

POSITIVE PSYCHOLOGY

Steve R. Baumgardner | Marie K. Crothers



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This One



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1

What Is Positive Psychology?

CHAPTER OUTLINE

Traditional Psychology

- Why the Negative Focus?

 - Negative Aspects Perceived as More Authentic and “Real”

 - Negatives as More Important

 - The Disease Model

Positive Psychology

- Health Psychology

- Focus on Research: Living Longer Through Positive Emotions—The Nun Study

- Clinical Psychology

- Developmental Psychology

- Survey Research and Subjective Well-Being

- Social/Personality Psychology and the Psychology of Religion

Positive Psychology: Assumptions, Goals, and Definitions

- Life Above Zero

- Culture and the Meaning of a Good Life

- Why Now?

Two Final Notes

- Positive Psychology Is Not Opposed to Psychology

- Positive Psychology and the Status Quo

TRADITIONAL PSYCHOLOGY

My major professor used to say that the surest way to become famous in psychology was to publish a study showing that human nature is even worse than we had imagined. His point was not to impugn the integrity of anyone who conducted such a study, but rather to note people's fascination with the dark side of human nature. A case in point is the one study that nearly every college student in introductory psychology remembers, namely Stanley Milgram's (1974) famous research on obedience to authority. In Milgram's study, ordinary people delivered what they believed to be painful electric shocks to a middle-aged man as he made errors on a simple learning task. At the direction of a white-coated lab technician, people increased the level of “shocks” despite strident protests from the recipient. These protests included refusals to continue the experiment, agonizing screams, demands that he be let out of the study, and complaints that his heart was starting to bother him. The participants were visibly upset by the effects on the victim of what they believed to be genuine electric shocks. However, 66% still obeyed the commands of the experimenter, marched up the shock scale, and pulled the last switch at the highest shock level of 450 volts, despite clear markings on the control panel indicating that the shocks were dangerous. How bad is

human nature? Milgram's classic study suggests that ordinary people will go against their own judgment and moral values under minimal pressure from a legitimate authority. Human nature, it appears, cannot be counted upon to insulate society from acts of brutality.

The connections between the Milgram study and real-life cases of people following orders to commit acts of brutality are compelling. Adolph Eichman, tried for crimes against humanity for his part in the Holocaust death camps run by the Nazis in World War II, said repeatedly in his own defense that he was just following orders. Captured in philosopher Hanna Arendt's famous phrase, "the banality of evil" (1963), those who carried out extraordinary acts of brutality in the systematic killing of Jews were utterly ordinary people—not pathological monsters. Like participants in Milgram's study, they were just following orders.

A positive psychologist might ask, why aren't there equally dramatic studies showing the human capacity for goodness? It certainly is not because goodness does not exist in the world. History provides countless examples. People risked their lives to help Jews escape from Nazi Germany during World War II, and priests and ministers aboard the *Titanic* sacrificed their own lives for others by giving their life preservers to fellow passengers. And, who can forget the imagery of heroic firefighters, police officers, and ordinary citizens following the September 11 terrorist attacks? A basic positive psychology premise is that the field of psychology is out of balance, with more focus on the negatives in human behavior than on the positives. Positive psychology does not deny the negative, nor does it suggest that all of psychology focuses on the negative. Rather, the new and emerging perspective of positive psychology embraces a more realistic and balanced view of human nature that includes human strengths and virtues without denying human weakness and capacity for evil. Each of us confronts a share of sadness and trauma in our life; but we also experience our share of joy and happiness. Historically, psychology has had more to say about the downs than about the ups. A large number of college students complete a general psychology course as part of their college education. Studies show that they recall mostly the negatives of human behavior, such as mental illness and the Milgram study (see Fineburg, 2004, for a review). Positive psychology

aims to offset this negative image of human nature with a more balanced view.

Why the Negative Focus?

NEGATIVE ASPECTS PERCEIVED AS MORE AUTHENTIC AND "REAL" Sigmund Freud is perhaps too easy a target for criticism regarding psychology's emphasis on negatives. Yet undoubtedly, Freud *was* influential in promoting the belief that beneath the veneer of everyday politeness and kindness lurked more self-serving motives. Let's say you sacrifice some of your own study time to help your roommate with a difficult homework assignment. Looks positive and altruistic on the surface, but some would argue that in actuality, you are just expressing your need to dominate and feel superior to others. You give blood at a university blood drive, but in actuality you were motivated by sexual attraction to one of the blood drive volunteers. You commit your life to helping others for low pay, but Freud might argue that you are just trying to compensate for feelings of inadequacy and guilt caused by traumatic childhood experiences. Freud believed that human behavior is motivated primarily by self-serving drives that must be controlled and channeled in productive ways for society to function effectively. Freud did not necessarily believe self-serving behaviors were bad. From his perspective they simply express our biologically inherited needs and impulses. The legacy of Freud's views within psychology, however, has been to perpetuate a negative image of human nature. It is difficult to deny that behaviors and traits that are seemingly positive on the surface are sometimes rooted in negative motives. However, positive psychology emphasizes that this is not always the case. From a positive psychology perspective, positive qualities and motives are just as authentic as negative ones and they affirm the positive side of human nature.

In addition to the Freud-inspired suspicion that negative motives lie beneath the surface of positive behaviors, there is also a science-inspired skepticism concerning the scientific legitimacy of topics studied in positive psychology—topics that some perceive as reminiscent of the popular psychology literature. Historically, psychologists have used pop psychology and self-help books as examples of the folly of unscientific and empirically unsupported ideas about human behavior. Many psychologists view the success of the self-help industry as evidence of laypersons' gullibility and the importance

of a critical scientific attitude. Telling an empirically-minded psychologist that his or her research smacks of pop psych would be an extremely disparaging criticism.

One of my students gave the following description of positive psychology: "Positive psychology is pop psychology with a scientific basis." The student's description is insightful because it acknowledges the connections between the subject matter of positive psychology and many long-standing mainstays of pop psychology. Current topics in positive-psychology include the study of happiness, love, hope, forgiveness, positive growth after trauma, and the health-promoting benefits of a positive, optimistic attitude. These topics read like a rundown of books in the pop psych section of your local bookstore. In summary, two reasons for psychology's greater focus on negative than positive phenomena are rooted in negative beliefs about the basic nature of humanity, and skepticism about the scientific basis of positive psychology's subject matter.

NEGATIVES AS MORE IMPORTANT Ironically, research suggests that the greater weight and attention given to the negatives in human behavior compared to the positives may reflect a universal tendency (i.e., such a focus may be inherent in human nature). Generally, in human behavior the **"bad is stronger than the good"** (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Studies of impression formation show that information about negative traits and behaviors contributes more to how we think about others than does positive information—a finding dubbed the "trait negativity bias" (Covert & Reeder, 1990; Rozin & Royzman, 2001). Research has also shown that the presence of conflict and negative behavior makes a greater contribution to relationship satisfaction (or lack thereof) than does the amount of positive behavior (Reis & Gable, 2003). Studies strongly suggest that one negative comment can undo many acts of kindness and one bad trait can undermine a person's reputation.

Part of the reason for the power of the negative is that we seem to assume that life is generally going to be good, or at least ok. This assumption may reflect our everyday experience, in which good or neutral events are more frequent than bad ones. As a result, negative events and information stand out in distinct contrast to our general expectations. Research supports this idea that because positive events are more common in our experience, negative ones violate our expectations and

are consequently given more attention (Gable & Haidt, 2005).

The fact that we attend more to the "bad" than to the "good" may also reflect an adaptive evolutionary behavior (Reis & Gable, 2003). Aversive events and negative behaviors may represent threats to our survival, therefore justifying, in an evolutionary survival sense, greater attention and impact. Evolution may thus help explain the "attention-grabbing power of negative social information" described by Pratto and John (1991). So, another reason for psychology's focus on the negative may be that psychologists are simply human, studying what attracts the greatest attention and what has the greatest impact on human behavior.

THE DISEASE MODEL Martin Seligman (2002a, 2002b, 2003) argues that the dominance of the disease model within psychology has focused the field on treating illness and away from building strengths. The disease model has produced many successes in treating psychopathology. Based on the disease model, psychology has built an extensive understanding of mental illness and a language to describe the various pathologies that affect millions of people. However, Ryff and Singer (1998) argue that psychology should be more than a "repair shop" for broken lives. The disease model is of limited value when it comes to promoting health and preventing illness. Psychologists know far less about mental health than about mental illness. We lack a comparable understanding or even a language for describing the characteristics of mentally healthy people; yet it is clear that mental health is not simply the absence of mental illness. Eliminating illness does not ensure a healthy, thriving, and competent individual. This fact points out that another contributor to psychology's focus on the negative has been the well-intentioned desire to reduce human misery, guided by the disease model.

POSITIVE PSYCHOLOGY

Martin Seligman may have been the first contemporary psychologist to call this new perspective "positive psychology." In his 1998 presidential address to the American Psychological Association, Seligman made a plea for a major shift in psychology's focus (Seligman, 1998), from studying and trying to undo the worst in human behavior to studying and promoting the best in human behavior. He asked his

audience why psychology shouldn't study things like "joy and courage." Seligman supported his call for positive psychology by noting the imbalance in psychology we discussed earlier: too much attention to weaknesses and reducing human misery, and not enough attention to strengths and promoting health. Seligman's hope was that positive psychology would help expand the scope of psychology beyond the disease model to promote the study and understanding of healthy human functioning. The standing ovation at the close of his address indicated an enthusiastic response to Seligman's ideas.

New areas of psychology do not emerge in a vacuum. The concerns and perspectives of positive psychology, given clarifying description by Seligman, have scattered representation throughout psychology's history. Terman's (1939) studies of gifted children and determinants of happiness in marriage (Terman, Bottenwieser, Ferguson, Johnson, & Wilson, 1938) are early examples of research emphasizing positive characteristics and functioning, as noted by Seligman and Csikszentmihalyi (2000). The origins of research on subjective well-being can be found in early research starting in the 1920s and reinforced by the polling techniques of George Gallup and others (Diener, Lucas, & Oishi, 2002). Within psychology's recent history, the humanistic movement may have been one of the stronger voices for a more positive psychology. Humanistic psychology (a popular perspective in the 1960s) also criticized the tendency of traditional psychology to focus on negative aspects of human functioning. Humanistic psychologists Abraham Maslow and Carl Rogers viewed human nature as basically positive, insisting that every individual is born with positive inner potentials, and that the driving force in life is to actualize these potentials. Humanistic psychologists believed that the goal of psychology should be to study and promote conditions that help people achieve productive and healthy lives.

What is new about positive psychology, however, is the amount of research and theory it has generated, and the scientific respectability it has achieved. Psychologists can now study hope, forgiveness, or the physical and emotional benefits of positive emotions without feeling that they are leaving their scientific sensibilities behind, and without being regarded as pop psychologists. One may still receive some good-natured ribbing, however. For example, one of our colleagues

refers to your first author's positive psychology class as "the happiness course."

While there is no official or universally accepted definition, positive psychology draws on research and theory from established areas of psychology. Positive psychology is, in part, a mosaic of research and theory from many different areas of psychology tied together by their focus on positive aspects of human behavior. Below is a brief sketch of research and theory from different areas of psychology that have contributed most to positive psychology. Hopefully, an overview of its relationship to more established and familiar areas of psychology will clarify what positive-psychology is about.

Health Psychology

Positive psychology and health psychology share much in common (Taylor & Sherman, 2004). Health psychologists have long suspected that negative emotions can make us sick and positive emotions can be beneficial. However, only recently has a scientific and biological foundation been developed for these long-standing assumptions. Our understanding of the relationship between body and mind has advanced dramatically in the last several decades. Research findings affirm the potential health-threatening effects of stress, anger, resentment, anxiety, and worry (Cohen & Rodriguez, 1995; Friedman & Booth-Kewley, 1987; Salovey, Rothman, & Rodin, 1998; Taylor, 1999; Vaillant, 1997, 2000). The pathways and mechanisms involved are complex and are just beginning to be understood. They involve the brain, the nervous system, the endocrine system, and the immune system (Maier, Watkins, & Fleshner, 1994). A variety of research shows that people going through long periods of extreme stress are more vulnerable to illness (Cohen, 2002; Kiecolt-Glaser & Glaser, 1987; Ray, 2004; Vaillant, 1997). One reason that stress and negative emotions are bad for us is that they seem to suppress the functioning of the immune system and reduce our body's ability to fight disease.

Positive psychologists are very interested in the most recent studies suggesting that positive emotions may have effects equal to negative emotions, but in the opposite direction. While negative emotions compromise our health, positive emotions seem to help restore or preserve the health of both our minds and our bodies. Positive emotions appear to set in motion a number of physical, psychological, and

social processes that enhance our physical well-being, emotional health, coping skills, and intellectual functioning. Summarized in Fredrickson's (2001) broaden-and-build theory, positive emotions like joy, contentment, interest, love, and pride "all share the ability to broaden people's thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (p. 219).

Our increasing knowledge of the physiological processes underlying emotions provides a biological foundation for positive psychology. It seems reasonable to conclude that positive emotions have every bit as much biological and evolutionary significance as the negative emotions that have attracted so much research attention. Consistent with the goal of restoring balance to the field, positive psychology emphasizes examination of the value of positive emotions in our lives.

Focus on Research: Living Longer Through Positive Emotions—The Nun Study

Do people who experience an abundance of positive emotions in their lives—emotions like cheerfulness, joy, and contentment—live longer than those whose emotional lives are less positive? Sounds reasonable, but how could you untangle all the complex factors that affect people's health to show that emotions made the difference? The "Nun Study," perhaps destined to become a classic in positive psychology, took advantage of the unique features of the religious life of sisters of the Catholic Church. The Nun Study was conducted by Danner, Snowdon, Friesen (2001) from the University of Kentucky. The study's formal title was "Positive emotions in early life and longevity: Findings from the Nun Study." Danner and her colleagues examined the relationship between positive emotions and longevity in a sample of 180 nuns. Why nuns? Nuns were an ideal group of people for such a study because many of the factors affecting physical health were controlled or minimized. Nuns don't smoke or drink excessively; they live in similar life circumstances; they are childless, so they have the same reproductive histories; and they eat the same bland diet. The "sameness" of their lives eliminated many of the variables that might confound an understanding of which specific factors were responsible for a long life.

What led the researchers to believe that a person's emotional life might predict longevity? First of all, prior research (reviewed in the article's introduction) supports the connection between emotions and health. Negative emotions have been shown to suppress the immune system and other aspects of physiological functioning and thereby increase the risk of disease. Positive emotions seem to enhance these same processes and thus reduce the risk of disease. Second, temperament has shown long-term stability over the life span. That is, emotional expressiveness, such as whether we have a positive and cheerful outlook or a negative and more guarded outlook, tends to be fairly consistent over a person's lifetime, from childhood through adulthood. Third, temperament is known to influence how well a person copes with the stress and challenges of life. People with cheerful temperaments and positive outlooks fare better than those with less cheerful and more negative outlooks. Finally, research has shown that writing about significant life events can capture a person's basic emotional outlook. When we write about things that are important to us, we express emotions that reflect aspects of our basic temperament. Taken together, these findings of prior research made it reasonable to assume that autobiographies written early in life would capture basic aspects of emotional expressiveness. Differences in emotional expressiveness might then predict health and longevity.

The nuns in Danner and colleagues' study had been asked to write a brief 2- to 3-page autobiographical sketch as part of their religious vows. These sketches were written in the 1930s and 1940s when the sisters were about 22 years old and just beginning their careers with the church. Researchers were able to retrieve the autobiographies from church archives. Then, they coded each autobiography by counting the number of positive-, negative-, and neutral-emotion words and sentences that it contained. Because few of the autobiographies contained negative emotions, the researchers concentrated on the number of positive-emotion words, positive-emotion sentences, and the number of different positive emotions expressed. Here are two sample portions of autobiographies—one low in positive emotion and the other high in positive emotion. Sister A—coded as low in positive emotion:

I was born on September 26, 1909, the eldest of seven children, five girls and two boys . . . My candidate year was spent in

the Motherhouse, teaching chemistry and Second Year at the Notre Dame Institute. With God's grace, I intend to do my best for our order, for the spread of religion and for my personal sanctification."

Sister B—coded as high in positive emotion:

God started my life off well by bestowing on me a grace of inestimable value. The past year, which I spent as a candidate studying at Notre Dame College has been a very happy one. Now I look forward with eager joy to receiving the Holy Habit of Our Lady and to a life of union with Love Divine.

Scores resulting from the coding system provided numeric indices to describe the women's early emotional lives. These scores were then analyzed in relation to mortality and survival data for the same group of women 60 years later. At the time the study

was done in 2001, the surviving nuns were between 75 and 94 years of age. Forty-two percent of the sisters had died by the time of the follow-up study.

The results of the study were rather amazing. Researchers found a strong relationship between longevity and the expression of positive emotion early in life. For every 1.0% increase in the number of autobiographical sentences expressing positive emotion, there was a corresponding 1.4% decrease in mortality rate. Comparisons of those nuns expressing many different positive emotions with those expressing only a few, showed a mean difference in age of death of 10.7 years. The most cheerful nuns lived a full decade longer than the least cheerful! By age 80, some 60% of the least cheerful group had died, compared to only 25% for the most cheerful sisters. The probability of survival to an advanced age was strongly related to the early-life expression of positive emotions. Figure 1.1 shows the positive-emotion/survival relationship beginning at age 75. The probability of survival to age 85 was 80% for the most cheerful nuns (Quartile 4 in Figure 1.1) and

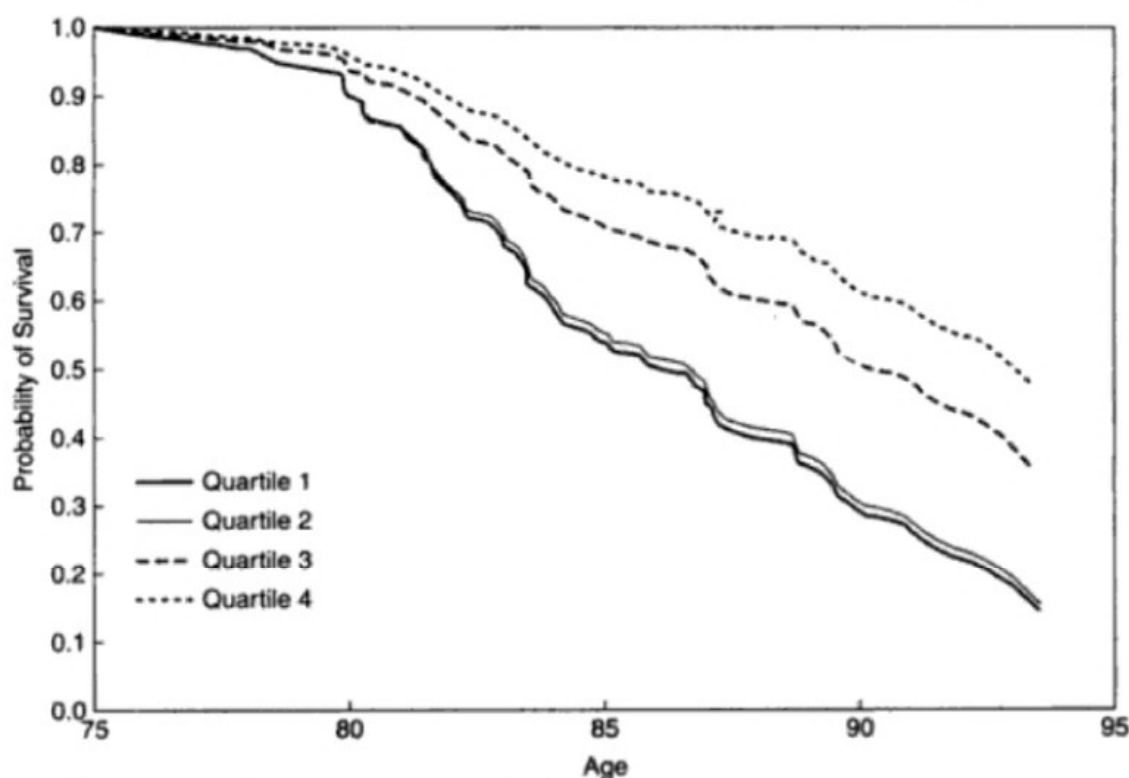


FIGURE 1.1 Positive Emotions and Survival

Probability of survival to different ages after age 75 as a function of positive emotions expressed early in life by 180 participants in the Nun Study. Positive emotional expression arranged in rank order from lowest (Quartile 1) to highest (Quartile 4). Source: Danner, D.D., Snowdon, D.A., & Friesen, W.V. (2001). Positive emotions in early life and longevity: Findings from the Nun study. *Journal of Personality and Social Psychology*, 80, 804–813. Copyright 2001 by the American Psychological Association. Reprinted by permission.

54% for the least cheerful (Quartile 1). The odds of survival to age 90 were 65% for the upbeat sisters, but only 30% for the less upbeat. By age 94, the survival odds were over half (54%) for the most positive sisters and only 15% for the least positive.

According to the results of the Nun Study, the phrase, “don’t worry, be happy” is excellent advice. You may live longer! In Chapter 3, “Positive Emotions and Well-Being,” we explore research that helps explain why positive emotions may lead to a longer life.

Clinical Psychology

The disillusionment of many clinical psychologists with sole reliance on the disease model has been another factor contributing to the development of positive psychology. Mental health professionals are beginning to view the work of reducing psychological misery as only part of their task. There will always be clients in need of help, and it will continue to be an important mission of psychologists to provide such help. However, many clinicians have begun shifting from the single-minded purpose of treating psychopathology toward a perspective that includes prevention of illness and promotion of positive mental health. Fundamental to this shift is the need to develop models of positive mental health. That is, what personal characteristics and what type of life define the extreme opposite of mental illness—a state Keyes and Haidt (2003) call “flourishing?” In the past, mental health was defined mostly in terms of the absence of disease. One goal of positive psychology is to establish criteria and a language defining the presence of mental health that parallels our current criteria and language for describing and diagnosing mental illness.

Developmental Psychology

A long-standing focus of developmental psychologists has been examination of conditions that threaten healthy development. Following a deficit-focused model, it was assumed that most children growing up under conditions of adversity (e.g., poverty, abuse, parental alcoholism, or mental illness) would be at heightened risk for deficits in social, cognitive, and emotional development compared to children not subjected to such adversities. These assumptions began to change in the 1970s when many psychiatrists and psychologists drew attention to the amazing resilience of certain children and adults subjected to

potentially debilitating life challenges (Masten, 2001). Cases of resilience—meaning “good outcomes in spite of serious threats to adaptation or development” (Masten, p. 228)—are more common than previously supposed. Research documenting the amazing resilience of ordinary people facing difficult life circumstances highlights a major theme of positive psychology, namely human strengths.

Perhaps even more intriguing is the concept of **posttraumatic growth** (PTG) as a counterpoint to posttraumatic stress disorder (PTSD). Researchers have documented that positive growth can occur as a result of traumatic experiences like serious illness, loss of a loved one, or a major accident or disability (Ryff & Singer, 2003a). In the aftermath of such events, many people report a greater appreciation for life and their loved ones, an increased sense of personal strength, and more clarity about what is most important in life. Studies of resilience and posttraumatic growth underscore positive psychology’s emphasis on human strengths and positive coping abilities.

Survey Research and Subjective Well-Being

Public opinion polling has been a long-standing research tool for social psychologists and sociologists. Beginning with national surveys of opinions toward issues, groups, and political candidates, survey research subsequently branched out to include quality-of-life measures. Ed Diener (2000) is a prominent contemporary researcher who studies happiness, defined as **subjective well-being** (SWB). Measures of SWB assess a person’s level of life satisfaction and the frequency of positive and negative emotional experiences. Studies of happiness have established a reliable pattern of intriguing findings (e.g., Diener, 2000; Diener, Suh, Lucas, & Smith, 1999; Myers, 2000a). The most noteworthy of these is that material success (i.e., money and wealth) bears only a weak relationship to happiness. Increases in income and possession of consumer goods beyond what is necessary to meet basic needs are not reliably related to increases in happiness. You may dream of winning a multimillion dollar lottery, but studies show that winners quickly return to their pre-lottery levels of happiness (see Csikszentmihalyi, 1999 and Diener, 2000 for reviews).

Survey research raises an interesting question. If money doesn’t buy happiness, what does? This

question is one way to think about positive psychology. Once basic needs are met, objective life circumstances (such as the amount of money you make, or your age, race, or gender) do not have much influence on your level of happiness. So, the difference between happy and unhappy people must involve more psychological and subjective factors. Positive psychology follows the lead of early survey research in examining the traits and states that help explain differences in the level of happiness. Much of the research in positive psychology is focused on *traits*, such as self-esteem, physical attractiveness, optimism, intelligence, and extraversion, and on *states*, such as work situation, involvement in religion, number of friends, marital status, and the quality of relationships. Taken together, these traits and states help explain one of the major questions of positive psychology: "Why are some people happier than others?"

Social/Personality Psychology and the Psychology of Religion

Social psychologists have provided extensive evidence of the critical importance of satisfying social relationships and support from others for our health and happiness (e.g., Baumeister & Leary, 1995; Ryff & Singer, 2000; Taylor, Repetti, & Seeman, 1997; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). A satisfying life is founded on satisfying relationships, such as a happy marriage and good friends. Social psychologists have also sensitized us to the different cultural understandings of well-being and happiness. Concepts of happiness in America and Japan, for example, are quite different. In addition to studies across diverse cultures, social psychologists have investigated a potential dark side of affluence and materialism among advanced consumer cultures such as our own (e.g., Cushman, 1990; Kasser & Kanner, 2004). These latter studies show that materialistic people who sacrifice fulfillment of important psychological needs in their pursuit of fame and fortune may also sacrifice their own happiness and life satisfaction. Related research has contributed to an understanding of the amazing process of human adaptation that helps explain why increases in income, like the sudden wealth of lottery winners, has only short-term effects (Diener & Oishi, 2005). In short, why money does not buy happiness.

Studies by personality psychologists have identified positive traits and personal strengths that

form the foundation of health and happiness. These studies include investigations of the genetic basis of a happy temperament (e.g., Lykken, 1999) and personality traits related to individual well-being such as optimism (Peterson, 2000; Seligman, 1990), self-esteem (Baumeister, 1999), extraversion (McCrae & Costa, 1997), a positive life outlook (e.g., Taylor, 1989; Taylor & Brown, 1988), and how the pursuit of personally meaningful goals contributes to happiness (Emmons, 1999b).

Both social and personality psychology researchers have contributed to an understanding of the roles that religion and morality play in people's lives (e.g., Pargament, 1997; Spilka, Hood, Hunsberger, & Gorsuch, 2003). Religion has become an important topic within positive psychology because it is a significant foundation of well-being for most people. The study of virtue also has a prominent position because the meaning of a good life and a life well-lived is strongly connected to human virtues, such as honesty, integrity, compassion, and wisdom (Peterson & Seligman, 2004). And, expressing human virtues contributes to individual well-being and the well-being of others. For example, acts of forgiveness (McCullough, 1999) and gratitude (Emmons & McCullough, 2004) tend to increase life satisfaction for both givers and recipients.

POSITIVE PSYCHOLOGY: ASSUMPTIONS, GOALS, AND DEFINITIONS

Martin Seligman's call for a positive psychology was aimed at refocusing the entire field of psychology. He will likely be disappointed if positive psychology becomes simply one more area of specialized research. It is encouraging, then, to find elements of positive psychology represented in so many different areas of psychology, from physiological to clinical psychology. Positive psychology is both a general perspective on the discipline of psychology and a collection of research topics focused on positive aspects of human behavior.

To sum up our discussion, we may point to several common themes that run through much of the developing literature in positive psychology. A major assumption of positive psychology is that the field of psychology has become unbalanced (Simonton & Baumeister, 2005). A major goal of positive psychology is to restore balance within the discipline. This goal is reflected in two areas of research and theory that need further development.

First, there is a need for improved understanding of positive human behaviors to balance the negative focus of much mainstream research and theory (Sheldon & King, 2001). Related to this is the need for psychologists to overcome their skepticism about the scientific and “authentic” status of positive psychology’s subject matter. A second need is to develop an empirically-based conceptual understanding and language for describing healthy human functioning that parallels our classification and understanding of mental illness (Keyes, 2003). It is arguably just as important to understand the sources of health as it is to understand the causes of illness, particularly if we are interested in preventing illness by promoting healthy lifestyles (Ryff & Singer, 1998).

The themes of positive psychology are captured in various attempts to define this new area of psychology. Sheldon and King (2001) define positive psychology as “nothing more than the scientific study of ordinary human strengths and virtues” (p. 216). This definition reflects the emphasis on psychology’s lack of attention to people’s everyday lives, which are typically quite positive. Gable and Haidt (2005, p. 104) suggest that positive psychology is “the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions.” This definition has much in common with Seligman’s (2003) description of the three pillars of positive psychology. Positive psychology is built on the study of (1) positive subjective experiences (such as joy, happiness, contentment, optimism, and hope); (2) positive individual characteristics (such as personal strengths and human virtues that promote mental health); and (3) positive social institutions and communities that contribute to individual health and happiness.

In a more specific formulation, Seligman and his colleagues have proposed that happiness as a central focus of positive psychology can be broken down into three components: the pleasant life, the engaged life, and the meaningful life (Seligman, 2003, Seligman, Rashid, & Parks, 2006). These three aspects of happiness capture the two major themes in positive psychology to be reviewed in Chapter 2, namely that positive psychology is the scientific study of optimal mental functioning and happiness. The **pleasant life** reflects the emphasis in positive psychology on understanding the determinants of happiness as a desired state—what some people might call the “good life.” Specifically, what life circumstances and personal qualities make people happy, content, and fulfilled?

The **engaged life** is an aspect of happiness focused on active involvement in activities (e.g., work and leisure) and relationships with others that express our talents and strengths and that give meaning and purpose to our lives. Such involvements promote a zestful and healthy life. A **meaningful life** is an aspect of happiness that derives from going beyond our own self-interests and preoccupations. This is a deeper and more enduring aspect of happiness that stems from giving to, and being involved in, something larger than your self—what Seligman and his colleagues (2006) call “positive institutions.” Examples might include a religious community, a personal philosophy of life, your family, a charitable community organization, or a political, environmental, or social cause. The point is that a life well-lived means being connected to something “larger than the self” (Seligman et al., 2006, p. 777).

Life Above Zero

In summary, you can think of positive psychology as the study of what we might call life on the positive side of zero, where zero is the line that divides illness from health and unhappiness from happiness. Traditional psychology has told us much about life at and below zero, but less about life above zero. What takes us from just an absence of illness and unhappiness to a life that is meaningful, purposeful, satisfying, and healthy—in short, a life worth living? Positive psychology is all about the personal qualities, life circumstances, individual choices, life activities, relationships with others, transcendent purposes, and sociocultural conditions that foster and define a good life. By combining these factors with the criteria positive psychologists have used to define a good life, we suggest the following definition of positive psychology: *Positive psychology is the scientific study of the personal qualities, life choices, life circumstances, and sociocultural conditions that promote a life well-lived, defined by criteria of happiness, physical and mental health, meaningfulness, and virtue.*

Culture and the Meaning of a Good Life

The particular meanings of a good life and a life well-lived are obviously shaped by one’s culture. Conceptions of a good life are part of every culture’s ideals, values, and philosophic/religious traditions (Ryff & Singer, 1998). Because positive psychology is

largely a Western enterprise, it is appropriate to ask whether its ideas about health and happiness reflect a Western view and, therefore, do not apply to other cultures. For positive psychologists this is largely an empirical issue, but one that has its share of controversy. Certainly, researchers in the emerging field of positive psychology do not want to impose a “one-size-fits-all” definition that suggests there is only one kind of good life. Instead, they want to tease out universal from culture-specific ideas and define a life well-lived according to broad and flexible criteria that allow for individual and cultural differences. Studies comparing people from widely diverse cultural backgrounds find both differences and commonalities in their understanding of the meaning and general defining features of a good life. Through intensive cultural comparisons, researchers have sought not only to respect differences, but also to identify the commonalities across cultures—that is, what all or most cultures share regarding their descriptions of positive human qualities and the meaning of a good life. The details of cultural differences and commonalities are reviewed in Chapters 6 and 7.

Why Now?

Why has positive psychology attracted so much enthusiastic interest from psychologists today? Calls for psychologists to give more attention to positive human behaviors have been made before. Why were they heard only recently? New ideas emerge in part because they fit or capture some essential theme that is prominent at particular point in history. Historians often refer to this as the *zeitgeist*, which means the spirit of the times. Several authors (e.g., Keyes & Haidt, 2003; Seligman & Csikszentmihalyi, 2000) have argued that positive psychology gave expression to concerns and issues widespread in our culture and in psychology that surfaced in the late 1990s and continue into the new millennium.

Foremost among these is the stark contrast between unprecedented levels of affluence in our society and increasing signs of subjective distress. Csikszentmihalyi (1999) captures this concern in the title of his article, “If we are so rich, why aren’t we happy?” In short, most indicators of material affluence, from personal income and ownership of computers and DVD players to GNP, have gone up over the last 30 years. The 1990s are perhaps epitomized in the bumper sticker stating, “the one with the most toys wins.” However, the “**paradox of affluence**,”

as Myers (2000b) describes it, is that many indicators of distress and unhappiness have also gone up.

The “misery index” includes rates of divorce, child abuse, childhood poverty, and adolescent suicide. Seligman (1998) notes that we are twice as rich as we were 40 years ago, but we are also 10 times more likely to get depressed. According to many clinical psychologists, depression in the United States is currently at the epidemic level. Themes related to the emptiness and dark side of affluence have also found expression in movies and documentaries such as *American Beauty*, *Bowling for Columbine*, and the PBS investigation titled, *The Lost Children of Rockdale County* (Frontline, 2002). The latter examined a group of affluent teenagers in a suburb of Augusta, Georgia, who grew up in “good homes” with every advantage money could buy. In the absence of adequate parental supervision, these teens lapsed into exploitive and abusive group sexual relationships culminating in an outbreak of sexually transmitted diseases. When their troubled experiences were discovered, these young people told painful stories of inner emptiness and unfulfilled lives.

Perhaps the most fundamental idea in these descriptions of our culture is an old one—namely, that money doesn’t buy happiness. Recognition of the limits in the ability of affluence to bring personal satisfaction has raised questions about the sources of a healthy and satisfying life. The fact that psychology has historically offered no ready answers to these questions has contributed, in part, to the surge of interest in positive psychology. In the aftermath of the September 11 terrorist attacks, our own safety and security may have taken center stage. However, the questions addressed by positive psychology are enduring, and much of its subject matter is directly relevant to our current, uncertain times.

TWO FINAL NOTES

Positive Psychology Is Not Opposed to Psychology

Any description of the issues and concerns that led to the development of positive psychology necessarily involves the question of how positive psychology is different from psychology as a whole. For purposes of clarification, positive psychologists frequently contrast this new area with “traditional psychology.” Describing what something *is*, inevitably involves describing what it *is not*. We do not want to create the

impression that positive psychology is somehow opposed to psychology. Psychologists have developed an extensive understanding of human behavior and the treatment of psychopathology. Psychology's history shows a steady advance in knowledge and in effective treatments. Positive psychologists are not so much concerned about what *has* been studied in psychology, as they are concerned about what has *not* been studied. It is the relatively one-sided focus on the negatives that is of concern. Sheldon and King (2001) describe the fundamental message of positive psychology as follows: "Positive psychology is thus an attempt to urge psychologists to adopt a more open and appreciative perspective regarding human potentials, motives and capacities" (p. 216). Positive psychology aims to expand—not replace—psychology's understanding of human behavior.

Positive Psychology and the Status Quo

Research in positive psychology shows that our attitude toward life makes a significant contribution to our happiness and health. But does this mean that life circumstances are not important? If you are poor, living in a high-crime area, and have no job, is your happiness dependent on your attitude and not your situation? If happiness is more a matter of attitude than money, do we need to worry much about the amount of poverty in our country? In other words, does positive psychology serve the status quo by helping to justify the unequal distribution of resources and power in our society? If our happiness is more a product of subjective personal factors than it is of material factors, why should we be concerned about who gets what?

There are a number of reasons why positive psychology should *not* be seen as justifying the status quo. First, an individual's external situation is clearly important to the quality of his or her life; and

there are limits to people's ability to maintain a positive attitude in the face of challenging life experiences. Poor people are less happy than those who are not poor, and certain traumas, like death of a spouse, do have lasting effects on personal happiness (Diener, 2000).

Second, most of the research on subjective well-being involves people who are, economically speaking, living relatively comfortable lives. For individuals in this group, life satisfaction is more dependent on psychological and social factors because basic needs have been met. The fact that most Americans seem reasonably happy (Myers, 2000a) may reflect the optimism and satisfaction that results from having the freedom to make personal choices and to pursue satisfying endeavors. Both are made possible, in part, by relative economic comfort. However, knowing that someone is economically well-off does not tell us whether he or she is happy or satisfied with his or her life. One important message of positive psychology is this: A shortage of money can make you miserable, but an abundance of money doesn't necessarily make you happy.

Finally, questions concerning what makes us happy and questions about what is just and fair in the distribution of resources and in how people are treated, might best be answered separately. That is, whatever positive psychologists may discover about the sources of happiness, issues of justice and fairness will remain. The primary reasons for promoting equality, equal opportunity, and equal treatment have to do with the foundational values of our country. Policies to remove discriminatory barriers or to improve the equal distribution of resources do not require misery or unhappiness as justification. Discrimination and inequality may create misery, but being treated fairly and having equal opportunity are rights of every citizen regardless of how she or he may feel. No one should have to show that he or she is miserable and unhappy to justify fair treatment or equal opportunity.

Chapter Summary Questions

1. From the perspective of positive psychology, why does the Milgram study present an imbalanced view of human nature?
2. Why are negative aspects of human behavior perceived as more authentic and real than positive aspects?
3. Why are negative behaviors given more weight than positive behaviors?
4. How does the disease model promote a focus on negatives?
5. Why is positive psychology necessary according to Seligman, and how is positive psychology related to humanistic psychology?
6. What does recent evidence from health psychology suggest about the differing effects of positive and negative emotions on our physical health?

7. a. Why did researchers in the Nun Study hypothesize that expressed emotions could predict longevity?
b. Briefly describe the study's design and major findings.
8. Describe two reasons why clinical psychologists are becoming interested in positive psychology.
9. How do developmental psychologists' studies of resilience and posttraumatic growth contribute to positive psychology?
10. What does survey research suggest about the importance of money to individual happiness?
11. How have social and personality psychology contributed to positive psychology? Describe three examples.
12. What is the major assumption and goal of positive psychology?
13. Describe the components of Seligman's three-part definition of happiness (i.e., pleasant, engaged, and meaningful life).
14. a. How may positive psychology be thought of as the study of life above zero?
b. How do your textbook authors define positive psychology?
15. What cultural changes and paradoxes have contributed to the development of positive psychology?
16. How does positive psychology complement rather than oppose traditional psychology?
17. Discuss the issue of positive psychology's relationship to the status quo.

Key Terms

bad is stronger than the good 3
disease model 3

subjective well-being 7
posttraumatic growth 7

pleasant life 9
engaged life 9
meaningful life 9
paradox of affluence 10

Web Resources

Positive Psychology

www.positivepsychology.org Site for the Positive Psychology Center at the University of Pennsylvania. A wealth of information about positive psychology's goals, research, and theories.

www.apa.org Web page for the American Psychological Association, with links to articles and books about positive psychology.

www.pos-psyb.com Site for the *Positive Psychology News Daily*. Web site put together by graduates of the Master's Degree program at the University of

Pennsylvania. Contains recent research and "fun" information.

The Nun Study

www.mc.uky.edu/nunnet/ University of Kentucky web page for research related to the famous Nun Study.

Authentic Happiness

www.authentic happiness.org Martin Seligman's link to his popular 2002 book *Authentic happiness*. Contains research summaries and positive psychology self-assessment tests.

Suggested Readings

Argyle, M. (2001). *The psychology of happiness* (2nd ed.). Great Britain: Routledge.

Aspinwall, L. G., & Staudinger, U. M. (Eds.). (2003). *A psychology of human strengths: Fundamental questions*

and future directions for a positive psychology. Washington, DC: American Psychological Association.

Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9, 103–110.

- Keyes, C. L. M., & Haidt, J. (Eds.). (2003). *Flourishing: Positive psychology and the life well-lived*. Washington, DC: American Psychological Association.
- Linley, P. A., & Joseph, S. (2004). *Positive psychology in practice*. Hoboken, NJ: John Wiley & Sons.
- Myers, D. G. (1992). *The pursuit of happiness*. New York: Avon Books.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An Introduction. *American Psychologist*, 55, 5–14.
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist*, 56, 216–217.
- Snyder, C. R., & Lopez, S. J. (Eds.). (2002). *Handbook of positive psychology*. New York: Oxford University Press.

2

The Meaning and Measure of Happiness

CHAPTER OUTLINE

Why a Psychology of Well-Being?

- Objective versus Subjective Measures
- Negative versus Positive Functioning

What is Happiness? Two Traditions

- Hedonic Happiness
- Eudaimonic Happiness
- Focus on Research: Positive Affect and a Meaningful Life

Subjective Well-Being: The Hedonic Basis of Happiness

- Measuring Subjective Well-Being
- Life Satisfaction
- Positive Affect, Negative Affect, and Happiness
- Focus on Research: Is Your Future Revealed in Your Smile?
- Issues in the Study of Affect
- Global Measures of Happiness
- Reliability and Validity of Subjective Well-Being Measures
- Experience Sampling Method
- Focus on Method: How Do We Spend Our Time?
 - The Day Reconstruction Method
- Experience Sampling versus Global Measures of Subjective Well-Being

Self-Realization: The Eudaimonic Basis of Happiness

- Psychological Well-Being and Positive Functioning
 - Emotional Well-Being
 - Psychological Well-Being
 - Social Well-Being
- Need Fulfillment and Self-Determination Theory
- Focus on Research: What Makes a "Good" Day?

Comparing Hedonic and Eudaimonic Views of Happiness

- Definition and Causes of Happiness and Well-Being
- Complementarity and Interrelationship

In this chapter, we begin an exploration of psychology's answer to some ancient questions. What is a good life? What is a life worth living? What is the basis for happiness that endures beyond short-term pleasures? The ancient Greeks contemplated the answers to these questions. Is a good life built on maximizing pleasures and minimizing pain, as the hedonic

philosophy of the Epicureans prescribed? Minimizing pain, as the Stoics believed? Or is happiness to be found in the expression of the true self, or *daimon*, as described by Aristotle's eudaimonic view of happiness?

Every day we are asked, "how are you doing?" Few of us consult classical philosophy to address this question. Yet our answers reflect some assessment of our well-being, even if only the temporary and fleeting assessment of our feelings at a given moment. In the larger scheme of things, much depends on how we describe and define happiness and "the good life." The kind of society we wish to have reflects our culture's image of what a good life represents. The efforts of parents, teachers, government, and religion are based on assumptions about the kind of qualities and behaviors that "should" be promoted and encouraged. As individuals, we each have some notion of the life we hope to lead, and the goals and ambitions we want to pursue. No matter how we describe the particulars, most of us hope for a happy and satisfying life. What makes up a happy and satisfying life is the question. Positive psychology has addressed this question from a subjective psychological point of view. This means that primacy is given to people's own judgments of well-being based on their own criteria for evaluating the quality of life. We now consider why a subjective and psychological perspective is important.

WHY A PSYCHOLOGY OF WELL-BEING?

We Americans collect a wealth of information related to the question, "how are we doing as a society?" We count, rate, and measure many aspects of our collective and individual lives. Information collected by federal, state, and local governments, along with numerous private agencies, provides a statistical picture of the "state" of different life domains. Economic indicators assess our collective economic well-being. They include statistics on the rate of unemployment, the number of people defined as poor, average annual income, new jobs created, home mortgage interest rates, and performance of the stock market. A variety of social indicators assess the state of our health, families, and communities (Diener, 1995; Diener & Suh, 1997). A picture of our physical health is suggested by statistics describing such things as how long we live, the number of people suffering from major illnesses (like cancer, heart disease, and AIDS), levels of infant mortality, and the percentage of people who have

health insurance. A picture of mental health is provided by statistics showing the percentage of people suffering from emotional problems like depression, drug abuse, anxiety disorders, and suicide. An aggregate view of community and family well-being may be seen in statistics on such things as divorce, single-parent families, poor families, unwed mothers, abused children, serious crimes, and suicide.

What kind of answer do these statistics offer to the question, "how are we doing?" Taken in total, they describe what we might call our country's "**miser index**." That is, they give us information about how many people are suffering from significant problems that diminish the quality of their lives. To be poor, depressed, seriously ill without health insurance, unemployed, or coping with the suicide of a family member seems like a recipe for misery and unhappiness. Most of us would agree that decreasing the misery index is an important goal of governmental, social, and economic policy. Within psychology, a good deal of research and professional practice has been devoted to preventing and treating the problems reflected in the misery index. Positive psychologists agree that these problems are significant and applaud efforts to deal with them. However, a positive psychological perspective suggests that national statistics provide an incomplete and somewhat misleading answer to the question, "how are we doing?"

Objective versus Subjective Measures

Researchers discovered early on that many economic and social indicators of a person's "objective" life circumstances (e.g., income, age, and occupation) were only weakly related to people's own judgments of their well-being (Andrews & Withey, 1976; Campbell, Converse, & Rodgers, 1976). In a major review of this research, Diener (1984) argued that subjective well-being (SWB), defined by ratings of life satisfaction and positive emotional experience, was a critical component of well-being that was missing from the equation. Subjective well-being, or happiness, in everyday terms, reflects an individual's own judgment about the quality of his or her life. From a subjective well-being (SWB) perspective, economic and social indicators are incomplete because they do not directly assess how happy or satisfied people are with their lives (Diener & Suh, 1997). Although these indicators describe the

"facts" of a person's life, they do not tell us how a person thinks and feels about these facts.

Personal, subjective evaluations are important for several reasons. First, different individuals may react to the same circumstances (as described by economic and social statistics) in very different ways because of differences in their expectations, values, and personal histories. Subjective evaluations help us interpret the "facts" from an individual's point of view. Second, happiness and life satisfaction are important goals in their own right. The "pursuit of happiness" is described in the Declaration of Independence as one of Americans' inalienable rights, and surveys show that people rank happiness high on the list of desirable life goals. For example, a survey of over 7,000 college students in 42 different countries found the pursuit of happiness and life satisfaction to be among students' most important goals (Suh, Diener, Oishi, & Triandis, 1998). Happiness is a central component of people's conception of a good life and a good society (Diener, Oishi, & Lucas, 2003). How happy people are with their lives is therefore an important part of the answer to the question, "how are we doing?"

Economic and social indicators may be misleading if we consider them to be sufficient indices of happiness and satisfaction. Research shows that a person's level of happiness depends on many factors that are not measured by economic and social statistics. For example, the amount of money a person makes is only marginally related to measures of happiness (Csikszentmihalyi, 1999; Diener, Suh, Lucas, & Smith, 1999). Over the last 50 years, average personal income has tripled. Yet, national surveys conducted during the same 50-year period showed that levels of expressed happiness did not go up, but remained unchanged. Clearly, some social statistics do tell us something about who is likely to be *unbappy*. The approximately 20% of Americans who are depressed are, by definition, dissatisfied with their lives (Kessler et al., 1994). However, most national statistics tell us little about who is likely to be happy. If we knew a particular person had a good job and adequate income, was married, owned a home, was in good physical health, and was not suffering from a mental disorder, we would still not know if he or she was also happy and satisfied. Diener and colleagues summarize the importance of happiness by arguing that the measurement of happiness is an essential third ingredient, along with economic and social indicators, for assessing the quality of life within a society (Diener et al., 2003).

Negative versus Positive Functioning

Other researchers have argued that national statistics are also incomplete because they fail to assess human strengths, optimal functioning, and positive mental health (Aspinwall & Staudinger, 2003; Keyes, Shmotkin, & Ryff, 2002; Ryan & Deci, 2001). For example, Ryff and Keyes (1995) described six aspects of positive functioning and actualization of potentials as the basis for what they called "psychological well-being:" autonomy, personal growth, self-acceptance, life purpose, environmental mastery, and positive relations with others. They argue that it is the presence of these strengths and realized potentials that define well-being and a fully functioning person. From this perspective, national statistics (particularly those related to mental illness) are incomplete because they only examine the presence or absence of illness and negative functioning, and fail to take into account the presence of strengths and positive functioning. Mental health statistics are focused on pathological symptoms of mental illness—not on positive markers of mental well-being (Keyes, 2002; Ryff & Singer, 1998). As noted by Keyes (2003), the absence of mental illness does not necessarily indicate the presence of mental health.

The major point of Keyes' analysis is shown in Figure 2.1. About 26% of American adults suffer from a diagnosable mental disorder in a given year. Does this mean that the other 74% are mentally healthy? Keyes' research suggests that the answer is no. Only 17% of Americans were found to enjoy complete mental health or to be flourishing, and 10% were estimated to be languishing. Languishing is a state of distress and despair, but it is not severe enough to meet current mental illness criteria and so is not included in official statistics.

Positive psychologists argue that without measures of SWB and positive functioning, our answer to the question "how are we doing?" is likely to be incomplete. In line with this conclusion, Diener and Seligman (2004) have recently provided a detailed examination of the social policy implications of well-being research. They argue for the development of a national indicator of well-being that would complement economic and social statistics. A national well-being index would highlight important features of our individual and collective lives that are not

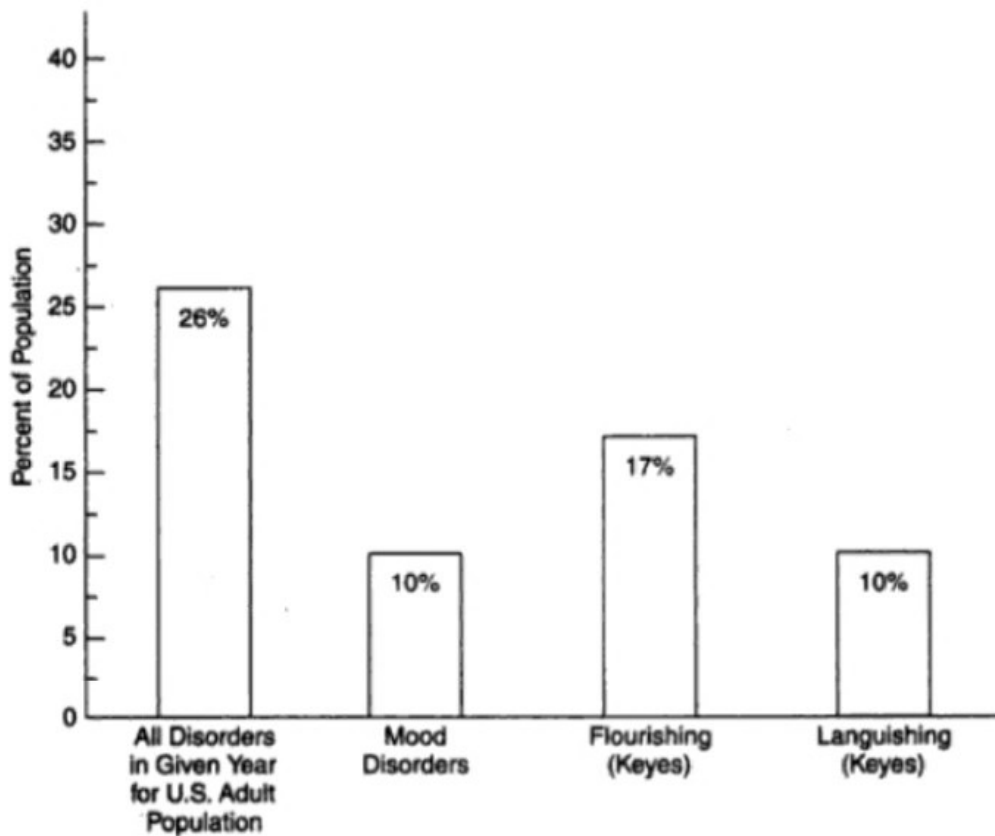


FIGURE 2.1 Mental Illness and Mental Health

Source: Mental disorders data from National Institute of Mental Health. The numbers count: *Mental disorders in America*, Rev. 2006. Retrieved August 2007 at <http://www.nimh.nih.gov/publicat/numbers.cfm>. Flourishing/languishing percentages from Keyes, C.L.M. (2007). Promoting and protecting mental health and flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62, 95–108.

currently measured in any systematic way. Such an index could have important and positive effects on social policies, and on how we think about the quality of our lives. Several countries in Europe have already begun to address this issue. For example, the German Socioeconomic Panel in Germany and the Eurobarometer in European Union nations are two examples of government-sponsored programs that regularly collect information about life satisfaction and well-being.

WHAT IS HAPPINESS? TWO TRADITIONS

From your own individual point of view, how would you answer the questions raised at the beginning of this chapter? What is a good life? What is happiness? What defines a satisfying life or a life well-lived? What kind of life do you wish to lead? And in the end, how do you hope people will remember you?

Hedonic Happiness

Probably most of us would hope first for a long life—one that does not end prematurely. Suicide, however, is a reminder that the quality of life is more important to many people than the quantity of life. As for quality of life, happiness might be number one on our list. Most people would likely hope for a happy and satisfying life, in which good things and pleasant experiences outnumber bad ones. Particularly in American culture, as we noted earlier, happiness seems to be an important part of how people define a good life. Defining the good life in terms of personal happiness is the general thrust of the hedonic view of well-being (Kahneman, Diener, & Schwarz, 1999; Ryan & Deci, 2001; Waterman, 1993). Hedonic psychology parallels aspects of the philosophy of hedonism. While there are many varieties of philosophical hedonism dating back to the ancient Greeks, a general version of hedonism holds that the

chief goal of life is the pursuit of happiness and pleasure. Within psychology, this view of well-being is expressed in the study of SWB (Diener, 1984; Diener et al., 1999). Subjective well-being takes a broad view of happiness, beyond the pursuit of short-term or physical pleasures defining a narrow hedonism. **Subjective well-being** is defined as life satisfaction, the presence of positive affect, and a relative absence of negative affect. Together, the three components are often referred to as happiness. Research based on the SWB model has burgeoned in the last 5 years (Ryan & Deci, 2001). Studies have delineated a variety of personality characteristics and life experiences that help answer questions about who is happy and what makes people happy. A major portion of this book is devoted to reviewing the research and theory on SWB.

Eudaimonic Happiness

Is happiness enough for a good life? Would you be content and satisfied if you were happy and nothing else? Consider a hypothetical example suggested by Seligman (2002a). What if you could be hooked to an “experience machine” that would keep you in a constant state of cheerful happiness, or whatever positive emotion you desired, no matter what happened in your life. Fitting the hedonic view, you would experience an abundance of happiness all the time. Would you choose to be hooked up? We might like it for awhile, but to experience only one of our many emotions, and to have the same cheerful reaction to the diversity of life events and challenges might actually impoverish the experience of life. And some of what we would lose might be extremely valuable. For example, negative emotions like fear help us make choices that avoid threats to our well-being. Without fear and other negative emotions we might make very bad choices. We’d be happy, but we might not live very long. Seligman (2002a) argues that we would likely also reject the experience machine because we want to feel we are entitled to our positive emotions, and to believe they reflect our “real” positive qualities and behaviors. Pleasure, disconnected from reality, does not affirm or express our identity as individuals.

Above all, most of us would probably reject the experience machine because we believe that there is more to life than happiness and subjective pleasure. Or as Seligman (2002a) describes it, there is a deeper and more “authentic happiness.” Much

of classical Greek philosophy was concerned with these deeper meanings of happiness and the good life. Waterman (1990, 1993) describes two psychological views of happiness distilled from classical philosophy. Hedonic conceptions of happiness, discussed above, define happiness as the enjoyment of life and its pleasures. The hedonic view captures a major element of what we mean by happiness in everyday terms: We enjoy life; we are satisfied with how our lives are going; and good events outnumber bad events.

In contrast, eudaimonic conceptions of happiness, given fullest expression in the writings of Aristotle, define happiness as self-realization, meaning the expression and fulfillment of inner potentials. From this perspective, the good life results from living in accordance with your *daimon* (in other words, your true self). That is, happiness results from striving toward self-actualization—a process in which our talents, needs, and deeply held values direct the way we conduct our lives. “Eudaimonia” (or happiness) results from realization of our potentials. We are happiest when we follow and achieve our goals and develop our unique potentials. Eudaimonic happiness has much in common with humanistic psychology’s emphases on the concepts of self-actualization (Maslow, 1968) and the fully functioning person (Rogers, 1961) as criteria for healthy development and optimal functioning.

What kinds of experiences lead to eudaimonic happiness? Waterman (1993) argued that eudaimonic happiness results from experiences of personal expressiveness. Such experiences occur when we are fully engaged in life activities that fit and express our deeply held values and our sense of who we are. Under these circumstances we experience a feeling of fulfillment, of meaningfulness, of being intensely alive—a feeling that this is who we really are and who we were meant to be.

At this point, you might ask whether hedonic and eudaimonic views of happiness are very different. Aren’t activities that bring us pleasure also generally the ones that are meaningful because they express our talents and values? Waterman believes that there are many more activities that produce hedonic enjoyment than activities that provide eudaimonic happiness based on personal expression. Everything from alcohol consumption and eating chocolate, to a warm bath can bring us pleasure, but there are fewer activities that engage significant aspects of our identity and give a deeper meaning to our lives.

To evaluate the similarities and differences between hedonic enjoyment and personal expressiveness (eudaimonic enjoyment), Waterman (1993) asked a sample of college students to list five activities that addressed the following question: "If you wanted another person to know about who you are and what you are like as a person, what five activities of importance to you would you describe?" (p. 681). This question was meant to evoke activities that define and express a person's personality, talents, and values. Each activity listed was then rated on scales describing personal expressiveness and hedonic enjoyment of the activity. Expressive items included questions about whether the activity gave strong feelings of authenticity (who I really am), fulfillment and completion, intense involvement, and self-activity-fit. Hedonic questions focused on whether the activity produced good feelings such as a warm glow, happiness, pleasure, or enjoyment. Waterman found substantial overlap in expressive and hedonic ratings. Half to two-thirds of the time, personally expressive activities also generated a comparable level of hedonic enjoyment. However, the two forms of happiness also diverged for some activities. Hedonic enjoyment was associated with activities that made people feel relaxed, excited, content or happy, and that led to losing track of time and forgetting personal problems. Feelings of personal expressiveness (eudaimonic happiness) were more strongly related to activities that created feelings of challenge, competence, and effort, and that offered the opportunity for personal growth and skill development.

Focus on Research: Positive Affect and a Meaningful Life

Until recently, Waterman was one of the few researchers who examined the similarities and differences between hedonic and eudaimonic conceptions of happiness. However, in a recent study, Laura King and her colleagues have revisited this issue by examining the relationship between positive affect and meaningfulness (King, Hicks, Krull, & Del Gaiso, 2006). Positive affect is a summary term for pleasurable emotions such as joy, contentment, laughter, and love. Meaningfulness refers to more personally expressive and engaging activities that may connect us to a broader and even transcendent view of life.

King and her colleagues note that historically, positive affect has been thought of as more central to hedonic than to eudaimonic conceptions of

well-being. In fact, "the good life," from a eudaimonic perspective, suggests that the pursuit of pleasure may detract from a personally expressive and meaningful life. Pleasure is seen as a shallow and unsatisfying substitute for deeper purposes in life. The potential opposition between pleasure and meaning is one reason for the scant research examining their potential interrelation. However, King and colleagues' study suggests that the line between positive affect and meaning in life is not as clear as previously imagined. Positive affect may enhance people's ability to find meaning and purpose in their lives.

As a basis for their study, King and her colleagues note the considerable research linking meaning with positive psychological functioning. Experiencing life as meaningful consistently predicts health and happiness across the life span. Finding meaning in life's difficulties contributes to positive coping and adaptation. Meaning in life may stem from a person's goals, intrinsically satisfying activities, interpersonal relationships, self-improvement efforts, or a transcendent philosophy or religion that provides a larger sense of understanding and coherence to the journey through life. Whatever the basis of their understanding, people are clearly capable of making global judgments about the meaning and purpose of life. Researchers do not typically define "meaning in life" for study participants, but let each person use his or her own understanding. People's self-described perceptions of meaning and purpose are highly related to well-being outcomes.

How might positive affect contribute to meaning in life? King and her colleagues believe that positive emotions open up people's thinking to more imaginative and creative possibilities by placing current concerns in a broader context. These effects of positive emotions may enhance meaning if they also cause people to think of their lives in terms of a larger system of meaning. For example, an enjoyable walk in the mountains on a beautiful day or a fun evening with friends may lead you to think of your place in nature's scheme of things or the importance of relationships in a satisfying life.

Positive emotions may also be markers of meaningful events and activities. Progressing toward important goals makes us feel good. Judgments of global life satisfaction are enhanced by a current or recent positive mood. Meaningful and expressive activities are typically accompanied by enjoyment. It is likely that these connections between positive affect and meaning are represented in our memories

as well-learned linkages. In the same way that the sights, sounds, and smells of Christmas may bring back fond childhood memories, positive affect may give rise to a sense of meaning in life. Positive emotions may be intimately bound to the meaning of meaning.

In a series of six studies, King and her colleagues found positive affect to be consistently related to meaning in life. Whether people were asked to make global life judgments or daily assessments, meaning and positive emotion were highly correlated. Taking a long-term view, people who characteristically experience many positive emotions (i.e., trait positive affectivity) report greater meaningfulness in their lives than people who typically experience more frequent negative emotions (i.e., trait negative affectivity). In day-to-day life, the same relationship was found. A day judged as meaningful included more positive than negative emotional events. People's ratings of statements such as, "Today, my personal existence was very purposeful and meaningful" or, "Today, I had a sense that I see a reason for being here" were significantly related to their daily diary entries describing positive emotional experiences occurring during the day. And the effect of positive emotion was above and beyond that of goal progress assessments. Goal pursuits are a significant source of purpose in life. When King and her fellow investigators factored out the effects of individual goal assessments, positive affect was still significantly related to enhanced life meaning. Experimental manipulations of positive and negative mood also supported the role of positive affect. People who were primed to think about, or induced to feel positive emotions rated life as more meaningful and made clearer discriminations between meaningful and meaningless tasks, compared to participants in neutral emotional conditions.

Overall, King and her colleagues' work suggests that meaning and positive emotion may share a two-way street. In other words, meaningful activities and accomplishment bring enjoyment and satisfaction to life, and positive emotions may bring an enhanced sense of meaning and purpose. As King and her associates conclude, "the lines between hedonic pleasure and more 'meaningful pursuits' should not be drawn too rigidly." "... pleasure has a place in the meaningful life" (King et al., p. 191).

Despite their apparent overlap, hedonic and eudaimonic conceptions of happiness are the bases for two distinct lines of research on well-being (Ryan & Deci, 2001). Studies of SWB have explored

the hedonic basis of happiness; and studies of optimal functioning, positive mental health, and flourishing have examined the underpinnings of well-being fitting the eudaimonic view. The definitions and measures of well-being developed within each of these empirical traditions will be reviewed separately. A comparative analysis will then examine the overlapping and the distinctive features of the hedonic and eudaimonic views.

SUBJECTIVE WELL-BEING: THE HEDONIC BASIS OF HAPPINESS

Subjective well-being shares a common core of meaning with the more everyday term *happiness*. The term "subjective" means, from the point of view of the individual. That is, it refers to a person's own assessment of his or her life, rather than assessment by an external observer or evaluator, or as might be inferred from more objective measures of factors such as physical health, job status, or income. As Myers and Diener (1995) put it, the final judge of happiness is "whoever lives inside the person's skin" (p. 11). Diener (2000) describes SWB as follows: "SWB refers to people's evaluations of their lives—evaluations that are both affective and cognitive. People experience an abundance of 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, when they are satisfied with their lives" (p. 34). In short, a person with high SWB has a pervasive sense that life is "good." In our review, we will use the terms *subjective well-being* and *happiness* interchangeably.

Measuring Subjective Well-Being

Early survey researchers assessed people's sense of well-being directly. In national surveys, tens of thousands of people responded to questions that asked for an overall global judgment about happiness, life satisfaction, and feelings (see Andrews & Withey, 1976; Campbell et al., 1976, for reviews). Survey researchers asked questions like the following: "Taking all things together, how would you say things are these days—would you say you are very happy, pretty happy or not too happy?" "How satisfied are you with your life as a whole? Are you very satisfied? Satisfied? Not very satisfied? Not at all satisfied?" Other researchers asked people to choose from a series of faces to indicate their degree of



FIGURE 2.2 Face Measure of Happiness

happiness (Andrew & Withey, 1976). Participants are simply asked to indicate which face comes closest to expressing how they feel about their life as a whole. An example of such a series of faces is shown in Figure 2.2

In current research, SWB is widely considered to have three primary components that are assessed by multi-item scales and inventories (Andrews & Robinson, 1992; Argyle, 2001; Diener, 2000; Diener et al., 1999). These three components are *life satisfaction*, *positive affect*, and *negative affect*. Life satisfaction is a cognitive judgment concerning how satisfied a person is with his or her life. The emotional components—positive and negative affect—refer to peoples' feelings about their lives. Positive affect refers to the frequency and intensity of pleasant emotions such as happiness and joy. Negative affect refers to the frequency and intensity of unpleasant emotions such as sadness and worry.

This three-part structure of SWB has been widely confirmed in research using large samples of people who completed a variety of measures of happiness, satisfaction, and emotions (e.g., Bryant & Verhoff, 1982; Compton, Smith, Cornish, & Qualls, 1996; Lucas, Diener, & Suh, 1996). Responses were then examined using a statistical technique called factor analysis to assess the relationships among the various measures. The results have generally revealed two prominent findings. First, statistical analyses reveal a single factor that underlies all the different measures. That is, despite the diversity of SWB measures, they all seem to tap a common dimension. Second, studies also reveal three components of SWB: a "life situation factor," a "positive affect factor," and a "negative affect factor." These three components (life satisfaction, positive affect, and negative affect) correlate strongly with the common dimension, but only moderately with one another. That is, each makes a relatively independent and distinct contribution. This finding (that measures of SWB reliably parcel themselves out into three related, but somewhat independent parts) serves as the basis for the three-component view of SWB.

The interrelationship of the three components is noteworthy because most researchers do not assess all

three components (Diener et al., 2003). Researchers assess SWB in a variety of ways. The fact that different measures share a common underlying dimension permits a comparative and cumulative evaluation of research results, despite differences in how SWB is assessed. However, Diener (2000) notes that this situation is less than ideal. It would be better, from a scientific measurement point of view, if studies assessed all three components. Developing more detailed and widely shared measures of SWB is an important task for the development of positive psychology.

Many of the measures to be described can be taken online at Martin Seligman's Authentic Happiness web site described at the end of this chapter. You can obtain a profile of your scores on a variety of measures developed by positive psychologists.

Life Satisfaction

Single-item measures of life satisfaction have given way to multi-item scales with greater reliability and validity. One of the more widely used measures of life satisfaction is the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffen, 1985). This five-item scale asks the participant to make a global evaluation of his or her life (adapted from Diener, Lucas, & Oishi, 2002, p. 70). You may be interested in completing the items yourself. To fill out the scale, simply indicate your degree of agreement or disagreement with each of the five statements using the 1–7 ratings described below:

- | | |
|-------|---|
| 7 | <i>Strongly agree</i> |
| 6 | <i>Agree</i> |
| 5 | <i>Slightly agree</i> |
| 4 | <i>Neither agree nor disagree</i> |
| 3 | <i>Slightly disagree</i> |
| 2 | <i>Disagree</i> |
| 1 | <i>Strongly disagree</i> |
| _____ | <i>In most ways my life is close to my ideal.</i> |
| _____ | <i>The conditions of my life are excellent.</i> |
| _____ | <i>I am satisfied with my life.</i> |
| _____ | <i>So far I have gotten the important things in life.</i> |
| _____ | <i>If I could live my life over, I would change almost nothing.</i> |

To score your responses, add up your ratings across all five items.

Diener et al. (2002) suggests the following interpretations. Scores below 20 indicate a degree of dissatisfaction with one's life, which can range from extremely dissatisfied (scores of 5 through 9), through very dissatisfied (10 through 14), to slightly dissatisfied (15 through 19). A score of 20 is the neutral point (i.e., not particularly satisfied or dissatisfied). Levels of satisfaction can vary from somewhat satisfied (21 through 25), through very satisfied (26 through 30), to extremely satisfied (31 through 35). Data from large-scale surveys show that most Americans are somewhat satisfied with their lives (scoring between 21 and 25) (Diener et al., 1985).

Life satisfaction can also be assessed by examining the levels of satisfaction in different life domains. A researcher might ask people how satisfied they are with their jobs, families, health, leisure activities, and social relationships. Overall life satisfaction would be expressed in terms of the average or sum of satisfaction ratings for these different aspects of life. This is the approach taken by "quality of life" researchers who ask about everything from satisfaction with physical health and the environment one lives in, to satisfaction with body appearance and sex life (see Power, 2003, for a review). To obtain a more detailed picture of the basis for people's overall life satisfaction, a recent model of SWB suggests that domain satisfaction be included as a fourth component of SWB (Diener, Scollon, & Lucas, 2004). Measures of domain satisfaction provide information on what specific aspects of a person's life make the largest contribution to her or his overall satisfaction. This is particularly important if a researcher is interested in how different life domains (e.g., work, family, or health) affect life satisfaction as a whole.

Positive Affect, Negative Affect, and Happiness

A variety of scales are used to measure people's emotional experiences (see Argyle, 2001; Larsen & Fredrickson, 1999; Lucas, Diener, & Larsen, 2003, for reviews). Some scales ask only about positive emotions, like happiness or joy, while others assess both positive and negative feelings. For example, Bradburn (1969) asked people to indicate the percentage of time they had experienced different positive and negative feelings, using questions like the following:

Within the last few weeks have you ever felt . . .

- ... *particularly excited about something?*
- ... *pleased about having accomplished something?*
- ... *proud because someone complimented you on something you did?*
- ... *that things were going your way?*
- ... *on top of the world?*
- ... *very lonely or remote from people?*
- ... *so restless you couldn't sit long in a chair?*
- ... *very depressed or very unhappy?*

A more common method of assessing feelings is to ask people to rate the frequency and intensity of different emotions they experienced during a given time period. For example, Diener and Emmons (1984) used nine descriptors to assess affect valence. The descriptors for positive affect were happy, pleased, joyful, and enjoyment/fun. The adjectives for negative or unpleasant affect were worried/anxious; frustrated; angry/hostile; unhappy; and depressed/blue.

Another example of a scale that is widely used to measure positive and negative affect is the Positive Affectivity and Negative Affectivity Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). It may be interesting to see how you score. To complete this measure, use the 1–5 rating scale to indicate how you feel right now.

1	2	3	4	5
<i>very slightly or not at all</i>	<i>a little</i>	<i>moderately</i>	<i>quite a bit</i>	<i>extremely</i>
___ <i>interested (PA)</i>			___ <i>irritable (NA)</i>	
___ <i>distressed (NA)</i>			___ <i>alert (PA)</i>	
___ <i>excited (PA)</i>			___ <i>ashamed (NA)</i>	
___ <i>upset (NA)</i>			___ <i>inspired (PA)</i>	
___ <i>strong (PA)</i>			___ <i>nervous (NA)</i>	
___ <i>guilty (NA)</i>			___ <i>determined (PA)</i>	
___ <i>scared (NA)</i>			___ <i>attentive (PA)</i>	
___ <i>hostile (NA)</i>			___ <i>jittery (NA)</i>	
___ <i>enthusiastic (PA)</i>			___ <i>active (PA)</i>	
___ <i>proud (PA)</i>			___ <i>afraid (NA)</i>	

To score your responses, add up separately your ratings for the 10 positive affect items (PA) and your ratings for the 10 negative affect items (NA). Each score can range from 10 to 50, indicating the degree of positive and negative affect. You can also see from this scale which emotions had the greatest impact on your current mood.

Using scales like the PANAS, researchers can ask people to rate the intensity and/or the frequency of their emotional experiences. Researchers can also vary the time period for which the ratings are made. To measure short-term or immediate emotional experience, people are asked to rate how they feel right now, or during the past day. To measure longer-term emotions, a researcher might ask people how frequently they experienced positive and negative emotions during the past week, the past month, or past few months. Other scales used to measure positive and negative feelings employ longer lists of adjectives that can be grouped into subscales of related emotions (see Lucas et al., 2003, for a review). Positive and negative affect can also be measured by facial and physiological expressions of emotions. The human face is highly expressive of emotion. For example, Ekman and Friesen (1976, 1978) developed the Facial Action Coding System that allows trained observers to interpret emotional expression by a particular constellation of muscle movements in the face.

Focus on Research: Is Your Future Revealed in Your Smile?

An intriguing study by Harker and Keltner (2001) examined life outcomes for women showing one of two kinds of smiles in their college yearbook photographs. When asked to smile for the camera, some of us break into spontaneous, genuine, and authentic smiles that make us look as if we are happy or have just been told a good joke. Others look like we are going through the motions of smiling, but it doesn't look like the real thing. It looks more like we have been told a joke that we didn't find funny, and are faking a smile as a social obligation to the joke teller. Trained coders can easily distinguish a genuine, authentic smile (called a "Duchenne smile") from one that looks inauthentic and forced (non-Duchenne). The 141 women in the study had graduated from Mills College in 1958 and 1960 when they were either 21 or 22 years old. Their college senior yearbook photos were coded according to the Duchenne or

non-Duchenne classification. Only a handful of the women did not smile in their photos and about half showed the Duchenne or "natural" smile. All the women in the study were contacted again when they were age 27, 43, and 52. The follow-up study at age 52 occurred 30 years after graduation from college. The researchers were interested in whether or not the expression of positive emotionality, shown among the women graduates with the Duchenne smile, would be related to personality and outcomes later in life.

During each of the follow-up periods, study participants provided information about their personalities, the quality of their relationships, their marital histories, and their personal well-being. Compared to the non-Duchenne group, women showing the Duchenne smile in their college yearbook photos showed lower negative emotionality and higher competence and affiliation with others across all three follow-up periods. Competence was expressed in higher levels of mental focus, organization, and achievement orientation. Affiliation was expressed in stronger and more stable bonds with others. The Duchenne women also showed consistently higher levels of personal well-being and life satisfaction, and lower levels of physical and psychological problems than the non-Duchenne group. Most interestingly, the Duchenne group of women were more likely to be married at age 27 and more likely to have stable and satisfying marriages throughout the 30 years since graduating from college. A number of researchers have noted the important role of positive emotions in avoiding and solving conflict and in maintaining the vitality of a relationship. The positive emotionality of the Duchenne group may have contributed to the development of more social and psychological resources for more creative solutions to life challenges, and may also have contributed to more stable and satisfying relationships and a happier life.

Issues in the Study of Affect

Before considering more global measures of happiness, we should note two issues concerning the relationship between positive and negative affect. The first issue concerns the controversy among researchers regarding the independence of positive and negative affect. The question is, are positive and negative feelings opposite ends of a single dimension (i.e., are they negatively correlated)? If so, this would mean that the presence of positive emotion

indicates the absence of negative emotion and *vice versa*. Or, are negative and positive emotions two separate dimensions with different causes and effects (moderate negative correlations)? If so, this would mean that people could experience both positive and negative emotions at the same time. There are arguments and research findings that support both the unidimensional and the bidimensional view (see Argyle, 2001; Diener & Emmons, 1984; Keyes & Magyar-Moe, 2003; Lucas et al., 2003; Watson & Tellegen, 1985). Several recent theories have attempted to resolve this issue (e.g., Keyes & Ryff, 2000; Zautra, Potter, & Reich, 1997). Moderate negative correlations found in research ($r = -0.4$ to -0.5) suggest that positive and negative emotions are somewhat independent, but the issue is still being debated (Lucas et al., 2003).

Lucas and his colleagues note that part of the issue has to do with how emotions are measured, and in particular, the time frame that is used (Lucas et al., 2003). To illustrate, let's say you are asked how you are feeling right now, and you say, "happy and relaxed." The odds would be low that you would also say you are feeling "depressed and uptight." In the short term, positive and negative emotions are likely to show a strong inverse relationship, supporting a unidimensional view (Diener & Larsen, 1984). On the other hand, if you were asked to report on your emotions over the past month, odds are that you would have experienced both positive and negative emotions. A longer-term assessment would likely show more independence in the experience of positive and negative feelings, supporting a more bidimensional view. Until the controversy is resolved, Diener (2000) recommends that both positive and negative affect be measured so that the contribution of each emotion to SWB can be evaluated.

A second and related issue concerns how much the intensity, and how much the frequency of emotional experiences contribute to SWB. Diener and his colleagues (Diener, Sandvik, & Pavot, 1991; Schimmack & Diener, 1997) have found that the frequency of emotions is more important than their intensity. Happiness is not built so much on intense feelings of happiness or joy, but rather on milder positive emotions that are experienced most of the time. That is, happy people are those who experience positive emotions relatively frequently and negative emotions relatively infrequently. This is true even if the positive emotions are mild rather

than intense. Diener and colleagues (1991) found that intense positive emotions are very rare, even for the happiest people. People with high SWB report frequent experiences of mild to moderate positive emotions and infrequent negative emotions.

Global Measures of Happiness

Some researchers use more global "life-as-a-whole" measures that assess a person's overall happiness–unhappiness instead of separate measures for positive and negative affect. For example, the Subjective Happiness Scale (SHS) measures the extent to which an individual sees himself or herself as a happy or unhappy person (Lyubomirsky & Lepper, 1999). If you wish to complete this measure, circle the number on the 7-point scale above each of the four questions, that you feel best describes you.

1. *In general, I consider myself:*

1	2	3	4	5	6	7
<i>not a very</i>						<i>a very</i>
<i>happy person</i>						<i>happy person</i>

2. *Compared to most of my peers, I consider myself:*

1	2	3	4	5	6	7
<i>less</i>						<i>more</i>
<i>happy</i>						<i>happy</i>

3. *Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?*

1	2	3	4	5	6	7
<i>not at</i>						<i>a great</i>
<i>all</i>						<i>deal</i>

4. *Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?*

1	2	3	4	5	6	7
<i>not at</i>						<i>a great</i>
<i>all</i>						<i>deal</i>

To evaluate your ratings, you first need to reverse code your response to question number four. In other words, if your rating for question four

was a 1, replace the 1 with a 7. If your rating was a 2, replace it with a 6. A rating of 3 is replaced with a 5; a rating of 4 remains a 4; a rating of 5 is replaced with a 2; and a rating of 1 is replaced with a 7. Now, add up your ratings for all four questions and divide by 4. Your composite score can range from 1 to 7. A rating of less than 4 indicates some degree of unhappiness, ranging from very unhappy (scores of 1 and 2) to somewhat unhappy (scores of 3 and 4). A rating of 4 or greater indicates some degree of happiness, ranging from somewhat happy (scores of 4 and 5) to very happy (scores of 6 and 7). The SHS measures people's global assessment of how happy or unhappy they are. Despite the global nature of the SHS, individuals' responses to the scale are strongly related to their scores on more complex and detailed measures of positive and negative affect (Lyubomirsky, 2001). An individual's judgment about whether he or she is a happy or unhappy person would seem to be a good summary and a useful, brief measure of positive and negative affect.

Reliability and Validity of SWB Measures

A substantial amount of research shows that self-report measures of the various components of SWB have good psychometric properties (see Argyle, 2001; Diener & Lucas, 1999; Diener et al., 2004; Lucas et al., 1996, 2003, for reviews). Measures of SWB are internally reliable and coherent, stable over time, and validated by behavioral measures and the reports of others. Internal reliability assesses the coherence and consistency of responses to a particular measure. If responses to items on the scale are highly correlated with one another it suggests that the scale is measuring a coherent, single variable. The internal reliabilities of life satisfaction scales and measures of positive and negative affect are quite high (correlation coefficients [r 's] of 0.84 or so) (Argyle, 2001; Diener, 1993; Pavot & Diener, 1993).

Measures of SWB also show reasonably high stability over time. Reviews of research show life satisfaction scores to be moderately stable over time periods of 4 years (r 's at approximately 0.58) and still somewhat stable at 10 and 15 years (r 's near 0.3) (Argyle, 2001; Diener et al., 2004). Measures of positive and negative affect also show moderate stability (r 's of 0.3 to 0.5) over periods of 6 to 7 years (Costa & McCrae, 1988; Watson & Walker, 1996). Further

evidence for stability can be seen in studies that examined SWB across different life situations. Diener and Larsen (1984) asked participants to record measures of SWB at multiple times during the day for a number of days. They found high correlations between life satisfaction and positive/negative affect across such diverse situations as work and recreation, being alone or in a social setting, and being in a familiar or new environment. Taken together, these studies suggest that people's overall evaluations of their lives are fairly stable and enduring across time and situations.

We should note that SWB measures are also sensitive to significant life events and changes. That is, within a general pattern of stability, life changes can increase or decrease SWB, at least in the short term. Research has shown that positive or negative changes in our lives can affect our level of happiness (e.g., Headey & Wearing, 1991). A good day at work, an enjoyable activity with friends, a new romance, or praise from others for our accomplishments can all increase our feelings of happiness and satisfaction, just as a bad day at work, conflict with friends, a failed romance, or criticism from others can make us unhappy and dissatisfied. However, research shows that most of these effects are short-lived (e.g., Brickman, Coates, & Janoff-Bulman, 1978; Eid & Diener, 1999). Within a day, a week, or a month we are back to our more typical level of happiness. Even the effects of major life events, like being fired from your job, have been found to decrease SWB for only a period of several months (Suh, Diener, & Fujita, 1996). Exceptions to these short-term effects include loss of a spouse and marriage. Widowhood produces longer-term decreases in SWB, while marriage produces longer-term increases in SWB (Winter, Lawton, Casten, & Sando, 1999).

If people say they are happy on measures of SWB, do they also behave in ways that confirm their self-reported happiness, and do others see them as happy? This question addresses the validity of a test. Is it measuring what it claims to be measuring? A number of studies support the validity of SWB measures. Individual self-reported happiness has been confirmed via assessments by peers (Watson & Clark, 1991), family members and friends (Sandvik, Diener, & Seidlitz, 1993), and spouses (Costa & McCrae, 1988). When asked to recall positive and negative life events, happy people recall more positive events than unhappy people (Seidlitz, Wyer, & Diener, 1997). A review of differences between

happy and unhappy people also supports the validity of SWB measures (Lyubomirsky, 2001). People with high SWB are more likely to perceive life in positive ways, expect a positive future, and express confidence in their abilities and skills. People with lower SWB are more focused on negative life events and show more self-absorbed rumination about themselves and their problems.

Experience Sampling Method

Despite evidence supporting their reliability and validity, global self-report measures of SWB are not free of potential biases. The most important sources of bias are those that may be introduced by distortions in memory and the effects of temporary mood. Suppose you were asked the following question: "Taking all things together how happy are you these days?" What would be the basis for your answer? Ideally, you would recall and reflect on the many significant events in your life (both positive and negative), and then make a reasoned judgment about what they all add up to in terms of your overall level of happiness. But what if you recalled only good experiences, or only bad experiences, or only your most recent experiences? What if your current mood affected your judgment of overall happiness? Using only one kind of remembered experience, or just your current mood as the basis for your judgment, might bias and distort your rated level of happiness. Studies show that this sort of bias can, in fact, occur. Schwarz and Strack (1999) have shown that such things as finding a small amount of money, hearing that your country's soccer team won the championship, being in a pleasant room, or being interviewed on a sunny day can increase people's self-reports of general life satisfaction. Conversely, hearing that your team lost, spending time in a noisy, overheated, and dirty laboratory, or being interviewed on a rainy day can decrease reports of satisfaction.

Work by Kahneman and his colleagues suggests that people may summarize and remember emotional experiences in complex and counterintuitive ways (see Kahneman, 1999, for a review). Common sense would indicate that the longer an emotional episode lasts, the more effect it should have on how we evaluate it. People who endure a long and uncomfortable medical procedure, for example, should rate it as more negative than people who go through the same procedure, but of

shorter duration. However, research with people undergoing a colonoscopy revealed that retrospective evaluations of pain and discomfort were not related to the duration of the procedure and were not a simple function of moment-to-moment ratings of pain during the procedure (Redelmeir & Kahneman, 1996). When people evaluated the experience as a whole, their responses followed what Kahneman calls the "**peak-end rule.**" Global judgments were predicted by the peak of emotional intensity during the experience (in this case, pain), and by the ending emotional intensity. The duration of the experience did not affect overall evaluations. The peak-end rule has been confirmed with a variety of emotional episodes (Fredrickson & Kahneman, 1993; Kahneman, Fredrickson, Schreiber, & Redelmeir, 1993). The peak-end rule accurately predicted the basis of evaluations of an unpleasant film showing an amputation, immersing one hand in ice water, and exposure to aversive sounds of varying intensity and duration. In each of these studies, participants gave moment-to-moment intensity ratings for the emotions they were feeling, and an overall global judgment after the experience. Consistent with the peak-end rule, global ratings are strongly related to the average between the peak of the moment-to-moment intensity ratings and the ending intensity ratings. Global ratings are much less related to a simple average of all the moment-to-moment ratings of intensity.

The peak-end rule suggests that people's evaluations of emotionally significant events are heavily influenced by intensity and how the experience ends, and less influenced by how long the experience lasts. People selectively focus on certain features of an emotional episode to represent and judge the entire experience. Kahneman believes that only by examining moment-to-moment feelings can we come to understand the basis of people's summary evaluations. Global summary measures do not tell us what aspects of the experience are most important or how these aspects are combined.

The potential for biases in self-report measures has led some researchers to argue that moment-to-moment measures of experience are both more accurate and more revealing of the factors and processes that underlie SWB. **Experience sampling methods** (ESM) encompass a variety of measures that provide a "day-in-the-life" view of emotions and events in people's lives (Larsen &

Fredrickson, 1999; Stone, Shiffman, & DeVries, 1999). Measures of what people are doing and how they are feeling may be taken in real time as they occur, or they may be taken retrospectively, shortly after events occur within the sampled time frame (e.g., keeping a daily diary). Real-time measures provide a picture of the specific events and emotions that people experience in their daily lives. Because responses are taken while or shortly after events actually happen, real-time measures are less susceptible to the distortions that may occur in delayed evaluations that rely on memory of the events.

Real-time studies might use a watch alarm, pager, or palm computer to signal people at random or predetermined times during the day. At the signal, participants take a few moments to fill out various measures of what they are doing and how they are feeling. For example, research reviewed by Stone and colleagues (1999) examined the relationship of momentary measures of mood taken throughout the day, to participants' end-of-day mood summaries. The review indicated that people's overall judgment of how their day has gone is primarily determined by how the day ends. Events occurring earlier in the day seem to be ignored in people's daily summaries. One problem with real-time measures is that they can be burdensome for research participants because they require people to stop what they are doing and fill out scales and inventories. Such disruption and investment of time might be particularly bothersome in the work setting.

Retrospective ESM measures ask people to reconstruct and review their activities and feelings related to life events after they have occurred. While a variety of methods have been developed (see Larson & Fredrickson, 1999, for a review), daily diary methods are most common because they are easiest to use. In these studies, people fill out a variety of measures at the end of each day for a number of days. These measures ask about significant events and emotional reactions that occurred during each day. Results can be summarized according to time period (e.g., days of the week) or significant events (e.g., personal relationships). Studies show, for example, that people's moods tend to fluctuate predictably over days of the week (e.g., Egloff, Tausch, Kohlmann, & Krohne, 1995; Larsen & Kasimatis, 1990). As you might expect, moods are generally more positive on the weekends than during weekdays—perhaps because

on weekends people have greater freedom in choosing what they want to do and they participate in more enjoyable activities and pleasant social interactions than on weekdays (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Focus on Method: How Do We Spend Our Time?

THE DAY RECONSTRUCTION METHOD Kahneman and colleagues (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004) have recently tested a new measure called the **day reconstruction method** (DRM), which promises to combine the accuracy of real-time measures with the efficiency of daily diaries. In the DRM, people first construct a diary of the *previous* day's events. Participants are asked to think of their day as a sequence of episodes or scenes in a film. Separate recording pages are provided for morning, afternoon, and evening episodes. To help them remember the day's events, people are encouraged to give each episode a short name, such as driving to work, shopping, or relaxing. After identifying daily episodes, study participants then respond to a set of structured questions. For each episode, participants are asked to indicate what they were doing (e.g., commuting, working, watching TV, or socializing), where they were (e.g., at home, at work), and for episodes involving other people, with whom they interacted (e.g., boss, friend, children, or spouse). Participants then rate a number of positive and negative emotions to indicate how they felt during each episode. These include emotions such as feeling relaxed, happy, tired, frustrated, anxious, impatient, and competent. The researchers also ask for demographic and work-or health-related information and for more global ratings of life satisfaction and mood.

To test this new method, Kahneman and his colleagues studied a group of 909 employed women living in Texas. Their average age was 38 years and their average household income was \$54,700. The women represented a mix of 49% white, 24% African American, and 22% Hispanic. Most were married and had young children. Following the day reconstruction method, all participants completed the questionnaire describing their experiences and feelings for the previous day. Most of the episodes that people identified lasted from 15 minutes to 2 hours, with an average episode length of 61 minutes. The average number of episodes per day

was 14. Each episode was rank-ordered according to the degree of positive and negative affect. Positive affect was based on the average ratings for feelings of happiness, relaxation, and enjoyment. Negative affect was reflected by average ratings for feelings such as: frustrated, annoyed, depressed, hassled, put down, angry, and worried. Overall, the intensity and frequency of positive affect was much higher than the intensity and frequency of negative affect. Negative affect was quite rare and of low intensity, while some positive affect was present in nearly every episode during the day.

When the day's activities were ranked according to the degree of positive affect, both some predictable and some surprising patterns emerged. As you might expect, people felt most positive when they were involved in intimate relationships with their spouses, family members, and friends. Socializing was high on the "enjoying myself" list, as were relaxing, eating, prayer, and meditation activities. Somewhat surprisingly, watching TV was rated more positively than shopping or taking a nap. Even more surprising, of 16 activities rated for positive and negative affect, "taking care of my children" was fifth from the bottom. Watching TV, preparing a meal, shopping, and exercising were all rated as more positive than childcare. Only housework, working, commuting, and responding to e-mail on the computer were rated lower than childcare. The lower enjoyment related to taking care of kids highlights the difference between global-belief-based measures of well-being and the "in-the-trenches" view captured by the DRM. Surveys reviewed by Kahneman and colleagues show that people typically *say* that they enjoy their children and find deep satisfaction in raising them. Such expressions of satisfaction are undoubtedly true in the general sense and also reflect the socially desirable thing to say. However, on any given day, kids can be a pain. Our overall judgment of taking care of children does not necessarily reflect our specific day-to-day experiences.

In addition to providing an interesting picture of a "day-in-the-life" of working women, the results of this study showed a high degree of similarity to findings from studies using moment-to-moment experience sampling methods. The DRM seems to produce accurate recall of daily events, as evidenced by the fact that the results parallel findings from ESM studies, in which events are evaluated as they occur. The DRM also reduces the burdens of

disruption and time commitment imposed on research participants with the ESM approach.

Experience Sampling versus Global Measures of Subjective Well-Being

We noted earlier that global self-report measures of SWB have good psychometric properties. The three components of SWB (life satisfaction, positive affect, and negative affect) are interrelated, but make independent contributions to overall well-being. Measures of each component are internally coherent, show consistency over time, and are appropriately sensitive to life changes. However, global measures that require people to recall and integrate information may be susceptible to memory errors and the influence of current mood. Experience sampling and day reconstruction methods both provide "as it happens" pictures of well-being that are less influenced by memory. What is the relationship between the two kinds of measures? Is one better than the other, or do they represent complementary pictures of SWB?

We do not have definitive answers to these questions because experience sampling methods are so new to well-being research. Initially, researchers saw the relationship between ESM and global self-reports as an issue of validation. In other words, they wondered whether measures of well-being based on ESM would correlate with global measures. If so, this would increase our confidence that global measures are valid summaries of people's actual experiences and that they are not distorted by errors or lapses in memory. The results here are mixed. Some studies show moderate relationships between global and ESM measures (e.g., Kahneman, et al., 2004; Sandvik et al., 1993), while others show much weaker relationships (e.g., Stone et al., 1999; Thomas & Diener, 1990). At this point, it seems appropriate to think of ESM and global measures as related, but not identical, ways to assess SWB. Each measure may tap somewhat different phenomena and different aspects of a person's life and psychological makeup. Part of the difference involves how sensitive each measure is to the effects of traits and states on SWB.

Experience sampling methods are particularly sensitive to momentary alterations in mood resulting from events that occur during the time period studied (e.g., during a day). Experience sampling effectively captures how life events affect our emotional state at a particular moment and across a particular

period of time. However, we would also expect that personal qualities (traits) would affect a person's emotional reactions to daily events. For example, happy people interpret life events (including negative ones) in more positive ways than unhappy people (Lyubomirsky, 2001). Experience sampling methods, while maximally sensitive to the effects of events (states) on SWB, would also show the effects of an individual's personality (traits) in between-person comparisons.

A similar, but opposite argument can be made for global self-report measures of SWB. **Global measures** are heavily influenced by genetic temperament and personality traits like extraversion, neuroticism, self-esteem, and optimism (see Diener & Lucas, 1999; Diener et al., 1999; Myers, 1992; Myers & Diener, 1995, for reviews). One reason global measures show long-term stability is that they reflect stable and enduring personality characteristics. Research has shown adult personality to be very stable over time (Costa & McCrae, 1988). Global measures that ask people to make overall summary judgments of well-being are likely to be highly sensitive to the makeup of a person's personality (traits), and somewhat less sensitive to their current situation (state). Our current mood, particularly if intense, can certainly affect our assessment of overall well-being. However, if our current emotional state were the primary determinant of SWB, then studies would not consistently find that a person's level of well-being is quite stable over time.

One of the tasks for future research is to explore the relationship between, and the differing information that may be provided by, global and ESM measures. These and other measurement issues are central concerns within positive psychology. Based on a literature search of psychology journals, Diener and Seligman (2004) found that most researchers measure only one aspect of SWB and too often rely on single-item measures. One researcher may measure only life satisfaction, while another may measure only positive affect, but both discuss their findings in terms of SWB and happiness. We noted in an earlier discussion that the three components of SWB are interrelated, thus providing a degree of comparability among studies that measured different SWB components. However, Diener and Seligman urge researchers to pursue more comprehensive measures

and models of SWB in order to advance and expand our understanding of the complexities and multiple aspects of human happiness.

SELF-REALIZATION: THE EUDAIMONIC BASIS OF HAPPINESS

Conceptions of SWB, like positive psychology as a whole, are works in progress. Though widely confirmed in research, the three-component view of SWB has been expanded by some psychologists to include personal qualities and life activities believed to be the psychological underpinnings of happiness. Seligman (2002a, 2002b) and Diener and Seligman (2004) have argued for a broader conception of well-being that would include measures of active engagement in absorbing activities or "flow experiences" (Csikszentmihalyi, 1997) and measures of meaning in life that concern purposes that transcend the self, such as religion. These expanded conceptions express the eudaimonic view by defining happiness in terms of striving for self-realization. As explained earlier, happiness, from the eudaimonic perspective, results from the development and expression of our inner potentials (daimon) that include our talents, personalities, and values. Following the hedonic view, measures of SWB ask people *if* they are happy and satisfied with their lives. Eudaimonic measures of happiness also ask *why* people are happy.

Psychological Well-Being and Positive Functioning

In an article titled, "Happiness is everything, or is it? Explorations on the meaning of psychological well-being," Carol Ryff (1989) argued that the three-component model of SWB fails to describe the features of a person's life that provide the basis and meaning of well-being. Well-being, in Ryff's view, is more than happiness with life. Well-being should be a source of resilience in the face of adversity and should reflect positive functioning, personal strengths, and mental health. Consider the following question: Are happy people also mentally healthy people? At first glance the answer would seem to be yes. It is hard to imagine people suffering from depression or anxiety disorders also being happy. However, people with delusional belief systems or people who derive pleasure from hurting others might be happy and, at the same

time, mentally ill; and in the latter case, considered so partly *because* of the pleasure they receive from hurting others. Eudaimonic conceptions of happiness include consideration of the difference between healthy and unhealthy happiness. What is missing from the three-part model of SWB is a conceptualization and assessment of positive functioning. Ryff (1989) argues that well-being and happiness are based on human strengths, personal striving, and growth.

Drawing on theories of positive mental health within personality and clinical psychology, Ryff and her colleagues have developed a model they call “**psychological well-being**” (PWB), based on descriptions of positive psychological and social functioning (Keyes, 1998; Keyes et al., 2002; Ryff & Keyes, 1995; Ryff & Singer, 1998). Originally used to describe positive functioning across the life span, this conceptualization has been extended to describe positive mental health (Keyes, 1998, 2003; Keyes & Lopez, 2002; Keyes & Magyar-Moe, 2003). The goal of these researchers was to formulate and validate a description of SWB that would delineate positive aspects of mental health. That is, just as mental illness is defined in terms of symptoms that express underlying pathology, these researchers asked, “What markers express underlying mental health and well-being?” As expanded by Keyes and colleagues, this model incorporates both hedonic and eudaimonic views of happiness.

At a general level, well-being is conceived, from this perspective, as involving the two broad dimensions of emotional well-being and positive functioning (Keyes & Magyar-Moe, 2003). Emotional well-being is defined by the three-component view of SWB. It includes life satisfaction and positive and negative affect. A psychological dimension and a social dimension define positive functioning. All together, well-being is described as a global combination of emotional well-being, psychological well-being, and social well-being. This comprehensive model is meant to serve as a more complete description of SWB. The major elements of the model are described below (adapted from Keyes, 2003, Table 13.1, p. 299, and Keyes & Magyar-Moe, 2003, Table 26.2, pp. 417–418). Each element is described as a marker of positive mental health and well-being. Example items from assessment scales developed to measure each symptom are also given. A minus sign after an item indicates it is reversed scored.

EMOTIONAL WELL-BEING

Positive Affect—experience of positive emotions like joy and happiness.

During the last 30 days, how much of the time did you feel cheerful; in good spirits; extremely happy; calm and peaceful; satisfied and full of life?

Negative Affect—absence of emotions suggesting life is unpleasant.

During the last 30 days, how much of the time did you feel so sad nothing could cheer you up; nervous; restless or fidgety; hopeless; that everything was an effort; worthless?

Life Satisfaction—sense of contentment and satisfaction with life.

During the last 30 days, how much of the time did you feel satisfied; full of life? Over all these days, how satisfied are you with your life?

Happiness—having a general feeling and experience of contentment and joy.

Overall these days, how happy are you with your life?

How frequently have you felt (joy, pleasure, or happiness) in the past week, month, or year?

PSYCHOLOGICAL WELL-BEING

Self-Acceptance—positive attitude toward oneself; accepting of varied aspects of self; feel positive about past life.

In many ways I feel disappointed about my achievements in life. (-)

Personal Growth—feelings of continued development and effectiveness; open to new experiences and challenges.

I think it is important to have new experiences that challenge how I think about myself and the world.

Purpose in Life—possessing goals and beliefs that give direction to life; feeling life has meaning and purpose.

I live life one day at a time and don't really think about the future. (-)

Environmental Mastery—feel competent and able to manage complex environment; able to create personally suitable living situation.

The demands of everyday life often get me down. (-)

Autonomy—feel comfortable with self-direction; possess internal standards; resist negative social pressures from others.

I have confidence in my own opinions, even if they are different from the way most other people think.

Positive Relations with Others—warm, satisfying, and trusting relationships with others; capable of empathy and intimacy.

Maintaining close relationships has been difficult and frustrating for me. (-)

SOCIAL WELL-BEING

Social Acceptance—holds positive attitudes toward others, while understanding their complexities.

People who do a favor expect nothing in return.

Social Actualization—cares about and believes that people have potential; society can evolve in a positive direction.

The world is becoming a better place for everyone.

Social Contribution—feeling that one's life is useful to society and valued by others.

I have something valuable to give to the world.

Social Coherence—has interest in society and believes it is intelligible and somewhat logical, predictable, and meaningful.

I cannot make sense of what's going on in the world. (-)

Social Integration—feels sense of belonging to a community; feels comfort and support from community.

I don't feel I belong to anything I'd call a community. (-)

Despite the complexity of this model (15 total aspects of well-being) and the difficult task of developing assessment tools for each of the various elements, a number of large-scale studies provide validation (see Keyes, 2002, 2003; Keyes & Lopez, 2002; Keyes & Magyar-Moe, 2003; Keyes et al., 2002; Ryff & Keyes, 1995, for reviews). Measures of emotional well-being, psychological well-being, and social well-being show good internal reliability and validity. Research shows that all three of the components are related, but each makes a separate contribution to SWB. Studies also show that these measures of well-being are negatively correlated with symptoms of mental illness. For example, measures of depression correlated in the -0.4 range with emotional well-being, around -0.5 with psychological well-being, and -0.3 with social well-being. These correlations suggest that this expanded mode of SWB is particularly relevant for examining the relationship between well-being and mental health.

Need Fulfillment and Self-Determination Theory

Self-determination theory offers another conception of well-being that embraces a eudaimonic view of happiness (Ryan & Deci, 2000, 2001). **Self-determination theory** (SDT) states that well-being and happiness result from the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. Autonomy needs are fulfilled when activities are freely chosen rather than imposed by others, and are consistent with the individual's self-concept. Competence needs are satisfied when our efforts bring about desired outcomes that make us more confident in our abilities. Needs for relatedness are fulfilled by close and positive connections to others. Social interactions that produce feelings of closeness and support contribute to satisfaction of this need. Research by Ryan, Deci, and their colleagues has confirmed the relationship between need satisfaction and well-being (see Ryan & Deci, 2000, 2001, for reviews).

Focus on Research: What Makes a "Good" Day?

What makes a "good" day and what makes for a "bad" day? A day we enjoy versus a day we don't? As Reis and his colleagues note, the ingredients of a

bad day are fairly well established (Reis et al., 2000). Negative life events (both big and small) that produce stress and conflict have consistently been shown to diminish our feelings of well-being, happiness, and enjoyment. The list of negative events would include failure at work or school, arguments and conflicts with others, financial problems, illness, and accidents—experiences that frustrate, disappoint, or cause anger and sadness. But what about a good day? Is a good day just the absence of negative events—no failure, disappointment, or conflict? If you get the flu you may be miserable, but if you are healthy, does that make you happy? Research discussed earlier in this chapter has shown that positive and negative emotions are somewhat independent, with each emotion making a separate contribution to happiness and well-being. This independence may result from the fact that the causes of negative and positive emotions are different. That is, a “good” day may involve different activities and experiences than those that make for a bad day. A study by Reis and colleagues titled, “Daily Well-Being: The Role of Autonomy, Competence, and Relatedness,” addressed the question of the psychological meaning of a “good” day. The researchers asked three questions: What kinds of activities and events make our day enjoyable? What makes an activity enjoyable? And third, how much of our enjoyment during the day depends on our personal characteristics, and how much depends on the events we encounter?

The answers to these questions were examined in terms of the three needs described by self-determination theory (SDT). The theory states that needs for autonomy, competence, and relatedness are shared by all humans. These needs are described as the “essential nutrients” from which people grow (Ryan & Deci, 2000). The need for autonomy involves our need for freely chosen actions that express our values, talents, and personalities. Autonomous people follow their inner goals and interests. Inner goals guide and direct their lives, and choices are made in terms of this inner direction rather than outer rewards. For example, an autonomous person would not choose a career or job based primarily on how much money she could make. The intrinsic satisfaction and meaningfulness provided by the work would be more important. Competence is the need for effective action in meeting life’s

challenges. A sense of competence involves feelings of confidence that we can solve problems, achieve our goals, master the demands of life, and be successful in new endeavors. The third need, for relatedness, involves feelings of intimacy and connection to other people. People who are skilled in the development and maintenance of close relationships are most likely to have this need fulfilled.

According to SDT, these three needs together form the foundation of well-being and happiness. Each need can be thought of both as a trait and as a state. A trait refers to an enduring personal disposition. Some people characteristically show autonomy in their actions and choices, feel confident in their abilities and pursuit of new challenges, and have rewarding and intimate relationships with others. For these individuals, high levels of well-being and happiness result from qualities they possess that result in fulfillment of the three needs. A state, in contrast, refers to the particular situation we are in at the moment. The fulfillment of the three needs can vary from day to day and from situation to situation. Activities that meet the need for autonomy are those that are freely chosen, personally rewarding, and expressive of our interests and talents. Competence needs are fulfilled by successfully completing a challenging task, solving a difficult problem, or expressing our talents and abilities. When competence needs are met, we feel confident about our abilities and take pride in our personal accomplishments. Relatedness needs are fulfilled and expressed when we feel close to others, have meaningful conversations, and enjoy the company of our romantic partner, our family members, and our friends.

In a study of 76 college students, Reis, Sheldon, and colleagues (2000) measured autonomy, competence, and relatedness both as states and as traits. Self-determination theory predicted that both trait and state measures would be related to a person’s daily level of well-being and happiness. That is, traits (in the form of personal qualities indicating high levels of autonomy, competence, and relatedness) and states (in the form of need-fulfilling daily activities) would both be related to higher degrees of well-being on a given day. Reis and colleagues’ research first assessed the three needs as traits by asking their college student participants how often they engaged in freely

chosen and personally meaningful activities (autonomy), how confident they typically felt when facing new tasks and challenges (competence), and about the quality of their attachments to others (relatedness). In a version of the ESM, state measures were based on a daily diary that was kept for 14 days. At the end of each day, before going to bed, students completed measures of well-being for that day. These included the extent of positive and negative emotion they experienced during the day, their level of energy, and physical symptoms of illness (e.g., symptoms of a cold). Then they were asked to list the three activities (excluding sleep) that took up the most time during the day. Each activity was rated according to why it was done. Reasons suggesting autonomous actions were those for which the activity was freely chosen, intrinsically interesting, and involved expression of personal identity and values. Non-autonomous activities resulted from the demands of an external situation or were based on the desire to avoid guilt and anxiety. Participants also rated each of the three activities to indicate to how competent it made them feel.

Daily relatedness needs were assessed in a similar way. The three social interactions that took up the most time during the day were listed. Each of the three social interactions was rated according to how close and connected it made the student feel toward others and the extent to which the interaction fulfilled or did not fulfill relatedness needs. Having fun with others, and feeling understood and appreciated indicated need fulfillment. Non-fulfillment or need frustration was suggested by social interactions that caused feelings of insecurity, self-consciousness, hostility, or anger.

Consistent with self-determination theory, Reis and colleagues found that a "good day" was related to the fulfillment of needs for autonomy, competence, and relatedness. Trait measures of need fulfillment were positively correlated with well-being and positive mood during the day. On average, students who scored higher in autonomy, competence, and relatedness also showed higher levels of well-being and happiness across the 14 days of the study. People who have personal qualities that contribute to need fulfillment tend to enjoy more well-being and more positive moods on a day-to-day basis.

Figure 2.3 shows the pattern of daily ratings for positive and negative emotional experiences, competence, relatedness, and autonomy across the 7 days of the week. For any given day, well-being was higher and students enjoyed themselves more when the day's activities contributed to feeling autonomous, competent, and connected to others. The more these three needs were positively engaged by activities during the day, the higher their ratings of well-being and positive mood. Of the three needs, relatedness had the most significant impact on daily well-being. Some of the "best" days occurred when social interactions involved discussion of meaningful matters and led to feelings of being understood and appreciated.

Interestingly, the degree to which needs were fulfilled was also significantly related to the days of the week. As you might guess, Monday produced the lowest ratings of positive emotion. Interestingly, negative emotion and feelings of competence were fairly stable across the seven days of the week. Bad moods and feelings of confidence were dependent on activities that did not vary systematically with day of the week. As you might also have guessed, Friday, Saturday, and Sunday were rated the highest with regard to positive emotion, relatedness, and autonomy. Our moods tend to be more positive during weekends because we can more readily enjoy desirable activities. However, this research suggests that a good day, even on the weekend, involves more than just having fun. Needs for autonomy and relatedness are more likely to be satisfied on the weekends. Monday through Friday we often have to follow the expectations, assignments, and demands of others. On the weekends we are more free to choose what we want to do, resulting in a greater sense of self-direction and expression that satisfies our need for autonomy. In addition, weekends often involve getting together with friends and family members. These interactions are enjoyable, but they also fulfill our desire for intimacy and meaningful connections with others. From the perspective of SDT, more "good days" occur during weekends because we are more likely to fulfill needs that increase our sense of well-being and happiness. Part of the nature of a "fun" activity is its ability to fulfill important psychological needs.

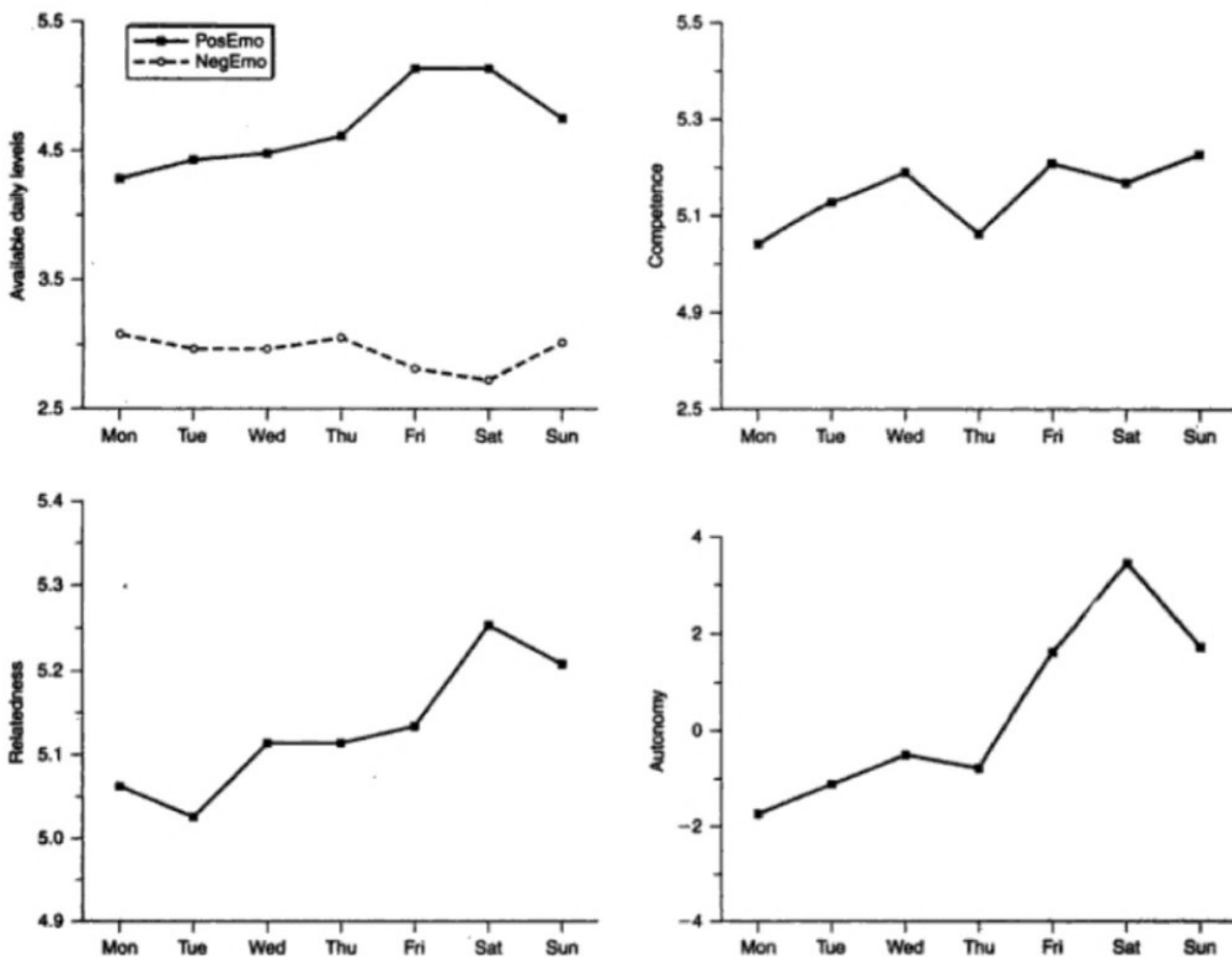


FIGURE 2.3 Positive and Negative Emotions, Competence, Relatedness, and Autonomy Ratings Across Days of the Week
 Source: Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26, 419–435. Copyright American Psychological Association. Reprinted with permission.

COMPARING HEDONIC AND EUDAIMONIC VIEWS OF HAPPINESS

We have examined a number of measures and two major models of happiness. At this early point in the development of positive psychology, it is too soon to tell which measures and models are the most useful, accurate, or revealing of processes and factors that underlie happiness. All would agree that the refinement of measures and the formulation of more comprehensive theories are essential to the growth and development of positive psychology. Here, we will note similarities and

differences between the hedonic and eudaimonic views of happiness. Most of the research within positive psychology can be organized around one, or some combination, of these two conceptions of well-being and happiness.

Definition and Causes of Happiness and Well-Being

The hedonic view, expressed in the model and measures of SWB, defines happiness as an individual's global assessment of positive/negative emotion and satisfaction with life. People who experience

an abundance of positive emotions and few negative emotions, and who also feel satisfied with their lives are defined as happy, or high in SWB. Subjective well-being does *not* specify or measure *why* a person is happy or unhappy. Proponents of the hedonic view regard the bases for happiness as an empirical question to be answered by research. That is, they hold that, by comparing the traits and behaviors of people high in SWB to those low in SWB, the psychological meanings and foundations of happiness will emerge through continued investigation. For example, if we find that happy people are optimistic, have good relationships, and are engaged in meaningful work, this will tell us some of the reasons why people are happy. Subjective well-being investigators have adopted a “research-driven” approach to happiness and well-being. Get the research facts first; then theory can be created later. Diener and his colleagues (Diener, Sapyta, & Suh, 1998) argue that this approach has the advantage of not imposing on people a definition of well-being developed by psychologists. Subjective well-being allows people to judge for themselves whether they are happy and satisfied, on the basis of their *own* criteria. The nature of these criteria is the focus of many SWB studies and will hopefully lead to a theory that explains the psychological underpinnings of happiness and well-being.

The eudaimonic view, expressed in models and measures of self-realization and positive mental health, defines well-being as positive or optimal functioning and the fulfillment of basic needs and inner potentials. A happy person is one who has actualized, or is striving to actualize his or her human potential to be a fully functioning, competent, and psychologically healthy person. In contrast to the hedonic conception, eudaimonic models *do* describe the psychological and social traits, behaviors, and needs that are the bases of happiness and psychological health. Proponents of the eudaimonic view believe well-being and happiness involve more than emotional happiness and life satisfaction. Models of well-being and happiness should tell us about psychological *health* and *effective* functioning. Researchers taking the eudaimonic view are particularly interested in developing models of well-being that will describe positive functioning and positive mental health. Achieving this goal requires a delineation of characteristics that define a healthy, happy person—that is, we need a theory of well-being. Therefore, a good deal

of eudaimonic research is “theory-driven.” Models and theories of well-being are developed and then evaluated empirically. The theory comes first and then it is checked to see if it holds up to the tests of research.

Complementarity and Interrelationship

Overall, we would emphasize a complementary rather than a conflicting relationship between the hedonic and eudaimonic views. Both perspectives seem to be reflected in what people regard as essential elements of a good life. King and Napa (1998) asked people to rate the importance of factors that might define the meaning of a good life. They found that factors related to both hedonic happiness and eudaimonic expressiveness were important. Research examining the relationships among various measures of well-being find these measures to be organized around broad aspects of both hedonic and eudaimonic well-being, such as happiness and personal growth (Compton et al., 1996), or happiness and personal expressiveness (Waterman, 1993), or happiness and meaningfulness (McGregor & Little, 1998).

Although conceptually distinct and separable in research, measures of hedonic and eudaimonic well-being show substantial correlations. This would seem to result from the fact that people who are happy and satisfied with their lives in a hedonic sense tend also to see their lives as meaningful in the eudaimonic sense of expressing their talents, strengths, deeply held values, and inner potentials. So, whether researchers assess hedonic happiness or eudaimonic happiness, both forms of happiness are reflected in the results. Taken together, the two perspectives provide a more complete picture of well-being and happiness than either one provides alone. For the future, we can anticipate an eventual rapprochement between the research-driven approach of those working from a hedonic view; and the theory-driven approach of those working from a eudaimonic orientation, such that the two will combine into a comprehensive picture of human happiness. Hedonic and eudaimonic views of well-being express two broad themes within positive psychology—one focused on personal happiness and life satisfaction and the other focused on personal meaning, growth, and positive functioning. These same two perspectives will emerge again in subsequent chapters of this text.

Chapter Summary Questions

- From the perspective of positive psychology, what are the two major limitations in national statistics that answer the question, "How are we doing?"
- Compare and contrast the hedonic and eudaimonic conceptions of happiness and describe an activity from your own experience that leads to hedonic happiness, and an activity that leads to eudaimonic happiness.
 - Describe the major measures, findings, and conclusions of the study by Laura King and her colleagues concerning the relationship between positive affect and meaning.
- What three components define SWB?
- Harker and Keltner studied whether specific types of smiles shown in college yearbook photos were predictive of later life outcomes. What outcomes did they find were associated with the "Duchenne smile," and what might explain these results?
- How does the time period studied help resolve the issue of the independence of positive and negative affect?
- What pattern of intensity and frequency of positive and negative emotions describes a happy person?
- How may memory and temporary mood distort or bias responses to self-report SWB measures?
- Define and give an example of the peak-end rule.
- What is the experience sampling method (ESM) and how does it reduce the distortions of memory and mood that may affect global SWB measures?
- Briefly describe the day reconstruction method and three findings from the study conducted by Kahneman and his colleagues.
- What are the relationships between global and ESM measures, and between trait and state influences on SWB?
- What is missing from the three-component hedonic model of SWB, according to Carol Ryff?
- Briefly describe the three major components of the eudaimonic model of well-being.
- What three needs are essential for well-being according to self-determination theory? Describe each and give an example of an activity or an experience that would relate to fulfillment of each need.
- What makes for a "good day" among college students, according to the study by Reis, Gable, and their colleagues?
- How can the three needs described by self-determination theory be thought of as both traits and as states?
- How do the hedonic and eudaimonic views of happiness differ as to their definitions and causes of happiness?
- How are the hedonic and eudaimonic conceptions complementary and interrelated?

Key Terms

misery index 15

hedonic happiness 17

eudaimonic happiness 18

subjective well-being 18

global measures 29

experience sampling

method 26

peak-end rule 26

day reconstruction method 27

psychological well-being 30

self-determination theory 31

Web Resources

Authentic Happiness

www.authentichappiness.sas.upenn.edu This is Martin Seligman's site at the University of Pennsylvania. This site offers the most complete set of positive psychology measures available online. You must log in, create a password, and provide

demographic information to take the tests and have them scored for you. A profile of scores on all tests is computed and can be accessed at anytime. Measures include several positive-negative emotional inventories, life satisfaction and happiness questionnaires, and personality tests.

Diener, Subjective Well-being, and Happiness

www.psych.uiuc.edu/~ediener Web page for the happiness researcher Ed Diener, with links to articles and descriptions of subjective well-being studies.

Psychological Well-being

www.psychologymatters.org/wellbeing.html
American Psychological Association site for information about psychological well-being.

Self-Determination Theory

psych.rochester.edu/SDT/publications/pub_well.html Web page covering research of Deci and Ryan at the University of Rochester focused on self-determination theory. This site highlights a prominent eudaimonic view of well-being.

Suggested Readings

- Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.
- Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science*, *306*, 1776–1780.
- Keyes, C. L. M. (2007). Promoting and protecting mental health and flourishing: A complementary strategy for improving national mental health. *American Psychologist*, *62*, 95–108.
- Lopez, S. J., & Snyder, C. R. (Eds.). (2003). *Positive psychological assessment: A handbook of models and measures*. Washington, DC: American Psychological Association.
- Myers, D. G. (1992). *The pursuit of happiness*. New York: Avon Books.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68–78.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*, 141–166.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–1081.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *57*, 1069–1081.
- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, *9*, 1–28.

3

Positive Emotions and Well-Being

CHAPTER OUTLINE

What are Positive Emotions?

- Focus on Theory: The Broaden-and-Build Theory of Positive Emotions

 - Positive Emotions Broaden Our Thought-Action Repertoires

 - Positive Emotions Undo Negative Emotions

 - Positive Emotions Enhance Resilience

 - Positive Emotions Build Enduring Resources and Improve Well-Being

Positive Emotions and Health Resources

- Physical Resources

- Psychological Resources

 - Positive Emotions and Coping with Stress

- Focus on Application: Finding the Positive in the Negative

 - Positive Reappraisal

 - Problem-Focused Coping

 - Infusing Ordinary Activities with Positive Meaning

 - Positive Traits and Health

- Social Resources

- The Limits of Positive Emotions

Positive Emotions and Well-Being

- Happiness and Positive Behaviors

- Positive Emotions and Success

- Positive Emotions and Flourishing

 - A General Theory of Positivity?

Cultivating Positive Emotions

- Flow Experiences

- Savoring

Consistent with the idea that “the bad is stronger than the good” people pay more attention to negative emotional states such as anxiety, stress, and boredom than they do to positive states such as joy and contentment (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). The differential attention given to bad feelings is reinforced by our awareness of conventional medical wisdom that informs us of the damaging effects of prolonged stress. The chronic experience of stress is not good for the mind or the body. Most hospitals have stress-reduction programs and most people have developed ways of reducing stress and other negative emotions. We exercise, read, spend time with friends, take in a movie, go shopping, pursue an enjoyable hobby, or take a vacation. Certainly we may do these things simply for

their intrinsic enjoyment, but we are likely to consider their value primarily in terms of offsetting negative emotions—that is, as a kind of self-directed therapy. After a stressful week at work, it is easy to think of an enjoyable evening with friends over a few drinks as a stress-reliever that clears out the accumulated tension of the week. But if we had a great week at work, would we consider the same kind of evening as beneficial to our well-being or just enjoyable and fun?

Considerable research suggests that positive emotions are good for us all the time, and not just when we are distressed (Salovey, Rothman, Detweiler, & Steward, 2000). This is not meant to change the meaning of enjoyable activities by reducing them to their instrumental health value. It simply reflects what appears to be true. Positive emotions have physical and mental health-promoting effects beyond their ability to offset the potentially toxic effects of negative emotions. Many researchers studying the effects of social support on health have reached a similar conclusion. Most of us know that support from others is extremely helpful in times of crisis and tragedy, such as the death of a loved one. But it also seems true that quality relationships with friends and family enhance our overall well-being on an ongoing basis, and again, not just when we are distressed.

In this chapter, we will explore the many connections between positive emotions and well-being. As we saw in Chapter 2, positive emotions are a cornerstone of the hedonic, or subjective well-being (SWB) conception of happiness. Positive emotions also contribute to physical health, successful performance, and the psychological well-being described by the eudaimonic perspective. We end the chapter by considering several ways in which positive emotions may be actively cultivated.

WHAT ARE POSITIVE EMOTIONS?

Our evolutionary heritage and life learning have given us the capacity to experience a rich array of emotions. We can feel sad, happy, anxious, surprised, bored, exhilarated, scared, disgusted, disappointed, frustrated, and feel the bittersweet combination of both sadness and joy, when we move on to new ventures, but have to leave old friends behind. As we saw in Chapter 2, positive psychologists typically measure people's emotional experience in terms of both the positive and the negative affective dimensions. This two-dimensional summary and assessment follows from research suggesting that despite

their diversity, if we evaluate emotions by their psychological and physiological effects, then emotions come in two basic forms, namely positive and negative affect. **Positive affect** refers to emotions such as cheerfulness, joy, contentment, and happiness. **Negative affect** refers to emotions such as anger, fear, sadness, guilt, contempt, and disgust. Evidence for this conclusion comes from two primary sources.

First, analyses of people's self-reported emotional experiences show that positive and negative affect form a basic, underlying structure for people's emotional lives (e.g., Watson, 2002; Watson & Tellegen, 1985; Watson, Wiese, Vaidya, & Tellegen, 1999). Studies also show that differences in people's characteristic levels of positive and negative affective experiences are significantly related to measures of personality and well-being (details reviewed in Chapter 9). Secondly, physiological studies have found a discernable pattern of nervous system arousal, brain activity, hormonal, and neurotransmitter output that distinguishes positive from negative emotions, but no clear distinction between discrete positive or negative emotions (Barrett, 2006; Cacioppo, Berntson, Larsen, Poehlmann, & Ito, 2000; Larsen, Hemenover, Norris, & Cacioppo, 2003). That is, our bodies seem to be doing something different when we are in a positive emotional state versus when we are in a negative state; but physiologically speaking, it is hard to tell whether we are angry, scared, or anxious, or to tell whether someone is happy, joyful, or contented. For our purposes, the major benefit of these studies is their potential to identify the physiological mechanisms and the psychological functions of positive emotions. We begin our discussion of the potential value of positive emotions with Barbara Fredrickson's (2001) broaden-and-build-theory of positive emotions.

Focus on Theory: The Broaden-and-Build Theory of Positive Emotions

Barbara Fredrickson's (2001) broaden-and-build theory of positive emotions provides an overview of how positive emotions help build physical, psychological, and social resources. Her theory has received considerable attention from positive psychologists. This is because Fredrickson has provided one of the first theories describing the potential value of positive emotions. An understanding of negative emotions (such as fear and anger) has been worked out in relation to evolution and survival. The purpose and influence of

negative emotions seems reasonably clear. However, up until Fredrickson's theory, positive emotions not only received little attention, but were not regarded as having much importance, aside from making us feel good. The **broaden-and-build theory** describes how positive emotions open up our thinking and actions to new possibilities, and how this expansion can help build physical, psychological, and social resources that promote well-being.

Two distinctions are important to the focus of Fredrickson's theory. The first is between mood and emotion. According to Fredrickson, mood is a more general concept than emotion because it refers to our overall feelings, usually over a long period of time (perhaps a week or month). When we say, "I've been in a bad mood all week," we are making a statement about our general emotional state. Emotions, in contrast, are more temporary states that are tied to personally meaningful events. Feeling proud because you got an "A" on your term paper would express a particular emotion. Unlike mood, which we experience as either a pleasant or unpleasant feeling (e.g., a good mood or a bad mood), emotions often fall into discrete, highly specific categories like anger, fear, joy, disgust, or surprise. Fredrickson's theory is focused on discrete positive emotions like joy, love, interest, pride, and contentment. Her theory describes the effects of positive emotions as essentially opposite to the effects of negative emotions.

Secondly, Fredrickson (2002) believes that positive emotions should not be confused with simple sensory pleasures such as sexual gratification or eating when you are hungry. These experiences are certainly associated with positive feelings, but she considers sensory pleasures as relatively automatic responses to physiological needs. In contrast, positive emotions are more psychological in nature and depend on the appraisal and meaning of events in people's lives rather than just physical stimulation of the body. In other words, Fredrickson's theory is not about the hedonic pleasures of the body, even though these may have their benefits.

Her description of the value of positive emotions begins with a contrast to negative emotions. The purpose of negative emotions, like anger and fear, is often described in terms of specific action tendencies. This means that a particular negative emotion (such as fear) is associated with a tendency to engage in specific kinds of actions. Fear is associated with a desire to escape, while anger is

associated with a desire to attack or fight. The concept of specific action tendencies does not mean that people always act in a specific way as a result of a particular negative emotion. The effect of negative emotions is to narrow the focus of our thoughts and possible actions. Think of the last time you were very angry with someone because he or she hurt your feelings. Probably most of your thoughts were focused on the person and your anger. Why did she say that? How could she say that? You probably also thought about actions you might take. How can I get even? How shall I go about letting her know how I feel or explaining why her actions were unfair and hurtful? Whether or not you actually carried out these actions is not the point of the specific action-tendency concept. The point is that negative emotions tend to narrow our thinking and our range of possible actions. From a biological and evolutionary perspective, this narrowing of thoughts and actions contributes to our survival. To focus our thoughts on how to deal with threatening events that produce emotions like fear and anger, increases the immediacy and potential effectiveness of our actions. In life-threatening situations, quick action focused on dealing with a significant threat may increase our chances for survival.

Positive emotions, however, do not fit very well with the notion of specific action tendencies. Research reviewed by Fredrickson shows that emotions like joy are related to more diffuse, rather than specific behaviors and thoughts. Her broaden-and-build theory of positive emotions states that ". . . positive emotions—including joy, interest, contentment, pride and love—although phenomenologically distinct, all share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (Fredrickson, 2001, p. 219). The benefits of positive emotions are more general and long-term than the more specific, short-term effects of negative emotions. Joy, for example, creates a desire to play, to explore new possibilities, and to express our creative talents. Play is an important activity in the development of children. Physical play helps build strength and stamina. Play involving fun and laughter helps build positive relationships and attachments to others. Play involving puzzle-solving, artistic expression (in the form of drawing or make-believe play) contributes to the development of intellectual and creative talents.

Each of these possible effects of play can be seen as building physical resources, psychological resources for solving problems and coping with life challenges and social resources in the form of help and support from others.

Fredrickson describes four ways that positive emotions can broaden our thought-action repertoires and build our personal resources to increase well-being (see Figure 3.1). Because increased well-being may produce increases in the experience of positive emotions, an upward spiral of health and happiness may be possible.

POSITIVE EMOTIONS BROADEN OUR THOUGHT-ACTION REPERTOIRES Negative emotions tend to narrow our thoughts to a limited set of possible actions that might be taken in response to an emotion-evoking situation. When we are angry or fearful, we become self-focused and absorbed in the emotion. This may result in a kind of tunnel vision and an unduly limited consideration of all the possible options. It is harder to think in a free and creative way when we are angry or fearful. In contrast, positive emotions seem to open up people's thinking to a wider array of possible actions. Perhaps because we are not so self-focused, more options and ways of thinking about a situation come to mind when we are content or happy than when we are upset. In one demonstration of this "opening up"

of possibilities as a result of positive emotions, Fredrickson and her colleagues asked research participants to watch emotionally charged film clips (see Fredrickson, 2001). The clips were selected for the purpose of inducing one of four emotions: joy, contentment, anger, or fear. A neutral, non-emotional clip served as a control condition. After watching the film clip, participants were asked to think of a situation that created feelings similar to those aroused by the film clip. Given the feelings created by the imagined situation, they were asked to list all the things they would like to do right then. That is, they were asked what came to mind as actions they would like to take. The results of this study supported the broaden-and-build theory. People in the joy and contentment conditions described more things they would like to do right then, than people in the anger or fear conditions. Further, people experiencing anger or fear identified fewer desirable actions than people in the neutral, non-emotional control condition. The broadening of thought-action possibilities, resulting from positive emotions, helps build intellectual resources for solving important life problems, because the more options we consider, the more likely we are to find an effective solution.

POSITIVE EMOTIONS UNDO NEGATIVE EMOTIONS Positive emotions and negative emotions seem to produce opposite effects. Our thinking and possible actions are narrowed by negative emotions and broadened by positive emotions. Positive emotions and negative emotions also seem incompatible with each other, in the sense that it is hard to imagine experiencing both at the same time. Have you ever been very happy and very angry at the same time? Joyfully sad? Fearfully relaxed? Combinations of emotional feelings are certainly possible, but the simultaneous experience of both intense positive and intense negative emotions seems unlikely.

Given this incompatibility, is it possible that positive emotions might undo the effects of negative emotions? To answer this question, Fredrickson and her colleagues examined the cardiovascular consequences of negative and positive emotions (see Fredrickson, 2001). Specifically, they designed a study to determine whether positive emotions would speed up recovery from the increased cardiovascular activity engendered by negative emotions. Negative emotions, like fear, increase cardiovascular

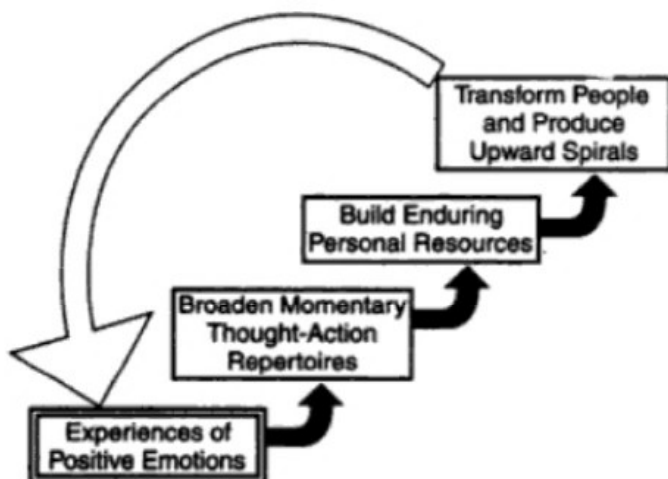


FIGURE 3.1 The Broaden-and-Build Theory of Positive Emotion

Source: Fredrickson, B.L. (2002). Positive emotions. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 120–134). New York: Oxford University Press. Copyright Oxford University Press. Reprinted with permission.

activity such that more blood flows to the appropriate skeletal muscles necessary for a possible “fight-or-flight” response.

Imagine yourself in one of Fredrickson’s studies. You show up to participate in a study and are told that you have one minute to prepare a speech that describes why you are a good friend. Your speech will be given in front of a live audience of other students and your talk will also be videotaped. As you would expect, giving a speech with little time to prepare made students very anxious and nervous. This was verified using measures of heart rate and blood pressure. After preparing for their speech, students were then assigned to one of four film conditions. One group of students watched a short film that was emotionally neutral; a second group saw a film selected to induce mild joy; a third group watched a film selected to produce mild contentment; and a fourth group saw a film selected to evoke sadness. The researchers measured how much time it took students to return to baseline levels of cardiovascular activity. As predicted, students in the joy and contentment film conditions returned to baseline significantly faster than those in the neutral or sad conditions. The sad film was associated with the longest recovery time. The experience of joy and contentment apparently helped undo the cardiovascular effects of the anxiety caused by the speech-preparation task.

POSITIVE EMOTIONS ENHANCE RESILIENCE Resilience is the ability to bounce back from stressful events and regain composure and a sense of well-being. Positive emotions may increase our resilience and ability to cope by offsetting the effects of negative emotions caused by stressful experiences. To examine the relationship between resilience and positive emotions, Fredrickson and her colleagues (Fredrickson, 2001) measured students’ self-reported resilience using a scale that assesses how strong and confident people feel when facing challenge and stress. Fredrickson’s research team used the same time-pressured speech preparation task to create anxiety and stress in participants. Students showing high levels of resilience on the self-report resilience measure tended to report more positive emotions during the preparation of their speeches and they showed faster return to baseline cardiovascular functioning after the speech task was completed. Resilient individuals seem (knowingly or unknowingly) to use positive emotions to offset negative emotions. Their tendency to cultivate positive

emotions in times of stress may be one source of their resilience and effective coping.

POSITIVE EMOTIONS BUILD ENDURING RESOURCES AND IMPROVE WELL-BEING Depression can produce a downward spiral of increasing negative mood and pessimistic thinking. Negative mood causes more pessimism, and more pessimism causes intensified negative mood. Conversely, Fredrickson proposes that positive emotions may create a comparable upward spiral of well-being. As summarized above, research has shown that positive emotions broaden our outlook, offset negative emotions, enhance our resilience, and improve our emotional well-being. A broadened outlook and increased resilience may, in turn, increase the experience of positive emotions, and so on. In short, positive emotions may help build our physical resources for fighting disease, our individual psychological resources for coping with stress, and our social resources (in the form of support from others) that are important in dealing with nearly all life challenges. We now turn to some of the specific research that has examined the importance of these three resources in physical health and how positive emotions may contribute to them.

POSITIVE EMOTIONS AND HEALTH RESOURCES

Most of us have seen first hand or have heard of the importance of a positive outlook in the face of serious illness and the idea that losing hope may foretell losing a battle against disease. As a poignant example of hope found and lost, consider the following story. A young boy named Jim suffered a form of abdominal cancer called Burkitt’s lymphoma. By age 10, Jim had endured a painful year of chemotherapy and radiation, but the cancer was still progressing. Despite the failing hope of his doctors, Jim was upbeat and optimistic about the future. He said he intended to grow up, become a doctor, and find a cure for the disease that threatened his life and the lives of other children. Jim pinned his immediate hopes on the upcoming visit of a well-known specialist, who had taken an interest in his case and had promised to stop in Salt Lake City to visit Jim on his way to a professional conference. Jim had kept a diary of his symptoms and hoped it would give the specialist

ideas about how to cure his disease. On the day the specialist was scheduled to visit Jim, the Salt Lake City airport was fogged in, so the specialist had to continue directly to his conference destination without stopping. Jim cried quietly when he heard the news. Listlessness replaced his earlier excitement and optimism. The next morning he developed a high fever and pneumonia. He was in a coma by evening and died the following afternoon (Visintainer & Seligman, 1983). It is hard not to see Jim's initial resilience in the face of his disease as resulting from his optimism and hope for the future. And it is equally hard not to believe that his rapid decline and death may have been due, at least in part, to his loss of hope.

In his widely read *Anatomy of an Illness* (1979), Norman Cousins describes how he used laughter to deal with the pain of ankylosing spondylitis—a disease that causes inflammation of connective tissue in joints and vertebrae. It is excruciatingly painful and potentially life threatening. Fed up with lying in a hospital bed, Cousins checked himself out of the hospital and into a motel where he watched his favorite Marx Brothers movies. He attributes his rather amazing recovery to the healing power of laughter. By his account, 10 minutes of laughter allowed him 2 hours of pain-free sleep and also reduced inflammation in areas of his body affected by the disease.

For many years, stories like these were just stories—anecdotal accounts that were intriguing, but not supported or understood scientifically. Today, compelling evidence shows that our emotions do affect our health. Research is beginning to clarify the multiple pathways and mechanisms that link emotions to well-being. Salovey and colleagues (2000) provide what may be regarded as a working hypothesis for the burgeoning research on health and emotions: "In general, negative emotional states are thought to be associated with unhealthy patterns of physiological functioning, whereas positive emotional states are thought to be associated with healthier patterns of responding in both cardiovascular activity and the immune system, although the data regarding negative states is more plentiful" (Salovey et al., 2000, p. 111). These authors also note that the mechanisms responsible for the associations between emotional states and health are complex and are only beginning to be understood. They involve multiple interacting systems and variables that make specifying cause-effect relationships difficult. However, evidence from many studies (e.g., Koenig & Cohen, 2002), new theories

concerning the different effects of negative and positive emotions (e.g., Fredrickson, 2001), and the opinions of numerous researchers (e.g., Folkman & Tedlie Moskowitz, 2000; Isen, 2002; Ray, 2004; Ryff & Singer, 2002; Taylor, Dickerson, & Cousino Klein, 2002) converge in support of Salovey and colleagues' general statement. Negative and positive emotions have the potential to set in motion a variety of physical, psychological, and social changes that can either compromise or enhance our health.

Research has described a number of pathways whereby emotions may affect health. Following Fredrickson's theory, we may classify these pathways as involving physical resources, psychological resources, and social resources. Physical resources involve the health and integrity of the body and the strength of the body's defenses against disease. Psychological resources refer to the effectiveness of people's responses in dealing with stressful experiences and the personal qualities they possess that provide strength and resilience in facing life's challenges. Social resources refer to the number and quality of relationships with others that provide support in times of need. The strength of each of these resources has been shown to influence our health. The basic premise underlying our discussion is that positive emotions contribute to the enhancement of our health resources and negative emotions contribute to their depletion. There is an extensive literature in the field of health psychology that focuses on the adverse influences of negative emotions on health (Taylor & Sherman, 2004). In contrast, research in positive psychology is just beginning to support the value of positive emotions in building health-promoting resources and in explaining why certain resources are more effective than others. Positive emotions may contribute to our physical resources by enhancing immune-system functioning. They may contribute to psychological resources by buffering or offsetting the detrimental effects of stress. Positive emotions may also help explain why certain personal traits and beliefs that appear to promote positive emotions (like optimism and self-esteem) are associated with better health. Finally, positive emotions may enhance people's social resources by facilitating the development and maintenance of supportive social relationships.

Physical Resources

Physical or biological resources important to our health involve four interacting systems studied

within the field of psychoneuroimmunology. These systems involve the brain, the nervous system as a whole, the endocrine system, and the immune system (Maier, Watkins, & Fleshner, 1994). Because these systems are interconnected, mind and body are in a mutually influential relationship. The physical experience of sweaty palms and dry mouth caused by your psychological state of anxiety while giving a speech in front of an audience provides an everyday example of mind influencing body. And if you remember how you felt emotionally the last time you had the flu, you know how the body can influence the mind. In a recent article titled, "How the mind hurts and heals the body," Ray (2004) argues that research investigating the physiological and biochemical processes within these four systems allows us to conclude that "it is literally true that as experience changes our brains and thoughts, that is, changes our minds, we are changing our biology" (p. 32).

Many researchers have targeted the immune system as a major pathway for the effects of emotions on health. The primary purpose of the immune system is to destroy or neutralize pathogens that might make us sick. A number of specialized biochemical, hormonal and cellular processes are involved. For example, T-cells recognize pathogens, and respond by multiplying rapidly and killing the invaders. Natural killer cells (NK cells) attack anything foreign within the body. Researchers can evaluate the relative state of the immune system by measuring levels of T cells, NK cells, stress hormones, production of antibodies to different viruses, and a variety of other aspects of immune-system functioning (see Koenig & Cohen, 2002, for a review). Negative emotions *suppress* these measurable outputs of the immune system, and positive emotions appear to *enhance* their output, providing evidence of one pathway by which emotions influence our health.

A significant body of research has shown how stress can suppress immune-system functioning (e.g., Cohen, 2002; Friedman & Booth-Kewley, 1987; Rabin, 2002). Some of the clearest evidence comes from studies that measure an individual's level of stress, monitor immune-system functioning, and track health outcomes over time. One exemplary study investigated the immune-system consequences of medical school exams among first-year medical students (Kiecolt-Glaser & Glaser, 1987). Students' baseline levels of stress and immune-system functioning

were assessed immediately after a vacation, before any exams occurred. These same measures were taken again later, during important exam periods. The researchers found that as students' stress levels increased during exam periods, the effectiveness of their immune-system functioning decreased (as evidenced by a decrease in the number of NK cells). Students also reported more illnesses, such as upper respiratory infections, during this same exam period.

In addition to the numerous studies on stress, research has also found that negative moods can decrease immune-system activity. There are strong associations among clinical depression, depressed mood and reduced immune-system responses (e.g., Cohen & Rodriguez, 1995; Herbert & Cohen, 1993). Depressed people may be more vulnerable to illnesses because of reduced body defenses caused by their chronic depressed mood. Controlled laboratory studies also provide evidence of the harmful impact of negative emotional states. For example, people exposed to a respiratory virus while they were in a negative mood developed more severe respiratory symptoms than those who were in a more positive mood at the time of exposure (Cohen et al., 1995).

There are far fewer studies of how positive emotions may influence the immune system, and the results are not entirely consistent. However, results to date strongly suggest that the effects of positive emotion are more or less opposite the effects of stress and negative moods. For example, Stone and his colleagues examined the relationship between antibody production and daily mood (Stone et al., 1994). Forty-eight adult men maintained daily diaries for 12 weeks. The men recorded their moods and experiences at work, at home, and in leisure activities, and in their relationships with spouses, friends, and children. Each man also took a harmless protein antigen pill every day during the 12-week period. (An antigen is a substance capable of generating an immune response. Specifically, the body responds to an antigen by producing antibodies that help defend against invading pathogens.) Participants gave daily saliva samples that were used to measure the levels of antibody produced. A clear association was found between the participants' moods and their responses to the antigen (as measured by their production of antibodies). The more positive events the men experienced during a given day, the more antibodies they produced. The more negative events they experienced, the less antibodies they produced. Although this study assessed

only one aspect of immune-system functioning and used a non-disease-causing antigen, the results suggest the potential for positive and negative emotions to have opposing influences on the immune system.

Laughter, one of the more expressive positive emotions, is also associated with positive changes in the immune system, and with better recovery from illness. Studies reviewed by Lefcourt (2002) show that humor and laughter increase the body's production of antibodies and NK cells, and that humor helps people cope with serious illness such as cancer. Laughter induced by a humorous videotape was found to produce significant increases in salivary immunoglobulin A (S-IgA) (Dillon, Minchoff, & Baker, 1985). S-IgA is an antibody that is widely regarded as the body's first line of defense against the common cold. In another study, people who watched a Bill Cosby comedy routine exhibited similar positive immune-system effects (Lefcourt, Davidson, & Kueneman, 1990).

Much more research is needed to confirm and clarify the beneficial effects of positive emotions. The issues here, both psychological and physiological, are very complex. A recent review concluded that evidence for the general value of positive affect is "provocative but not definitive" (Pressman & Cohen, 2005, p. 963). These reviewers note that there is considerable evidence connecting positive emotions to self-reported reductions in illness symptoms, decreased levels of pain, and better health. There is also suggestive evidence linking positive affect to enhanced immune-system functioning and longevity. However, there are also studies suggesting that for diseases with high and rapid mortality rates (e.g. certain forms of cancer), positive emotions may actually be harmful. An optimistic outlook may cause people to ignore symptoms or have unrealistic expectations, causing them to avoid getting the medical attention they need (Salovey et al., 2000).

Positive emotions are obviously not a magic bullet cure-all. The final word on positive emotions awaits future and well-controlled research. So, we must conclude with a bit of caution. The evidence, at the very least, seems to be strongly suggestive that people who are generally happy and cheerful (whether it's a result of enjoyable experiences, their sense of humor, their temperament, or their active cultivation of a positive attitude) are likely to reap health benefits compared to those who are generally sad, unhappy, pessimistic, and humorless (Lyubomirsky, King, & Diener, 2005). The increased longevity of the

more cheerful sisters in the "Nun Study" (Danner, Snowdon, & Friesen, 2001, reviewed in Chapter 2) is undoubtedly the result of a complex interaction of multiple factors. Yet many of these factors are probably related to the nuns' cheerful, positive dispositions. In addition to its potential effects on the immune system, a cheerful attitude may have helped the nuns cope with stressful experiences, led them to take better care of their health, and/or enabled them to establish more supportive relationships with others. The next section considers positive emotion as a psychological resource for coping with stress, and describes how positive emotions may help explain the importance of individual traits associated with beneficial health outcomes.

Psychological Resources

POSITIVE EMOTIONS AND COPING WITH STRESS

Knowledge of the health-threatening effects of stress has inspired extensive research regarding coping behaviors that might help people reduce stress and thereby improve their health (Somerfield & McCrae, 2000). Psychological resources for managing stress involve the strength and effectiveness of our intellectual, behavioral, and emotional efforts to reduce and offset stressful experiences. Many factors affect how people cope with stress. Coping behaviors are often grouped into two general categories: **problem-focused coping** and **emotion-focused coping** (Lazarus & Folkman, 1984). **Problem-focused coping** involves behaviors directed at altering, reducing, or eliminating the source of stress, such as seeking concrete help from others, taking action to change a stressful life situation, or gathering and evaluating information to assess one's alternatives. **Emotion-focused coping** involves an attempt to change or reduce one's own response to a stressful experience. Examples of emotion-focused coping would include avoiding the problem, denying the problem exists, seeking emotional support from others, venting one's emotions to relieve stress, and positive self-talk (e.g., "counting your blessings") (see Tamres, Janicki, & Helgeson, 2002, for a recent meta-analytic review of coping behaviors).

Aspinwall and Taylor (1997) have suggested a third category of coping called **proactive coping**, which involves efforts to prevent stress from happening in the first place. An example of a proactive approach would be going to the doctor when you first notice symptoms that might indicate a serious

illness, rather than worrying about your symptoms, hoping they will go away, or waiting until you *do* have a serious illness. Another example would be finishing your term paper ahead of the deadline to avoid the stressful feeling that, "it's due tomorrow!"

Positive emotion has only recently received systematic attention as a coping resource. Research on coping has focused primarily on ways to reduce or eliminate emotional distress caused by stressful experiences. Much less attention has been given to the possible role of positive emotions in coping with stress and in strengthening psychological resources. This situation has begun to change as several prominent coping researchers have considered the value of positive emotions in coping (e.g., Aspinwall, 1998; Hobfoll, 1989; Lazarus, 2000; Somerfield & McCrae, 2000; Vaillant, 2000). Folkman and Tedlie Moskowitz (2000) argue that positive emotions play an important role in coping with stress and life traumas. They review research showing that positive emotions can co-occur with distress, even in highly stressful life situations such as a loved one being diagnosed with cancer. Despite adverse circumstances, people find ways to laugh together, enjoy shared memories, and learn positive life lessons. Positive emotional experiences in the midst of distress may benefit people by buffering or helping to offset the negative effects of stress. Positive emotions may bolster depleted psychological resources by promoting optimism, hope, and confidence, and may contribute to physical resources that enhance immune-system functioning. Research investigating the role of positive affect (i.e., positive emotion) as a coping resource supports many of these possibilities.

Research has identified several ways that positive affect may help people cope with stressful, threatening, or problematic situations (see Aspinwall, 1998; Hobfoll, 1989; Isen, 2002, 2003, for reviews). In general, people experiencing positive affect tend to show more proactive coping styles and skills (Aspinwall & Taylor, 1997). Positive affect leads people to think about how to prevent stressful situations rather than just how to cope with them after the fact. Individuals experiencing positive affect also show more flexibility and creativity in solving problems. For example, positive affect in medical students was associated with improved ability to make medical diagnoses, and with more accepting and flexible consideration of alternatives (Estrada, Isen, & Young, 1997). Positive affective states may make people less defensive in response to criticism or information that

threatens their self-image (Trope & Pomerantz, 1998). Further, individuals experiencing positive affect may be less likely to deny or distort information that does not agree with their beliefs and preconceptions (Estrada et al., 1997). These findings affirm the contribution of positive emotions to our psychological resources for coping with life's challenges.

Focus on Application: Finding the Positive in the Negative

As we noted, people facing serious illness report surprisingly frequent experiences of positive emotions. How do people find the positive in the negative? Can we actively cultivate positive emotions to improve our well-being and ability to deal with challenging life events? Based on a longitudinal study of AIDS caregivers, Folkman and Tedlie Moskowitz (2000) describe three kinds of coping that generate positive affect: positive reappraisal, goal-directed problem-focused coping, and infusing ordinary events with positive meaning. Each of these three coping styles will be explored below.

POSITIVE REAPPRAISAL Positive reappraisal refers to a cognitive strategy that reframes the problem in a more positive light. Whatever situation you are in, it could be worse. Even when confronting the death of a loved one from AIDS there are things to appreciate and value. Despite the emotional pain and stress of caring for someone dying of AIDS, many caregivers in Folkman and Tedlie Moskowitz's (2000) study reported positive feelings associated with their efforts. They saw their devotion to caregiving as an expression of the depth of their love for their partners and believed their efforts had preserved their partners' dignity. They believed their efforts were both valued and worthwhile. These positive reappraisals were associated with increases in positive mood for the caregivers in the study. In the next chapter on resilience, we will review additional studies showing how people facing traumatic and painful situations are able to cultivate positive experiences, find personal meaning, and discover benefits.

PROBLEM-FOCUSED COPING Problem-focused coping refers to actions taken to reduce the distress of a painful situation. In the case of terminal illness, it may seem that the situation is uncontrollable and therefore no action can be taken. This is why terminal illness is so distressing. However, in their study

of AIDS caregivers, Folkman and Tedlie Moskowitz (2000) found that, even though people could not control the final outcome, they did not adopt a helpless or passive stance. Instead, caregivers focused on smaller problems that they *could* solve, such as changing aspects of living arrangements to make their partner more comfortable; arranging planned outings; managing medications; preparing food; or planning entertainment activities. These activities, like positive reappraisal, were related to higher levels of positive affect. Further, solving problems encountered in the daily activities of caregiving contributed to a sense of personal effectiveness, mastery and control.

INFUSING ORDINARY ACTIVITIES WITH POSITIVE MEANING Folkman and Tedlie Moskowitz (2000) asked AIDS caregivers in their study about things they had done that made them feel good, were personally meaningful, and helped them get through the day. Somewhat amazingly, in over 1,700 interviews in which this question was asked, 99.5% of the participants recalled and reported positive events. Many of these events appear quite ordinary, such as planning a special meal for their partner or a getting together with friends. However, the active planning that went into these events and the comfort they were able to provide for their partners led to both positive feelings and a sense of purpose and personal meaning. Caregivers also reported unplanned events and experiences, such as receiving a compliment for a small task or encountering something like a beautiful flower. These events added a bit of cheer and good feeling to the daily routine of caregiving. Each of these ordinary activities, infused with positive meaning, produced positive feelings and helped caregivers make it through the day.

POSITIVE TRAITS AND HEALTH The contribution of positive emotions to our psychological resources suggests that any personal quality, experience, or activity that generates positive emotion, particularly when we are faced with a stressful experience, may have health benefits. Positive emotions, whether they arise from an enduring personal quality (a trait) like a cheerful temperament, a routinely practiced activity (a state) like an enjoyable hobby, or a coping strategy such as looking for the bright side of a bad situation, all share the potential to improve our health. Research has identified a number of traits that are associated with improved health. For

example, optimism, self-esteem, resilience, and emotional expression have all been linked to positive health outcomes (Chapter 9 gives a full discussion of positive traits). At this point, psychologists do not have direct evidence linking the positive health benefits of these traits to the role of positive emotions. However, the potential contribution of positive emotion is increasingly recognized (e.g., Aspinwall, 1998; Fredrickson, 2001; Hobfoll, 1989; Salovey et al., 2000).

People with high self-esteem typically feel good about themselves and have a positive sense of self-worth. Myers (1992) argues that self-esteem is one of the best predictors of personal happiness. If you feel good about yourself you are also likely to be reasonably happy with your life. One prominent theory of self-esteem called self-affirmation theory (Steele, 1988) views self-esteem as a psychological resource that people can draw upon in challenging situations. When life deals a blow to our self-image, high self-esteem allows us to bounce back, stay on course, and affirm continuation of a positive self-image. Self-esteem is like "money in the bank." If you have ample savings, a \$500 car repair bill may not cause much upset; but if your bank account is at zero, that same bill will pose a big problem. People with high self-esteem are generally happier, fare better in stressful situations, are less prone to depression, and lead healthier lives overall than people with low self-esteem (e.g., Antonucci & Jackson, 1983; Crocker & Luthanen, 2003; Crocker & Park, 2004; Hobfoll & Lieberman, 1987; Kernis, 2003a, 2003b; Myers, 1992). There are many reasons why self-esteem and positive emotions are valuable psychological resources, such as the strong association between self-esteem and personal happiness, and the beneficial role of positive emotions in coping with stress.

Positive emotions may also play a role in the relationship between optimism and health. Optimism and pessimism are general expectations about the future. Optimists expect that more good things will happen to them than bad, while pessimists expect the opposite (Carver & Scheier, 2002a). A person's answer to the question, "Is the glass half empty or is it half full?" captures one fundamental difference between an optimistic and a pessimistic outlook.

Numerous studies have shown that optimists enjoy generally better health than pessimists (e.g., Affleck, Tennen, & Apter, 2002; Peterson & Bosio, 1991; Scheier & Carver, 1992; Scheier, Carver, & Bridges, 2001; Seligman, 1990). For example, compared to

their more pessimistic classmates, optimistic college students suffered from fewer colds, sore throats, and bouts with the flu over the course of a year. Larger-scale studies over long time periods provide strong support for the influence of optimism and pessimism on health. A 10-year study of 1,300 men living in Boston found optimists to be 50% less likely to suffer from coronary disease than their more pessimistic counterparts (Kubzansky, Sparrow, Volkonas, & Kwachi, 2001). A prospective study by Peterson and his colleagues (Peterson, Seligman, & Vaillant 1988) followed up with a group of men 35 years after they had graduated from Harvard, and found optimists to be significantly healthier than their pessimistic fellow alumni.

What explains these relationships between optimism and better health? Like self-esteem, a variety of factors may be involved. Optimists may be more likely to engage in protective health behaviors such as scheduling regular visits to the doctor, and by gathering and responding to information about their health.

Recent research suggests that optimists may also exhibit stronger positive immune responses when under stress than pessimists (e.g., Segerstrom, Taylor, Kemeny, & Fahey, 1998). The link between optimism and positive emotion is suggested by the fact that an optimist expects good outcomes. This attitude may contribute to a positive state of mind, which may be a useful resource in times of stress or illness. Studies show that optimists cope more effectively with stress than pessimists (Scheier & Carver, 1992); positive emotion may be part of the reason for this finding. Optimism is also strongly correlated with happiness and life satisfaction (Myers, 1992; Scheier & Carver, 1992). Optimistic people tend to be upbeat, happy, and satisfied with their lives. If optimism leads to more frequent experiencing of positive emotional states, this may also help explain the health benefits of an optimistic attitude.

A number of other traits and states have shown similar relationships to health and to positive emotion. For example, all of the following have been found to be positively associated with health and/or happiness: sense of humor, hope, extraversion, belief in personal control over life outcomes, and forgiving others (see Lopez & Snyder, 2003; Myers, 1992; Snyder & Lopez, 2002, for reviews). Even though our understanding is at a beginning stage, it seems reasonable to suggest that positive emotions play a role in these relationships, just as they appear to help explain the benefits of

self-esteem and optimism. Positive emotions are obviously not the whole story, given the complex factors that affect our health. A central aim of positive psychology is to develop a research-based understanding of the role positive emotions *do* play.

Social Resources

Of all the diverse aspects of our lives, if we had to pick one that had the most powerful influence on overall happiness and health, it would have to be our relationships with others. Countless studies find that people involved in a network of close, supportive relationships enjoy better health and more personal happiness than those who lack such a network (Baumeister & Leary, 1995; Ryff & Singer, 2000). Confirming evidence is so overwhelming that Myers (1992) described the connection between relationships and well-being as a "deep truth" (p. 154). The fact that Myers' observation has been repeated by several authors reviewing the relationship literature (e.g., Berscheid & Reis, 1998; Reis & Gable, 2003) is also testimony to the weight of supporting evidence.

The most impressive evidence for the importance of relationships comes from large-scale epidemiological studies involving thousands of people. These studies have found that people involved in a wide variety of social relationships (e.g., with spouses, friends, family members, neighbors, communities, and social or religious groups) get sick less often and live longer than people with few social involvements (see Cohen, Underwood, & Gottlieb, 2000; House Landis, & Umberson, 1988, for reviews). A 9-year follow-up study of mortality rates of 7,000 California residents found that the more social contacts a person had, the longer she or he lived (Berkman & Syme, 1979). This finding was true across the board: for rich and poor, for women and for men, for young and old, and for people of differing ethnic and racial backgrounds. Through interviews with over 2,500 adults during visits to their doctors, House and colleagues (1988) found that the most socially active men were 2 to 3 times more likely to survive over the next decade than their socially isolated counterparts. The same researchers also examined the association between relationship status and a set of widely recognized risk factors. Statistically, the health risks associated with a lack of social ties exceeded the risks of cigarette smoking and obesity (House et al., 1988).

On the negative side, we know that a lack of social ties, involvement in conflictual relationships, or loss of a significant relationship can contribute to loneliness, depression, personal distress, and unhappiness (e.g., Berscheid, 2003; Berscheid & Reis, 1998; Reis & Gable, 2003). For example, death of a spouse can have dramatic effects on both physical and emotional well-being (Stroebe & Stroebe, 1993). Studies show that the mortality risk for surviving partners doubles in the week following the loss of their spouse (Kaprio, Koskenvuo, & Rita, 1987). Psychotherapists report that troubled relationships are one of the most common problems among their patients (Berscheid & Reis, 1998). Interpersonal relationships are a frequent source of stress and upset. When national survey participants were asked to describe "the last bad thing that happened to [them]," they most often mentioned conflict or disruption in their important relationships (e.g., with family members, friends, co-workers, or spouses) (Veroff, Douvan, & Kulka, 1981).

The irony of relationships is that they contribute most to our enduring happiness and joy, but also to our distress and misery. Our relationships have the potential both to enhance and to compromise our health. What explains the role of relationships in health? One long-standing explanation is built on the value of social support as a resource for coping with stress. The **buffering hypothesis** states that social support from others reduces (i.e., buffers) the potential debilitating effects of stress (Berscheid & Reis, 1998). By sharing our burden with others, our own burden becomes lighter, stress levels are reduced, and stress-induced suppression of the immune system may decrease (Cohen, 2002). Support for the buffering hypothesis comes from studies showing the health benefits of disclosing traumatic events to others. For example, Pennebaker and O'Heeron (1984) compared the health outcomes of spouses whose partners had committed suicide or died in automobile accidents. Surviving spouses who had shouldered the burden of their loss alone had more health problems than those who talked openly and shared their feelings with others. Disclosure of emotions about past traumas seems helpful, even if we simply write them down. Pennebaker, Kiecolt-Glaser, and Glaser (1988) asked 50 undergraduates to engage in "disclosure writing" either about personal and traumatic events in their lives or about trivial topics. Students wrote for 20 minutes each day for 4 days. The personal traumas described by students

included divorce of their parents, death of a loved one, sexual and physical abuse, failed relationships, loneliness, and fears about the future. Immune system measures were collected at the beginning of the study, at the end, and at 6-week and 4-month follow-ups. Students who wrote about traumatic events showed healthier immune responses than those who wrote about trivial events.

Other studies confirm the value of emotional disclosure of personally painful events. Cancer patients who discussed their feelings with other patients in a support group setting showed better health outcomes than cancer patients who were not involved in support groups (see Spiegel & Fawzy, 2002, for a review). Recent experimental studies have directly manipulated participants' stress levels and the availability of social support, and then examined the intensity of stress-related physiological responses within the sympathetic and endocrine systems (see Taylor et al., 2002, for a review). In these studies, participants were alone, or with one of their own friends, or with a supportive stranger assigned by the experimenter. Stress response measures were taken during and after participants' performance of a stressful task, such as giving a public speech. Results showed that the presence of a friend or supportive stranger reduced the intensity of stress responses and led to faster recovery of from the physiological effects of acute stress.

The buffering hypothesis suggests that people benefit from social support only in times of stress. However, proponents of the **direct effects hypothesis** argue that social support contributes to an individual's health independent of his or her level of stress (Stroebe & Stroebe, 1996). People involved in close, caring relationships are generally happier and healthier because of their supportive relationships, whether or not they are dealing with stressful life experiences (Berscheid & Reis, 1998). The health benefits of social support may stem from the positive emotions associated with close relationships and the feelings of security that come from the knowledge that people care about you and will be there when you need them (Salovey et al., 2000). These positive feelings may, in turn, enhance immune-system functioning.

The Limits of Positive Emotions

This chapter has reviewed some of the factors that contribute to the physical, psychological, and social

resources that help fight disease and counteract the negative effects of stress. Positive emotions are increasingly recognized as contributing to these resources. To keep the role of positive emotions in proper perspective, a few words of caution are in order. First, as mentioned earlier in this section, we know considerably more about the health-threatening effects of negative emotions and stress than we know about the health-enhancing effects of positive emotions. At present, research findings strongly suggest a link between positive emotions and health. The value of positive emotions is becoming increasingly recognized and researched. Possible explanations have been offered regarding specific mechanisms by which positive emotions may contribute to better health. However, research confirming these explanations is at a preliminary stage. It seems fair to say that positive emotions do make a significant difference in people's health. Understanding the specific pathways that explain *how* they make a difference is one goal of research in positive psychology.

Secondly, there are limits to the power of positive emotions. No serious scientist views positive emotion, an optimistic outlook, or social support as a miracle cure for serious illness, or as providing any guarantee of a long and happy life. Traumatic experiences, like death of a spouse, can overwhelm our coping resources. Prolonged and severe trauma, such as the stress associated with war, is damaging. No amount of good humor, cheerfulness, or optimism in the face of major life challenges ensures a happy or healthy ending. The critical standard for evaluating the effects of positive emotions is a relative one. That is, other things being equal, people who experience and cultivate positive emotions may have an edge in terms of the strength of their physical, psychological, and social resources for coping with illness and stress, compared to people with less frequent positive emotional experiences. The health benefits of positive emotions are relative—not absolute. Positive emotions don't cure in an absolute sense: you were sick and now you are not. Positive emotions help, and we know this because of empirical comparisons with the effects of negative emotions. The bottom line here is this: Research suggests that positive emotions contribute to faring better. Better than what? Better than you would fare without them, and better than you might fare with negative emotions.

POSITIVE EMOTIONS AND WELL-BEING

Happiness and Positive Behavior

Chapter 2 described positive emotions as a central component of the SWB definition of happiness. People who enjoy frequent positive emotions and experience few negative emotions, along with a judgment that their life is satisfying, are considered happy. A number of studies show that people in a positive mood act quite differently than when they are in a bad mood or experiencing a distressing emotion. This is hardly news, but it is interesting that many of the behaviors we consider to be positive are enhanced by positive affect. Happy people, whether by temperament or recent experiences, are more tolerant and less prejudicial, more compassionate, more focused on others rather than self-focused, more helpful to others, and more enjoyable to be with (Isen, 2003; Myers, 1992). Evidence supporting the broaden-and-build theory suggests that positive emotions contribute to more flexible, creative and resilient responses in the face of challenge (Fredrickson, 2001, 2002). These findings led Myers (1992) to suggest that happiness might be viewed as a desirable state in and of itself because it is linked to so many positive behaviors. As Myers noted, it is negative emotions and unhappiness—not happiness—that causes us to be self-absorbed, self-centered, and focused on our own preoccupations. Happiness seems to produce a more expansive view of the world around us.

Positive Emotions and Success

In American culture, it is widely believed that success makes people happy. This makes sense and subsequent chapters will review evidence documenting its validity. A recent extensive research review examined whether the causal arrow might also point the other way (Lyubomirsky et al., 2005). Might positive affect and happiness promote success? More specifically, these researchers asked, are chronically happy people, defined as those who have frequent experiences of positive emotions, more successful in multiple domains of life? The answer is yes. In their analysis of hundreds of cross-sectional, longitudinal, and experimental studies, happy people were consistently found to enjoy greater success in marriage, friendship, income, work, and mental and physical health. Compared to their less happy peers, happy people have more satisfying marriages, are more

likeable and extraverted and have a richer network of friends, receive more favorable evaluations from their employers, take better care of their physical health, cope more effectively with challenge, and have higher incomes. Moreover, longitudinal studies show that happiness precedes as well as follows success and many of the effects of positive emotions were paralleled by experimental research that induced positive affect in well-controlled studies.

The sources of an individual's happiness might stem from an enduring trait, current life circumstances, or the satisfaction derived from intentionally chosen activities, such as satisfying work or investment in one's family. Whatever its source, the evidence seems clear that happy people fare better in many areas of life. Lyubomirsky and her colleagues believe that their empirical review provides strong support for Fredrickson's broaden-and-build theory of positive emotions. Positive emotions do seem to build people's intellectual, psychological, and social resources that contribute to success and positive well-being, and success seems to contribute to enhanced happiness, as well. The two-way street of happiness and success, with each contributing reciprocally to the other, supports Fredrickson's idea of a potential upward spiral of well-being.

Positive Emotions and Flourishing

The strong connections between positive emotions and individual success and health raise the possibility that positive emotions might signify optimal functioning. That is, if positive emotions were not somehow a central aspect of positive functioning, why would researchers find so many aspects of health related to them? In an intriguing article, Fredrickson and Losada (2005) describe a quantitative relationship between people's emotional experience and their level of optimal functioning. These researchers drew on the work of Corey Keyes (2002, 2007) and his model of complete mental health as flourishing (reviewed in Chapter 2). **Flourishing** is a state of optimal human functioning that is at the opposite end of the continuum from mental illness. In other words, flourishing is complete mental *health*. **Languishing** is a state that divides mental health from mental illness and is characterized by a feeling of emptiness, hollowness, or what people used to call melancholy. Languishing individuals have few symptoms of

mental illness, but they also have few symptoms of mental health. In other words, there is no serious pathology, but there is little purpose, meaning, or zest for life either.

Drawing on Fredrickson's broaden-and-build theory of positive emotions and the substantial research connecting positive emotions to enhanced well-being and performance, Fredrickson and Losada (2005) hypothesized that the ratio of positive-to-negative emotions and behaviors that people experience during a given time period might be an index of the flourishing–languishing dimension. That is, might there be some critical ratio of positive-to-negative that divides optimal functioning (flourishing) from poor functioning (languishing)? Fredrickson and Losada reviewed evidence from studies of effective business management teams, intensive observational research with married couples, and investigations of depressed patients before and after treatment. In each of these studies, positive and negative behaviors and emotions were measured and their ratio calculated in relationship to quality-of-outcome measures. The evidence from these studies converged on a “**critical positivity ratio**” of 2.9. That is, within a given time period, a ratio at or above roughly three times the positive affect to negative affect signifies flourishing, and ratios below that signify languishing. In everyday life, this would suggest that if during a week you experienced 12 significant positive events and only 4 negative events, you probably had a good week with a ratio of $12/4 = 3$.

To investigate the discriminative validity of this ratio in relation to mental criteria for flourishing and languishing, Fredrickson and Losada had two samples of college students complete Keyes' (2002) mental health measures and keep a daily log of their emotional experiences over a 1-month period. Measures of flourishing were drawn from the work of Corey Keyes (2002, 2007). Flourishing is defined by scores on questionnaire items measuring high SWB (frequent positive affect and high life satisfaction), self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, positive relations with others, and positive social functioning, including social acceptance, actualization, contribution, coherence, and integration (see Chapter 4 for detailed description of each attribute and sample measurement items). The presence of a majority of these characteristics (six), together with the absence of mental illness symptoms, define flourishing in Keyes' conceptualization.

The primary results for this study were based on dividing the monthly total of positive emotional experiences by the total for negative emotional experiences, and examining the relation of the resulting ratio to the criteria for flourishing. Consistent with predictions, flourishing students had ratios at or above 2.9 (average was 3.2) and non-flourishing students were below the 2.9 threshold.

A GENERAL THEORY OF POSITIVITY? A general theory of positivity is an intriguing and potentially integrative addition to positive psychology's growing arsenal of informative theories, and fertile ground for future research. The robustness of the evidence for the 2.9 ratio is supported by the fact that it was found in such diverse samples and life domains (i.e., business, marriage, depressed patients, college students) and also when different measures of positivity, negativity, and outcome assessments were used. As described by Fredrickson and Losada, a **general theory of positivity** predicts that the line dividing human flourishing from languishing among individuals and groups is strongly associated with positivity ratios of 2.9.

You may wonder if there is an upper limit to this ratio. Is there such a thing as too much positivity? Fredrickson and Losada provide evidence suggesting that the answer is yes. While not empirically assessed, mathematical models suggest that at very high ratios (11.6) the relationship of positive emotion to flourishing begins to break down. As these authors note, a certain amount of negativity seems to be necessary for healthy functioning. Conflict, pain, and distress all represent opportunities for personal growth, and for growth in relationship to others. Negativity contributes to flourishing by helping to build psychological growth and resilience. In any case, a life with no negative experiences is impossible. It is probably unhealthy as well.

CULTIVATING POSITIVE EMOTIONS

Life is full of simple pleasures that we simply enjoy for themselves and/or use to reduce stress and bad feelings. Examples would include fixing a delicious meal for family or friends, taking a hot bath, going for a casual stroll, reading a good book with a glass of wine in the evening, a cup of coffee with the morning paper, and a host of more elaborate activities such as gardening, painting, photography, woodworking, and

other hobbies. A major message of this chapter is that these activities are good for us, not only because they offset negative emotions, but also because positive emotions, independent of their detoxifying effects, are good for us. We end this chapter by considering two examples of positive emotion-promoting activities that are probably familiar to you. They are simple, free, and enjoyable.

Flow Experiences

Think of an activity or experience in which you become totally absorbed and lose yourself in the moment. At the same time, you are highly effective in expressing your skill and don't have to think about what you are doing. In fact, once you start to think and analyze, the whole experience ends and you are back to your everyday state of mind. As a mini-example of this kind of experience (which Csikszentmihalyi calls "flow") (Csikszentmihalyi, 1990, 1997; Nakamura & Csikszentmihalyi, 2002, 2003), consider what happened to your textbook's first author. I golf. Not well, but I've had my moments. One of these moments occurred on a round at my favorite course while golfing with a friend. I was just thoroughly enjoying the game and being outdoors and I seemed to be in a groove, playing well. On the next-to-the-last hole my partner pointed out that I was two over par which, for me, was the round of my life. I started wondering why I was doing so well. I started thinking about my grip, stance, address to the ball, swing, etc. Of course, this was the kiss of death for my good round. The 17th hole was along a lakefront. I put my drive in the lake. The final hole had a small pond and a sand trap. I managed to get into both. I ended the round 8 over par! Thinking too much ruined my game.

I am convinced that one of the reasons that Michael Jordan of the Chicago Bulls was such an attraction when he played was not only because he was consistently a good player, but on many occasions he had phenomenal games of 40 to 50 or more points. Everything he did worked. He played "unconsciously," was "in the zone," and could make baskets even when he was off-balance and had multiple defenders in his face. But you don't have to be a star to experience flow. In Csikszentmihalyi's (1990) interview studies, ordinary people described this same kind of experience that many referred to as "flow." Rock climbers, dancers, chess players,

basketball players, musicians and painters described how they often got lost in the moment of creativity or performance—doing their best, but feeling “outside themselves,” as if they were watching it all happen from an external perspective. They engaged in flow-producing activities for the intrinsic enjoyment those activities yielded. The simple *doing* of the activity was its own reward. They also described the exhilaration they felt during or after such flow experiences.

The experience of flow can be contrasted with our more typical state of mind that we will call our “8-to-5 mind.” Our 8-to-5 mind is the one that goes to work, balances the checkbook, and analyzes what, when, and how we are going to solve problems and tackle various daily tasks. This is not to say that people cannot experience flow at work. In fact, Csikszentmihalyi and his colleagues have found that the most satisfying and productive work involves a level of challenge appropriate to our skill that actively engages our talents, is deeply meaningful, and produces a sense of “vital engagement” and flow (see Nakamura & Csikszentmihalyi, 2002, 2003). So, our contrast of flow with an 8-to-5 mindset is not meant to be a work-versus-play distinction, since some people have the good fortune to combine the two. Rather, it points to the fact that flow is less common than our “normal” state of consciousness. In this regard, we might consider flow as a naturally occurring altered state of consciousness when compared to the more frequently experienced 8-to-5 mindset. In flow, we are “out of our minds” in the sense of breaking through the dominance of normal consciousness. Consistent with this idea and our golf example, when “normal mind” intrudes, flow is lost. Table 3.1 shows the differences between normal mind and flow (out of your mind).

Duality means to be aware of yourself and the environment as two separate objects. Self-control refers to consciously directing our actions. That is, “I am doing this now, and next I will do that.” We consciously monitor our actions related to a task or activity. In flow, there is a merging of action, awareness, and the sense of self, such that we lose the feeling of consciously controlling our actions (loss of self). This does not mean that we literally lose ourselves. It means we don’t have to think in a self-reflective way about what we are doing. It just flows—seems to happen by itself. If you play a musical instrument, you know the difference between having to think consciously about each

TABLE 3.1 Flow versus the 8-to-5 Mind

Normal Mind 8 to 5	Out of Your Mind – (Flow)
1. Duality	1. Oneness
2. Self-control	2. Loss of self
3. Attention wanders	3. Total absorption
4. Time conscious	4. Time flies–frozen
5. Internal talk	5. Talk destroys it
6. Confusion	6. Clarity of action
7. Negative emotions	7. Exhilaration
8. Stress accumulates	8. Discharges stress

note, and having the music just flow effortlessly because it’s so well-learned.

Attention and time-consciousness are frequent problems in our 8-to-5 minds. We daydream at work and in class; we have trouble focusing on the task at hand; we watch the clock and can’t believe how time drags. Of course, this assumes that one’s job or class is not overwhelmingly interesting or challenging. In flow, attention is never a problem because we are totally absorbed in the activity. Neither is time an issue, because it seems to fly or stand still. An hour can go by in what feels like a moment.

In our 8-to-5 minds, we are often confused and concerned about our performance and what other people think of us. We also carry on conversations with ourselves (in a kind of internal talk) in which we analyze, ruminate about the future or past, and consider what is going on around us. In flow, there is utter clarity of action. We know exactly what we are doing and we get ongoing and immediate feedback from the environment. In sports, music, and writing, you see and hear the results of your efforts as they occur. As we discussed earlier, internal talk, self-reflection, and conscious thinking leads to kind of “paralysis-by-analysis” of flow.

Finally, although not specifically evaluated, many of Csikszentmihalyi’s research participants commented on the discharge of stress and the feeling of leaving your troubles behind that resulted from flow experiences. This stands in contrast to the 8-to-5 mind; by the end of a week at school or work, most of us feel at least a bit stressed, worn down, and ready for the weekend. Because flow is associated with enjoyment and an ending feeling of “Whew, that

was great!" it would seem to follow that reduced stress would be one of the benefits of flow. In addition, our review of the beneficial physiological effects of positive emotions suggests that people who regularly participate in flow activities might enjoy some enhancement of physical and mental health.

Savoring

Most of us have experienced the difference between hurriedly eating a hamburger at a fast-food restaurant and a relaxed candlelight dinner where each bite of food and each sip of wine is consumed slowly in order to appreciate, prolong, and enjoy the sensual pleasure it offers. Based on their studies, Bryant and Verhoff (2007) argue that savoring a good meal offers a more general model for savoring good moments in life and increasing the intensity and frequency of our positive experiences.

The basic assumption of **savoring** is that "people have capacities to attend to, appreciate, and enhance the positive experiences in their lives" (Bryant & Verhoff, 2007, p. 2, italics in original). Savoring may occur spontaneously. We may find ourselves captivated by a striking sunset. Appreciation and enjoyment arise from immersing ourselves in the beauty of the colors and patterns of light. Bryant and Verhoff believe that whether planned or spontaneous, three preconditions must be met for savoring to occur. First, we must have a sense of immediacy of what is happening in the moment—here and now. That is focused attention, and it's easiest to think of in terms of a specific object or activity (e.g., a sunset or a hot bath), but it also applies to internal thoughts and feelings. A person might savor a memory, such as a great time with good friends or a treasured childhood experience. One might also savor the anticipation of a future positive event, like getting married or graduating from college. Whatever the focus, it needs to fully absorb your attention in order for savoring to occur.

Secondly, to experience savoring, social and self-esteem needs must be set aside. If you are worried or thinking about how others view you, or preoccupied with getting ahead in your career, with family issues, or all your life responsibilities, there is little room for savoring the moment. Given the hectic lives most of us lead today, Bryant and Verhoff believe that people may have to intentionally set aside time for relaxation and disengagement from the endless stream of thoughts, worries, and

concerns that dominate our everyday consciousness. Savoring requires an attentive, but a quiet and relaxed state of mind.

Thirdly, savoring requires a mindful focus on the pleasurable features of a current experience—fully appreciating one particular thing and all it has to offer, rather than thinking of several things at once that may divert attention away from the present moment and what is in front of us. This means we need to take a break from analytical thinking and just take in the experience, allowing ourselves, to some extent, to "get lost" in it. This aspect of savoring is somewhat similar to the "total absorption" that characterizes the flow experience. However, flow (as we have seen) gets disrupted by too much self-awareness. Savoring is a more self-aware activity, in which thinking still occurs, but is focused on enhancing the experience. Bryant and Verhoff believe that attending to, thinking about, and identifying the emotions associated with savoring can heighten its positive effects. That is, asking ourselves, "What emotion am I feeling?" Is the savoring emotion a feeling of awe, warmth, comfort, joy, inspiration, happiness, pleasure, gratefulness, mellowness, contentment, or connectedness to others? By focusing on the specifics and subtleties of savoring emotions, we may become more aware of the rich complexity of our emotions and the kinds of savoring experiences that can create them.

Savoring is a relatively simple and straightforward way to enhance our positive experiences. It is not difficult to think of how we might punctuate each day with savoring moments and unplug for a time from our hectic lives. With practice over time, one might also find that savoring becomes a more general mindset applied to more and more aspects of life, and that it may begin to occur spontaneously when we encounter moments worth appreciating.

The evidence reviewed in this chapter strongly suggests that increasing our experience of positive emotions, whether through savoring, flow, socializing with friends, or other enjoyable activities, pays dividends in the form of enhanced well-being. Consistent with Fredrickson's broaden-and-build theory, positive emotions enhance our physical, psychological, and social coping resources. However, positive emotions are also "good" for us whether or not we are in distress. Positive emotions contribute to a happy and satisfying life.

Chapter Summary Questions

1. What evidence suggests that positive and negative affect underlie our emotional experience?
2. a. How do negative emotions fit the concept of specific action tendencies?
b. Why don't positive emotions fit the specific action-tendencies concept?
3. Describe four ways in which positive emotions broaden thought-action repertoires and build personal resources, according to Fredrickson's theory. Give an example of each.
4. a. What are the effects of stress and negative emotions on immune-system functioning? Describe and give a research example.
b. What are the effects of positive emotions on immune-system functioning? Describe and give a research example.
5. Describe problem-focused, emotion-focused, and pro-active coping.
6. Describe three ways in which positive emotions might influence successful coping.
7. Describe and give examples of the following three coping strategies that help generate positive emotions (described by Folkman and Tedlie Moskowitz):
 - positive reappraisal
 - problem-focused coping based on positive emotions
 - infusing ordinary activities with positive meaning
8. a. What does research show about the relationships among self-esteem, optimism, and health?
b. What role may positive emotions play in explaining these relationships?
9. Describe a study showing the relationship between social contacts and health.
10. a. How does the buffering hypothesis explain the effects of social relationship?
b. Describe a study that supports the buffering hypothesis.
11. What is the direct effects hypothesis?
12. What are the limits of positive emotions? What comparisons are involved?
13. What kinds of positive behaviors and life successes are related to happiness and positive affect? Give four examples.
14. a. How is the "critical positivity" ratio of 2.9 measured in research?
15. What are the limits and qualifications to a general theory of positivity?
16. What are four differences between a flow experience and the "8-to-5" mind?
17. What three preconditions are necessary for savoring to occur?

Key Terms

positive affect 39	proactive coping 45	languishing 51
negative affect 39	positive reappraisal 46	critical positivity ratio 51
broaden-and-build theory 40	buffering hypothesis 49	general theory of positivity 52
problem-focused coping 45	direct effects hypothesis 49	flow experience 53
emotion-focused coping 45	flourishing 51	savoring 54

Web Resources

Positive Emotions

www.unc.edu/peplab/barb_fredrickson_page.html
Web site for the research of Barbara Fredrickson and the broaden-and-build theory of positive emotions.

APA Online: Positive Emotions, Affect, and Health

www.apa.org American Psychological Association site. Search for articles and recent research on positive emotions and affect.

Creating Flow Experiences

www.positivepsychology.org Web site for Positive Psychology Center at the University of Pennsylvania. Search for links to flow experiences.

Suggested Readings

- Bryant, F. B., & Verhoff, J. (2007). *Savoring: A new model of positive experience*. Mahwah, NJ: Lawrence Erlbaum.
- Cousins, N. (1979). *Anatomy of an illness*. New York: Norton.
- Csikszentmihalyi, M. (1997). *Finding flow*. New York: Basic Books.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*, 218–226.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamic of human flourishing. *American Psychologist*, *60*, 678–686.
- Koenig, H. G., & Cohen, H. J. (Eds.). (2002). *The link between religion and health: Psychoneuroimmunology and the faith factor*. New York: Oxford University Press.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect. *Psychological Bulletin*, *131*, 803–855.
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health? *Psychological Bulletin*, *131*, 925–971.
- Salovey, P., Rothman, A. J., Detweiler, J. B., & Steward, W. T. (2000). Emotional states and health. *American Psychologist*, *55*, 110–121.