that we understand what happiness is, how it is measured, and which factors do and do not lead to it, a new question arises: What good is it?

One of the newest and most important areas of subjective-well-being research analyzes the potential benefits of happiness. Pleasure seekers and Aristotelians alike will find comfort in the research findings that there are actually many tangible advantages of happiness. Studies show that people who are at least mildly happy most of the time have more self-confidence and better relationships, perform better at work, are rated more highly by their superiors, are better creative problem solvers, are more likely to volunteer or engage in altruistic behavior, and even make more money than their less happy counterparts. Some evidence even suggests that they are healthier and live longer. Longitudinal research, meanwhile, suggests that happiness may actually cause desirable characteristics, not just follow

them; it is likely that there is a psychological loop that reinforces itself, with success in marriage, work, and other life domains leading to continued happiness that, in turn, leads to more successes. Thus, the emerging body of research literature seems to indicate that happiness does not simply feel good – it is actually good for you.

It should be noted, however, that just because happiness is beneficial does not mean that subjective well-being should be the highest pursuit, or that it is desirable to experience it all the time. Subjective well-being is one pursuit among many, and there are occasions where people willingly sacrifice short-term happiness to achieve some other goal. The frustrations and anxieties of graduate school, for example, are consciously endured with the belief that a doctoral degree is a worthy pursuit. Besides, it is undesirable – impossible even – to experience happiness constantly. Unpleasant emotions such as guilt and grief can be highly functional in that they help regulate behavior and provide crucial information. People with a tendency toward happiness need to react to unpleasant events, and sometimes negative emotions can help people adapt and cope more effectively. Happiness, then, is much more a process than a destination.

In many modern societies, public policies stress the role of wealth in producing happiness. When material necessities are in short supply, it is understandable that economics will be the focus of policymakers and politicians. However, we propose that wealthy industrialized nations are just now at the point where subjective well-being should be the primary policy focus. Economic and social indicators related to health, education, equality, and other important aspects of quality of life should, of course, continue to be monitored. The key outcome

variable, however, should be subjective well-being, because it represents an integration and outcome of other variables. As material well-being in modern societies becomes increasingly common, people move beyond strictly economic concerns in what is important to their quality of life, and public policies ought to reflect this evolution. We propose that the economics of money should now be complemented by an economics of happiness that bases its policies on measures of subjective well-being.

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