

Part One

The Definition and Measurement of
Psychological Wealth

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What is Psychological Wealth?

In 1776, Adam Smith published his monumental book *An Inquiry into the Nature and Causes of the Wealth of Nations*, thereby creating the foundation of modern quantitative economics. Smith was concerned with the economic activities of individuals and society (Krueger, 2003). He provided deep insights into the biggest questions of economics, ranging from how to define and measure the wealth of nations, what increases economic productivity, to international trade and international differences in economic outputs. As you can see from the title of my book, I was inspired by Smith's *Wealth of Nations* to produce this work. Roughly 200 years after Smith's opus, the science of psychological wealth, or well-being, finally came into being. The empirical research on well-being over the last 30 years by psychologists, sociologists, economists, political scientists, and other social scientists has uncovered remarkable depth and breadth of answers to the questions people have been asking for thousands of years. Now the time is ripe to summarize these findings and figure out the *psychological* wealth of nations. I shall try to explain what makes nations and individuals psychologically wealthy in the same way as Smith told us what makes nations wealthy. To do that, we have to find the answers to several riddles: What is psychological wealth? How can we measure psychological wealth? And what people and which nations are psychologically wealthy?

What is Psychological Wealth?

Material wealth is a relatively straightforward concept compared to psychological wealth.¹ It typically means how much money and *stuff* people own and how much it's all worth. Wealthy people have high annual incomes, lots of savings, and material possessions. Problem solved. But what is *psychological* wealth? What are the psychological equivalents of income, savings, investments, and possessions?

Researchers like James Coleman, Robert Putnam, and Francis Fukuyama have persuasively demonstrated the importance of social capital—social networks and relationships—in the well-being of individuals and society (Coleman, 1988; Fukuyama, 2000; Putnam, 2000). It is easy to see the parallel between social and material capital. Just as income, savings, and assets can be thought of as monetary resources, friendships and social networks can easily be thought of as non-monetary resources that people can use to buffer the bad times and increase the good. And as in financial investment, people have to invest time and energy in friendships, neighborhoods, families, and romantic relationships. If people invest well and are lucky, they get handsome returns in the form of deep friendships, harmonious neighborhoods, satisfied families, and fulfilling romantic relationships. As with savings, if people satisfy the favors of others, they can withdraw their own favors later. But the favor-less find it hard to get a favor from others even when they need it. The sociologist Mark Granovetter (1974) even found that people with broader social networks are more likely to find satisfying and high-paying jobs, compared with people who have narrow networks. Thus, what Putnam and others call “social capital” can indeed bring people material wealth.

Although social capital enriches people's lives, I will not equate social capital with psychological wealth. This is because, strictly speaking, social capital is *relational* wealth, but it is not necessarily psychological wealth. By definition, psychological wealth is the wealth of the psyche—the inner world of human beings. There is no question that social capital

¹ I say “relatively” here because smart economists have spent much time debating the best way to measure material wealth. It is clearly not as simple as it appears to be. However, there seems to be a greater degree of consensus on the measures of material wealth than psychological wealth at this time.

plays a critical role in understanding psychological wealth. However, it does not directly refer to the condition of the psyche per se, but refers to external conditions that enrich human mind and soul. Thus, social capital and psychological wealth are two related, but different ideas.

Then what would best represent the concept of psychological wealth, the wealth of mind and soul? One can make a good argument that it's spirituality. After all, Mother Theresa appeared to have a great deal of spiritual richness. So too do the Dalai Lama and the Pope. The novelist Jonathan Safran Foer's grandmother is a case in point (Foer, 2009, October 7). During World War II, his Jewish grandmother was separated from her family and had to literally run everyday to escape the Nazis. If she had stopped running, she would have died. Without enough food, she began to starve. She got sicker and sicker, and she was in constant pain from the malnutrition. In order to survive, she ate almost anything she could find. Throughout the horrendous conditions, she kept her faith. Foer's grandmother told him about the ordeal:

"The worst it got was near the end. A lot of people died right at the end, and I didn't know if I could make it another day. A farmer, a Russian, God bless him, he saw my condition, and he went into his house and came out with a piece of meat for me."

"He saved your life."

"I didn't eat it."

"You didn't eat it?"

"It was pork. I wouldn't eat pork."

"Why?"

"What do you mean why?"

"What, because it wasn't kosher?"

"Of course."

"But not even to save your life?"

"If nothing matters, there's nothing to save."

A story like this makes it clear that spirituality and religious faith are a major source of human strength, embodying the wealth of the soul and mind. Not surprisingly, numerous studies have found that spiritual people report better health, happiness, and life satisfaction (Myers, 2000).

Although people can be spiritual without identifying with any of the major, traditional religions, spirituality is typically highly intertwined with religion. But a major problem with using spiritual richness as the

definition for psychological wealth, then, is the existence of numerous individuals who do not espouse any particular religious beliefs, yet lead a life rich in inner satisfaction. Defining psychological wealth in terms of spirituality, therefore, creates a bias toward religious individuals and nations and a bias against non-religious ones. Though is spirituality a clear indicator of psychological wealth, defining psychological wealth in terms of spiritual richness is obviously too narrow a definition.

If spirituality is too closely tied to religion, then what about something broader, like meaning or purpose in life? Feeling that life has a purpose and meaning seems to be a perfect indicator of the wealth of the soul. In addition, scientists are coming closer to testing meaning and purpose empirically because they have done extensive work recently on how to measure meaning and purpose (e.g., Ryff & Keyes, 1995; Steger et al., 2006). But the problem with using meaning and purpose is that it automatically excludes a huge portion of society—children. Exactly when can people assess meaning in life? Can seven-year-olds evaluate meaning or purpose in life? Can twelve-year-olds do it? If seven-year-olds cannot do it by themselves, can their parents or teachers do it? Certainly seven-year-olds can be happy. But if happiness requires meaning and purpose, then we have an intractable problem. If psychological wealth cannot be measured among children, then we cannot rely on just meaning or purpose by itself.

One indicator of psychological wealth that solves the age problem is psychological resilience because it has been studied among young children and older adults. So psychological resilience—often defined as “patterns of positive adaptation during or following exposure to adverse experiences” (Masten & Obradović, 2008)—might be another candidate for psychological wealth. After all, resilience exemplifies that people have psychological resources that carry individuals forward in the face of hardship, even if they lack material wealth. However, psychological resilience can only show its face when people face serious challenges. So people who live in benign environments are almost automatically shut out from showing their psychological resilience. We would almost be forced to say that all of the highest resilience scores belong to the people who live in extremely challenging environments. So it seems that resilience cannot be measured without measuring external conditions. In other words, if we take psychological resilience as an indicator of psychological wealth, we must first know the external conditions that the individuals and society are facing. This

conceptual and measurement dependency makes it a less-than-ideal candidate for the concept of psychological wealth.

If we take the resource analogy of material wealth, what would be psychological “resources,” besides spirituality and meaning in life? When we think about a resourceful person, most of us think of someone who can handle difficult situations, as well as prosperous situations. In this sense, intelligence might be considered a psychological resource. If psychological wealth is based on psychological resources, then, intelligence might even be the *best* candidate. After all, material wealth is valuable because it provides resources that people need and desire, from shelter and food to leisure and recreation. Likewise, intelligence is valuable because it provides resources that individuals need and desire, ranging from reading, writing, and accounting, to daily problem solving and planning the future. Social and emotional intelligence, in particular, seem to fit this definition of psychological wealth. There is a long history of research on social and emotional intelligence. Thorndike and Stein (1937), for instance, proposed that intelligence consists of abstract, mechanical, and social components. Abstract intelligence refers to “ability to understand and manage ideas and abstractions,” while mechanical intelligence refers to “ability to understand and manage the concrete objects of the physical environments” (p. 275). Finally, they defined social intelligence as “abilities to understand and manage people” (p. 275). Although social intelligence is an appealing construct, the measurement problem is a major hurdle for using it as the definition of psychological wealth. Indeed, Thorndike and Stein reviewed then-popular social intelligence tests, in particular the George Washington Social Intelligence Test and concluded that it is nearly impossible to measure social intelligence.

Since Thorndike and Stein’s 1937 paper, psychologists virtually gave up on researching social intelligence. Cantor and Kihlstrom (1989), however, revived interest in social intelligence from a perspective that avoided the objective performance measures of the earlier researchers. They defined social intelligence as people’s ability to deal with “the mundane and monumental problems that they confront in the ordinary course of everyday living” (p. 1), and they argued explicitly that social intelligence is too diverse to be measured objectively. Instead, Cantor and Kihlstrom encouraged psychologists to investigate such diverse abilities as goal setting, implementation, will-power, and self-knowledge. Similarly, Salovey and Mayer (1989–1990) proposed that emotional

intelligence should be a useful concept that integrates a diverse array of research topics such as emotion regulation and flexible planning. Unlike Cantor and Kihlstrom (1989), Salovey and Mayer insisted that it was possible to measure emotional intelligence just like cognitive intelligence. So they created the Multifactor Emotional Intelligence Scale (MEIS: Mayer, Caruso, & Salovey, 1999) and reported that it met the standards of intelligence tests.

The common thread to these different kinds of intelligence is the core idea that these abilities help people handle everyday situations well. In this sense, intelligence broadly defined is a great candidate for the definition of psychological wealth. Although I believe that cognitive, social, and emotional intelligence fit well with the resource definition of psychological wealth, I do not use this definition. This is because the main focus of this book is to explore the psychological wealth of *nations*. To explore across nations, psychological wealth needs to be measurable across people and borders. Over the past hundred years, psychologists have made a heroic effort and great advances in creating valid and reliable intelligence tests (Carpenter, Just, & Shell, 1990; Horn, 1968). Despite all this work, intelligence tests are very difficult to compare across groups (Brody, 2007). In addition, the social intelligence movement failed to create performance measures. Cantor and Kihlstrom (1989) led the way theoretically, but they haven't come up with social intelligence performance measures. Mayer, Caruso, and Salovey (1999) did develop a test, but there is considerable controversy about the validity and reliability of social and emotional intelligence tests (Roberts, Zeidner, & Matthews, 2001). It is quite possible that the MEIS will be further refined or that other valid measures of social emotional intelligence will be developed. However, at this point there are still too many conceptual and measurement obstacles to use social and emotional intelligence as the definition for the psychological wealth of nations.

Like Diener and Biswas-Diener (2008), in this book I will consider happiness as the best proxy to psychological wealth. What I mean by happiness is not a temporary mood state, but a summary index of how well someone thinks his or her life is going. Psychologists use the term *subjective well-being* instead of happiness to emphasize the distinction (Diener, 1984; Diener et al., 1999). I use the terms *happiness*, *subjective well-being*, and *psychological wealth* interchangeably in this book. It should be known up front that there are cognitive and affective components of subjective well-being. The cognitive component of

subjective well-being is often represented by life satisfaction, or how well people think their lives are going. The affective component of subjective well-being is represented by positive and negative affect—how often people feel happiness, sadness, and other emotions in their daily lives. Unlike social capital, happiness is inherently psychological. Social capital involves external behaviors like meeting attendance, voting, and hanging out with friends, all of which can be measured without peeking inside the mind. But happiness is necessarily psychological because it is how people subjectively evaluate their own life, independent of objective, external conditions. Unlike spirituality, happiness does not have religious connotations. Unlike meaning in life, most kindergarteners have a sense that their lives are going well or not. Unlike resilience, happiness does not require external conditions to be seen. Finally, unlike intelligence (in particular social and emotional intelligence), scientists generally agree about how to measure subjective well-being.

To some readers, seeing happiness as a psychological resource might seem odd at first. After all, unlike intelligence, it is harder to see how happiness can be helpful and considered a “resource.” But as we shall see in Chapter 7, empirical research has shown that happiness does serve as a fundamental “resource” that (a) helps individuals deal with difficult situations and (b) builds social relationships (see Fredrickson, 1998, 2001 for a review).

The main difficulty of defining psychological wealth in terms of happiness is its conceptual diversity. Is it possible to measure happiness if the concept of happiness is so diverse? First, I will review a historical change in the concept of happiness. Then, I will review cross-cultural variations in the concept of happiness. Finally, following Sumner (1996), I will argue that it is possible to measure the diverse concepts of happiness, focusing on global life satisfaction and various positive emotion terms.

The History of Happiness

Socrates, Plato, and Aristotle all deemed happiness (Greek *eudaimonia*) as the highest goal of human beings and believed that only god-like humans could achieve this goal. Unlike the contemporary American concept of happiness, in which everyone is entitled to be happy, Socrates, Plato, and Aristotle’s concept of happiness was highly elitist because these philosophers thought that happiness required a virtuous and

contemplative life rather than mere enjoyment. After all, how many Greeks were able to indulge in a contemplative life rather than worrying constantly about their daily survival? Plato makes this argument clearly in his *Republic* (Waterfield, 1993). Plato divided pleasures into pure and false pleasures. He argued that most pleasures (like sex and food) are based on the removal of pain, which is not really pleasure or pain. In contrast, pleasure of the mind is pure because it is not based on relief from pain. However, only the well educated are familiar with the pleasure of the mind, and therefore only the educated can be happy.

Although Socrates, Plato, and Aristotle all agreed on the centrality of happiness in a good life (ethics), they differed in the role of luck. Whereas Socrates and Plato emphasized individual agency in achieving this highest good, Aristotle recognized the fragility of happiness that lies outside our control (Nussbaum, 1986/2000). Aristotle uses the story of Priam, the king of Troy during the Trojan War who lost his wife, sons, all of his property, and power toward the end of his life multiple times in his *Ethics* to make the point that no matter how virtuous people are, they cannot be happy without luck. That is, virtue can cause happiness, but bad luck can easily take it away. Aristotle writes “Happiness demands not only complete goodness but a complete life. In the course of life we encounter many reverses and all kinds of vicissitudes, and in old age even the most prosperous of men may be involved in great misfortunes, as we are told about Priam in Homer’s *Iliad* and *Odyssey* (the Trojan poems). Nobody calls happy a man who suffered fortunes like his and met a miserable end” (Thompson, 1953, p. 81). In this sense, people can evaluate their lives only after their lives are over. If one takes this perspective seriously, then it is impossible to measure a person’s happiness until he or she has died. According to McMahon (2006), Europeans believed for many centuries that no living person could be happy, until the Reformation in the 16th century, when earthly happiness became considered a sign of grace.

Even after people started feeling that humans can be happy on earth, one aspect of the Aristotelian conception of eudaimonia, or the fragility of happiness, remained influential. Like the Aristotelian concept of eudaimonia, most words for happiness originated in fortune and luck. McMahon (2006) notes that the Middle English and Old Norse *happ* (e.g., “happen” “hapless”) is the root of *happiness*. Similarly, French *bonheur* comes from *bon* (good) and *heur* (fortune or luck). Germans still use the term *Glück* to refer to both luck and happiness.

Italian, Spanish, and Portuguese, *felicità*, *felicidad*, and *felicidade* all come from the Latin *felix* (happy). We examined the historical change in the meaning of the term *happiness* in the Webster Unabridged Dictionaries (Oishi, 2010a). In the 1850, 1853, 1854, 1859, and 1861 editions, the Webster Unabridged Dictionary lists “the agreeable sensations which spring from the enjoyment of good” as the first definition of happiness, “good luck; good fortune” as the second, and “fortuitous elegance; unstudied grace” as the third definition. Interestingly, however, in the 1961 edition, the definition of happiness as “good fortune; good luck; prosperity” was deemed “archaic.” In other words, in the U.S. some time after World War II people stopped using happiness to refer to good luck or fortune, and happiness became a purely internal state of mind, or “a pleasurable or enjoyable experience.” In addition, current definitions of Italian, Spanish, and Portuguese terms for happiness emphasize the satisfaction of desires rather than luck per se. The Italian word *felicità* means the fulfillment of every desire, according to the Dizionario della Lingua Italiana (1988). The Portuguese *felicidade* is similar to Italian in that it is a “state of full/absolute inner satisfaction, well-being, in which all human beings’ aspirations are met/satisfied” (*Dicionário da Língua Portuguesa Contemporânea da Academia das Ciências de Lisboa*, 2001). The Spanish term *felicidad* is defined as an “affective state involving satisfaction with the possession of something” and “satisfaction, pleasure, contentment” in the Diccionario de la Real Academia de la Lengua Española (22nd edition). Thus, although happiness in most languages originated from fortune, luck, or fate, the precise meaning has changed over time in English, Italian, Spanish, and Portuguese, creating diversity in the concept of happiness (see also Kitayama & Markus, 2000; Wierziback, 2004 for a review).

In addition to Socrates, Plato, and Aristotle, other philosophers have provided divergent views on the pursuit of happiness (see Haybron, 2008; McMahan, 2006; Tiberius, 2004 for review). For instance, Epicurus famously emphasized the democratic notion that everyone can attain happiness, by defining happiness primarily through enjoyment and comfort (McMahan, 2006). Although Epicurus had an enormous impact on subsequent generations, hedonism has been criticized on several grounds. The earliest critique can be found in Plato’s *Philebus* (before Epicurus made hedonism famous), in which he argues that intellect is required to moderate pleasure, as well as to choose a right pleasure out of various pleasures (Van Riel, 2000). The implication of this

critique is that the blind pursuit of pleasures could result in more pains than pleasures in the long run. To address this problem, James Griffin (1986) proposed the satisfaction of *informed* desires as the key to happiness. If individuals are well-informed and prudent about their desires, then the blind pursuit of pleasure critique does not apply to the satisfaction of the informed desires. A main critique of the informed desire theory of happiness is that ordinary people have difficulty knowing which desires to pursue. Because of this difficulty, Martha Nussbaum and Amartya Sen (1993) present the alternative approach to happiness, or the objective approach to happiness, and argue that people are happy when they have: autonomy, physical health, and relationships.

In sum, there have been diverse concepts of happiness over time and across cultures. There are many competing theories regarding the pursuit of happiness. Such diversity does not mean, however, that it is impossible to measure happiness. In his book *Welfare, Happiness, and Ethics*, Wayne Sumner (1996) reviews all the major ethical theories of welfare (or the condition of faring or doing well) and reaches the conclusion “(1) that welfare is subjective, (2) that it is either identical with or at least closely related to happiness, (3) that happiness consists in life satisfaction, and (4) that people’s self-assessments provide the most reliable measure of how satisfied they are with their lives, or with particular sectors of their lives” (p. 153). In other words, even if different individuals and cultures hold different concepts and views of happiness, the subjective judgments, as long as they are well-informed, provide a good cue into how well or poorly their lives are going. Hedonists might judge their lives based on how much pleasures they feel day to day, while moralists might judge their lives based on how virtuous their lives have been. When judging their lives, French and Germans might think of how lucky and fortunate they are, whereas Italians and Portuguese might consider how much their desires are satisfied. Sumner argues that as long as these judgments are made with full or near-full information, they are authentic. In the current book, I take Sumner’s perspective as a starting point, define psychological wealth as happiness, and investigate the happiness of nations.

Why Psychological Wealth of Nations?

Just as individuals have a sense of how well their lives are going, nations can have psychological wealth defined as the average of residents’

evaluation of how well they think their lives are going. In other words, how well its residents think and feel they are doing could be a great indicator of how well the nation is doing as a whole. This is exactly what Jeremy Bentham (1789/2008) and John Stuart Mill (1871/2007) advocated in the late 18th to 19th centuries. Whereas Adam Smith's (1776/2003) *The Wealth of Nations* was primarily concerned with the economic activities of individuals and society, other founders of modern economics like Bentham and Mill were deeply concerned with the happiness of individuals and society as a whole. Bentham, for instance, famously defined utilitarianism as follows: "By the principle of utility is meant that principle which approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question: or, what is the same thing in other words, to promote or to oppose that happiness" (p. 1). Bentham went on to argue that "The business of government is to promote the happiness of the society, by punishing and rewarding" (p. 46) and laid out the utilitarian perspective on morality and law. Whereas Bentham and Mill's utilitarianism remained the dominant theory in moral philosophy² (Rawls, 1971/1999), economists in the 20th century were mainly interested in the material wealth of nations and monetary exchanges rather than psychological aspects of economic activities (see Vaggi & Groenewegen, 2003 for a historical survey). The pioneers of macroeconomics, such as Knut Wicksell and John Maynard Keynes, for instance, measured wealth by looking at interest rates, inflation, and unemployment. The influential Cambridge economist Arthur Cecil Pigou (1932) also argued that social welfare, or Bentham's greatest happiness principle, could and should be measured by money, further invalidating the use of self-reports and the first-person perspective in economics. Thus, neither self-reported well-being nor aggregates of it were considered a proper method or topic in mainstream economics (Graham, 2005). Lately, however, several prominent economists have begun investigating the *psychological* wealth of nations, or the subjective well-being of nations, fully incorporating the first-person perspective and self-reports of well-being (see Easterlin, 1974 for a pioneering work; Frey, 2008; Layard, 2005 for recent

² John Rawls (1971/1999) stated "During much of modern moral philosophy the predominant systematic theory has been some form of utilitarianism," (p. xvii). He then went on to dismantle utilitarianism as a just/fair ideal of society.

review). Below I will present a brief historical survey of the shift in interest among economists and other social scientists from the purely material wealth of nations to the *psychological* wealth of nations.

The Creation of Gross National Product (GNP) and Its Discontent

Smith (1776/2003) proposed that the wealth of nations be measured by the “produce of the whole labour of the society” and the “quantity of capital stock” (p. 4–5). Smith famously observed that the division of labor was a pivotal factor contributing to the wealth of a nation because it multiplies the efficiency of societal outputs. Later, the recipient of the 1971 Nobel Memorial Prize in Economics Simon Kuznet and his colleagues (Kuznets, Epstein, & Jenks, 1941) presented the concrete concept of national income, which was defined as “the net value of all economic goods produced by the nation” (p. 3). Among its other influences, national income formed the foundation for various indicators of material societal well-being such as Gross Domestic Product (GDP) and Gross National Product (GNP), which became the most popular indices of material well-being at the level of nations from the 1950s to now.

Although the outputs of a nation do indicate the material well-being of the nation, material wealth alone does not capture the full range of societal conditions (Diener & Seligman, 2004; Frey & Stutzer, 2002; Graham, 2005; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004a; Sen, 1999). For instance, an increase in industrial production often entails undesirable societal conditions such as environmental pollution (e.g., the U.S. in the 1890s; Japan in the 1950s; China in the 1990s). In addition, the crime rate, personal safety, the availability of health care and social welfare, homelessness, infant mortality, and longevity are not perfectly correlated with indicators of material well-being such as GDP (Diener & Suh, 1997; Morris, 1979).

Dissatisfaction with the limited nature of purely economic indicators of societal well-being led to the social indicators and quality of life movement in the 1960s and 1970s. In the late 1960s, the U.S. government set up a Panel on Social Indicators with sociologist Daniel Bell and economist Alice M. Rivlin as co-chairs. Federal agencies started publishing various social indicators regularly, including educational

enrollment and attainment, crime victimization, infant mortality, and longevity. In 1972, the General Social Survey was started with support from the National Science Foundation. In 1974, the interdisciplinary journal *Social Indicators Research* was established as a forum for social indicators and quality-of-life researchers (see Sirgy, Michalos, Ferriss, Easterlin, Patrick, & Pavot, 2006 for a comprehensive history of this movement).

Whereas there is a great deal of consensus on societal indices of material well-being (e.g., GDP per capita, saving rates, the unemployment rate), there is less agreement on indicators of societal well-being. Many questions still need answers: what should be counted as an indicator of societal well-being? Should the divorce rate be an indicator? What about longevity? Even when there is an agreement on the content of the indicators, there is a question of weighting. Should an economic indicator such as GDP per capita be weighted equally with indices like the literacy rate and air pollution (see Diener & Suh, 1997 for a detailed discussion on this point)? To all of these questions, the United Nations' first publication of the Human Development Index (HDI) in 1990 provided history's first answer; before the HDI, there was no agreed-upon measure of societal well-being, other than economic indicators. That first HDI was a simple metric: income, life expectancy, and educational attainment (see <http://hdr.undp.org/en/statistics/indices/hdi/> for details).

Since the first HDI, several measures of societal well-being have been proposed (Easterlin, 2000). Diener (1995), for instance, developed the value-based index of quality of life, which is made up of purchasing power, the homicide rate, fulfillment of basic physical needs, the suicide rate, the literacy rate, gross human rights violations, and deforestation. Diener also created an advanced version of the index. For instance, the basic indicator of egalitarian commitment is gross human rights violations, whereas the advanced indicator of egalitarian commitment is income equality (as measured by the GINI index). The basic indicator of intellectual autonomy is the literacy rate, whereas the advanced indicator of intellectual autonomy is university attendance. The Centre for Bhutan Studies has proposed the Gross Happiness Index (GHI), made up of living standards, health, education, ecosystem diversity and resilience, cultural vitality and diversity, time use and balance, good governance, community vitality, and psychological well-being (<http://www.grossnationalhappiness.com>). At this point, however,

the Centre for Bhutan Studies has not clarified how community vitality, cultural vitality, and time use and balance will be measured.

Although there are several strengths of social indicators like the HDI and GHI, there are also several problems (see Diener, Lucas, Schimmack, & Helliwell, 2009 for detailed criticism). First, a small number of experts often decide which indicators to include in the summary index of societal well-being; this leaves room for disagreements (e.g., “Should the unemployment rate be included?”). Second, it is unclear what formula of the various indicators should be used to calculate an overall index. Third, social indicators are not free from measurement errors. For instance, some nations keep the statistics regarding schooling more accurately than others. Thus, like self-reports, there is divergent reliability in social indicators. Finally, social indicators (e.g., graduation rate, percentage of people with a high school diploma) might not reflect people’s everyday experiences (Easterlin, 2000). For instance, social indicators researchers assume that a higher percentage of people with a high school diploma means that societal well-being is high. But are high school graduates living in a country where 90% of the population has a high school diploma happier than high school graduates living in a country where 50% of the population has a high school diploma? It is true that a well-educated country is more likely to experience economic growth over time than a less-educated country. However, competition with peers might be more fierce in a well-educated country than in a less-educated country. Thus, the link between social indicators and people’s everyday experiences is far from straightforward.

The Psychological Wealth of Nations: A Subjective Approach to Societal Well-Being

Bentham (1789/2008) argued that the happiness of a community is the sum of happiness of individual members, as follows: “The community is a fictitious *body*, composed of the individual persons who are constituting as it were its *members*. The interest of the community then is, what?—the sum of the interests of the several members who compose it” (p. 3). Many psychologists, economists, sociologists, and political scientists agree that the psychological wealth of nations can be calculated by adding up the well-being of individuals (Diener, Lucas, Schimmack, & Helliwell, 2009; Dolan & White, 2007; Inglehart, Foa, Peterson, &

Welzel, 2008). The strength of a subjective approach to societal well-being is that it captures people's experiences and evaluations more directly than either economic or social indicators. The basic assumptions of the subjective approach are that (a) it is possible to clearly define and measure well-being, and (b) people can report their well-being directly.

But one could argue, as Durkheim (1897/1951) did in his analysis of suicide, that the psychological wealth of nations is more than the sum of its residents' subjective well-being and that there is something at the collective level that cannot be measured at or reduced to the level of individuals' subjective well-being. In other words, the psychological wealth of nations might have an emergent property such that the whole (the nation) could be greater than the sum of its parts (the citizens). Maybe nations are like the 1969–1970 Knicks; maybe their citizens are only moderately satisfied with their own lives but the nation as a whole is extremely well-functioning. Psychologically wealthy nations might be characterized, then, not only by average happiness of citizens, but also by collective forces. For instance, psychologically wealthy nations might have citizens who are more willing to forgo their self-interest (e.g., taking long showers, using air conditioning) in order to solve societal problems (e.g., drought, power shortage). In Part Three, I will explore psychological wealth at a societal level and summarize the findings about the happiness sum metric versus the happiness as the '69–'70 Knicks model.

In sum, psychological wealth can be defined by concepts ranging from social capital to spirituality and meaning to subjective well-being. Like Diener and Biswas-Diener (2008), in this book I define psychological wealth as subjective well-being, or how people subjectively evaluate their own life. Like Bentham (1789/2008) and Mill (1871/2007), I also define the psychological wealth of nations as the average subjective well-being of its citizens (although I will discuss the possibility that the psychological wealth of nation has an emergent property that cannot be reduced to average subjective well-being of citizens in Part Three). Using these definitions as guidelines, I will answer the following questions: How can we measure psychological wealth? (Chapter 2), How strongly is material wealth associated with psychological wealth? (Chapter 3), What predicts psychological wealth? (Chapters 4 and 5), Can we become happier? (Chapter 6), Are there benefits or harms of happiness? (Chapter 7), What are the optimal levels of psychological wealth? (Chapter 8), and What does it mean for a nation to be psychologically wealthy? (Chapters 9 to 12).