An Invitation to Health: Build Your Future

DIANNE HALES

15TH EDITION
After studying the material in this chapter, you should be able to

- Identify the characteristics of emotionally healthy persons.
- List and give examples of the three major areas of positive psychology.
- Name the two pillars of authentic happiness.
- Contrast characteristics of optimistic and pessimistic individuals.
- Discuss the health benefits of spirituality.
- Identify ways to enrich one’s spiritual life.
- Explain the relationship between gratitude and positive psychology.
- Describe four ways that sleep affects daytime well-being.
Adam never considered himself a spiritual person until he enrolled in a class on the science of personal well-being. For a homework assignment he had to pursue different paths to happiness. As part of his experiment, he went to a Mardi Gras celebration and partied all night to see if having fun made him happier. To test whether doing good makes a person happy, Adam volunteered to help build a house for a homeless family. “I can’t remember the name of a single person I met at the party,” he says. “But I’ll never forget the look on the family’s faces when we handed them the keys to their new home.”

For his final project, Adam, who did not have a religious upbringing, focused on developing a richer spiritual life. “The spirituality didn’t end with the term,” he says. “I continue to meditate, do yoga, and read religious texts because I believe a more spiritual life will help me in the long run with happiness and health.”

The quest for a more fulfilling and meaningful life is attracting more people of all ages. The reason? As the burgeoning field of positive psychology has resoundingly proved, people who achieve emotional and spiritual health are more creative and productive, earn more money, attract more friends, enjoy better marriages, develop fewer illnesses, and live longer.

This chapter reports the latest findings on making the most of psychological strengths, enhancing happiness, and developing the spiritual dimension of your health and your life. It also explores an often overlooked dimension of physical and emotional well-being: sleep.

Your Psychological and Spiritual Well-Being

Emotional and Mental Health

“A sound mind in a sound body” was, according to the ancient Roman poet Juvenal, something all should strive for. This timeless advice still holds. Almost 2,000 years later we understand on a much more scientific level that physical and mental health are interconnected in complex and vital ways. One does not guarantee the other, but recent research has found that individuals who practice four fundamental behaviors—regular exercise, a healthful diet, moderate alcohol use, and no tobacco—are less
likely to become depressed, be overwhelmed by stress, or suffer poor mental health. 

Unlike physical health, psychological well-being cannot be measured, tested, X-rayed, or dissected. Yet psychologically healthy men and women generally share certain characteristics. They value themselves and strive toward happiness and fulfillment. They establish and maintain close relationships with others. They accept the limitations as well as the possibilities that life has to offer. And they feel a sense of meaning and purpose that makes the gestures of living worth the effort required.

Psychological health encompasses both our emotional and mental states—that is, our feelings and our thoughts. Emotional health generally refers to feelings and moods, both of which are discussed later in this chapter. Characteristics of emotionally healthy persons, identified in an analysis of major studies of emotional wellness, include the following:

- Determination and effort to be healthy.
- Flexibility and adaptability to a variety of circumstances.
- Development of a sense of meaning and affirmation of life.
- An understanding that the self is not the center of the universe.
- Compassion for others.
- The ability to be unselfish in serving or relating to others.
- Increased depth and satisfaction in intimate relationships.
- A sense of control over the mind and body that enables the person to make health-enhancing choices and decisions.

“Emotional vitality,” a sense of positive energy and engagement in life, correlates with physical vitality. In a recent study the individuals who ranked highest in this state of heightened emotional well-being had the lowest risk of cardiovascular disease.

**Mental health** describes our ability to perceive reality as it is, to respond to its challenges, and to develop rational strategies for living. The mentally healthy person doesn’t try to avoid conflicts and distress but can cope with life’s transitions, traumas, and losses in a way that allows for emotional stability and growth. The characteristics of mental health include:

- The ability to function and carry out responsibilities.
- The ability to form relationships.
- Realistic perceptions of the motivations of others.
- Rational, logical thought processes.
- The ability to adapt to change and to cope with adversity.

**Culture** also helps to define psychological health. In one culture, men and women may express feelings with great intensity, shouting in joy or wailing in grief, while in another culture such behavior might be considered abnormal or unhealthy. In our diverse society, many cultural influences affect Americans’ sense of who they are, where they came from, and what they believe. Cultural rituals help bring people together, strengthen their bonds, reinforce the values and beliefs they share, and provide a sense of belonging, meaning, and purpose.

To find out where you are on the psychological well-being scale, take the Self Survey: “Well-Being Scale” on page 51.

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The Lessons of Positive Psychology

Positive psychology has been defined as “the scientific study of ordinary human strengths and virtues.” Rather than concentrating on what goes wrong in our lives and in our minds, it focuses on “the aspects of the human condition that lead to happiness, fulfillment, and flourishing”—in other words, on what makes life worth living. The three major areas of positive psychology are the study of positive emotions, such as hope and trust; positive traits, such as wisdom and courage; and positive institutions, such as strong families and democracy.

According to psychologist Martin Seligman, Ph.D., author of *Flourish: A Visionary New Understanding of Happiness and Well-Being*, who popularized the positive psychology movement,
everyone, regardless of genes or fate, can achieve a happy, gratifying, meaningful life. The goal is not simply to feel good momentarily or to avoid bad experiences, but to build positive strengths and virtues that enable us to find meaning and purpose in life. The core philosophy is to add a “build what’s strong” approach to the “fix what’s wrong” focus of traditional psychotherapy.

Some researchers categorize the spectrum of positive traits as those related to knowledge (creativity, curiosity, open-mindedness, love of learning, perspective); human nature (love, kindness, social intelligence); justice (citizenship, fairness, leadership); transcendence (appreciation of beauty and excellence, gratitude, hope, humor, spirituality); and temperance (humility, prudence, self-regulation, forgiveness).2

According to the “broaden-and-build” theory of positive emotions, such emotions expand our ways of thinking and acting. Joy, for instance, spurs an urge to play; contentment, an urge to appreciate and be grateful. In contrast, negative emotions narrow our behavioral range. When frightened, for instance, we may think only of fleeing from danger. As more than a decade of research has shown, broadening and building can produce significant positive effects, including buffering us against negative life events, promoting resilience, lowering the risk of psychological disorders, and enhancing physical well-being.3

Individuals vary in the ways they respond to and regulate positive emotions. Those with high self-esteem (discussed later in this chapter) are more likely to savor positive emotions, while those with low self-esteem tend to dampen them. (“Health in Action” offers ways of making the most of positive experiences and emotions.)

Clinical psychologists have developed and tested various interventions that bolster positive emotions, such as recalling positive memories from one’s life, using one’s unique or signature strengths in new ways, and cultivating gratitude and acceptance. These approaches have proven effective in enhancing well-being and decreasing negative feelings in individuals with and without psychological symptoms.5

The labs in An Invitation to Personal Change (IPC) apply the principles of positive psychology. You can start practicing positive psychology right away. The next time you think, “I’ve never tried that before,” also say to yourself, “This is an opportunity to learn something new.” When something seems too complicated, remind yourself to tackle it from another angle. If you get discouraged and feel that you’re never going to get better at some new skill, tell yourself to give it another try.

Develop Self-Compassion

“College life is notorious for challenging students’ sense of well-being,” a team of educational psychologists at the University of Texas wrote in a recent paper, noting that students must “manage competing academic and social goals as well as their emotional reactions to both success and disappointment.”6

One of the best ways to maintain well-being, they found, is self-compassion, a healthy form of self-acceptance that includes three components:
• Treating oneself kindly in the face of perceived inadequacy by engaging in self-soothing and positive self-talk.
• Recognizing that such discomfort is an unavoidable part of the human experience. This recognition of “common humanity” promotes a sense of connection to others even in the face of isolation and disappointment.
• Facing painful thoughts without avoiding or exaggerating them and managing disappointment and frustration by quelling self-pity and melodrama.

In their research, the ability to respond to life’s disappointments, daily hassles, and stressful life events with self-compassion was a strong predictor of students’ well-being. (See “Your Psychological Self-Care Pyramid” in Making Change Happen, p. 53, and in Labs for IPC to learn specific methods for being kinder to yourself.)

Boost Emotional Intelligence

A person’s “IQ”—or intelligence quotient—was once considered the leading predictor of achievement. However, psychologists have determined that another “way of knowing,” compiled by your online journal.
dubbed emotional intelligence, makes an even greater difference in a person's personal and professional success.

“EQ” (for emotional quotient) is the ability to monitor and use emotions to guide thinking and actions. Strong social or interpersonal skills are one measure of EQ. As more than a decade of research has shown, people with high EQ are more productive at work and happier at home. They’re also less prone to stress, depression, and anxiety and bounce back more quickly from serious illnesses. Individuals with high EQ also seem more likely to have good mental and physical health.7

According to recent research, females score slightly higher in emotional intelligence than males, but in both sexes, individuals who are outgoing, dependable, and independent-minded tend to have higher EQs. Both sexes are equally capable of cultivating greater emotional intelligence. Emotional intelligence isn’t fixed at birth, nor is it the same as intuition. Among the emotional competencies that most benefit students are focusing on clear, manageable goals and identifying and understanding emotions rather than relying on “gut” feelings.

Know Yourself

Why do some students consistently invest in taking the best possible care of themselves while others repeatedly put their well-being at risk? The answers may lie within their personalities. According to recent research, two personality traits—conscientiousness (striving for competence and achievement, self-discipline, orderliness, reliability, deliberativeness) and extraversion (being active, talkative, assertive, social, stimulation-seeking)—correlate with very different health behaviors.8

College students who rate high in conscientiousness tend to wear seat belts, get enough sleep, drive safely, use safer sex practices, exercise, not smoke, drink less, and eat fruits and vegetables. The reason may be that they are thorough in their decision making and carefully weigh the risks and benefits of their behavior. They also can delay immediate gratification for the sake of long-term benefits, such as preventing cardiovascular disease or sexually transmitted infections.

Although they’re more likely to participate in vigorous exercise, students who score high in extraversion are more likely to put their health at risk. They often drink more alcohol, binge-drink, smoke, engage in risky sexual behaviors, and don’t get enough sleep. The reasons might involve brain chemistry. Individuals with low levels of neurochemical arousal may pursue highly stimulating (though risky) behaviors to feel more alert and excited.

Personality is not destiny. If you see yourself as low in conscientiousness or high in extraversion, you can take deliberate steps that will safeguard your health. For instance, you might fulfill your need for stimulation and excitement with less risky alternatives, such as X-Game competitions, rock-climbing, or volunteering with student-led emergency response services.9

Meet Your Needs

Newborns are unable to survive on their own. They depend on others for the satisfaction of their physical needs for food, shelter, warmth, and protection, as well as their less tangible emotional needs. In growing to maturity, children take on more responsibility and become more independent. No one, however, becomes totally self-sufficient. As adults, we easily recognize our basic physical needs, but we often fail to acknowledge our emotional needs. Yet they, too, must be met if we are to be as fulfilled as possible.

The humanist theorist Abraham Maslow believed that human needs are the motivating factors in personality development. First, we must satisfy basic physiological needs, such as those for food, shelter, and sleep. Only then can we pursue fulfillment of our higher needs—for safety and security, love and affection, and self-esteem. Few individuals reach the state of self-actualization, in which one functions at the
highest possible level and derives the greatest possible satisfaction from life (Figure 2.1).

**Boost Self-Esteem**

Each of us wants and needs to feel significant as a human being with unique talents, abilities, and roles in life. A sense of *self-esteem*, of belief or pride in ourselves, gives us confidence to dare to attempt to achieve at school or work and to reach out to others to form friendships and close relationships. Self-esteem is the little voice that whispers, “You’re worth it. You can do it. You’re okay.”

Self-esteem is based not on external factors like wealth or beauty, but on what you believe about yourself. It’s not something you’re born with; self-esteem develops over time. It’s also not something anyone else can give to you, although those around you can either help boost or diminish your self-esteem.

The seeds of self-esteem are planted in childhood when parents provide the assurance and appreciation youngsters need to push themselves toward new accomplishments: crawling, walking, forming words and sentences, learning control over their bladder and bowels.

Adults, too, must consider themselves worthy of love, friendship, and success if they are to be loved, to make friends, and to achieve their goals. Low self-esteem is more common in people who have been abused as children and in those with psychiatric disorders, including depression, anxiety, alcoholism, and drug dependence. Feeling a lack of love and encouragement as a child can also lead to poor self-esteem. Adults with poor self-esteem may unconsciously enter relationships that reinforce their self-perceptions and may prefer and even seek out people who think poorly of them.

One of the most useful techniques for bolstering self-esteem and achieving your goals is developing the habit of positive thinking and talking. While negative observations—such as constant criticisms or reminders of the most minor faults—can undermine self-image, positive affirmations—compliments, kudos, encouragements—have proved effective in enhancing self-esteem and psychological well-being. Individuals who fight off negative thoughts fare better psychologically than those who collapse when a setback occurs or who rely on others to make them feel better.

Self-esteem has proved to be one of the best predictors of college adjustment. Students with high self-esteem report better personal, emotional, social, and academic adjustment.

**Pursue Happiness**

“Imagine a drug that causes you to live eight or nine years longer, to make $15,000 more a year, to be less likely to get divorced,” says Martin Seligman, the “father” of positive psychology. “Happiness seems to be that drug.” But even if just about everyone might benefit by smiling more and scowling less, can almost anyone learn to live on the brighter side of life?

Skeptics who dismiss “happichondria” as the latest feel-good fad are dubious. However, happiness researchers, now backed by thousands of scientific studies, cite mounting evidence suggesting that happiness is a learned behavior. “Happiness is measurable, and it’s buildable,”

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**Figure 2.1 The Maslow Pyramid**

To attain the highest level of psychological health, you must first satisfy your needs for safety and security, love and affection, and self-esteem.

Health on a Budget

Happiness for Free!

Money can’t buy happiness. As long as you have enough money to cover the basics, you don’t need more wealth or more possessions for greater joy. Even people who win a fortune in a lottery return to their baseline of happiness within months. So rather than spending money on lottery tickets, try these ways to put a smile on your face:

• **Make time for yourself.** It’s impossible to meet the needs of others without recognizing and fulfilling your own.

• **Up your appreciation quotient.** Regularly take stock of all the things for which you are grateful. To deepen the impact, write a letter of gratitude to someone who’s helped you along the way.

• **String beads.** Think of every positive experience during the day as a bead on a necklace. This simple exercise focuses you on positive experiences, such as a cheery greeting from a cashier or a funny e-mail from a friend, and encourages you to act more kindly toward others.

• **Create a virtual DVD.** Visualize several of your happiest memories with as much detail as possible. Smell the air. Feel the sun. Hear the sea. Play this video in your mind when your spirits slump.

• **Fortify optimism.** Whenever possible, see the glass as half-full. Keep track of what’s going right in your life. Imagine and write down your vision for your best possible future and track your progress toward it.

• **Immerse yourself.** Find activities that delight and engage you so much that you lose track of time. Experiment with creative outlets. Look for ways to build these passions into your life.

• **Seize the moment.** Rather than waiting to celebrate big birthday-cake moments, savor a bite of cupcake every day. Delight in a child’s cuddle, a glorious sunset, a lively conversation. Cry at the movies. Cheer at football games. This life is your gift to yourself. Open it!

Why pursue happiness? The answer goes beyond the psychological benefits. As a meta-analysis of long-term studies has shown, happiness reduces the risk of dying—both in healthy people and in those with diagnosed diseases. “Happiness is beneficial over and above the absence of misery,” researchers have concluded. The reason may be that happiness induces changes in the brain or encourages stronger social connections.\(^{12}\)

**Happiness 101** Genetics, as research on thousands of sets of twins has demonstrated, accounts for about 50 percent of your happiness quotient and for related personality traits, such as extraversion and conscientiousness. But even if you inherited the family frown rather than its joy genes, you’re not fated to a life of gloom. Just don’t pin your hopes on advantages like fitness, fortune, education, or good looks. The healthy, the wealthy, the bookish, and the beautiful report only somewhat greater happiness than those who are less blessed. Unless you’re extremely poor or gravely ill, life circumstances account for only about 10 percent of happiness. The other 40 percent depends on what you do to make yourself happy. (See Health on a Budget.)

Unfortunately, most of us look for happiness in all the wrong places. We assume that external things—a bigger house, a better job, a winning lottery ticket—will gladden our lives. While they do bring temporary delight, the thrill invariably fades.

In one study, more than 150 older college students rated a recent purchase—either of an object or of a life experience—that they invested in to make themselves happy. Those who spent their money on a pleasurable experience reported feeling more alive and invigorated than those who bought material things. The reason, according to the

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researchers, is that life experiences bring people closer, satisfy a natural human need for connection, and create memories that can be savored again and again.13

“After 18 years studying happiness, I fell into the same trap as everyone else,” says psychologist Sonja Lyubomirsky, Ph.D., author of The How of Happiness: A Scientific Approach to Getting the Life You Want. “I was so excited to get a new car, a hybrid I’d wanted for a long time, but within two months driving it became routine. Happiness is like weight loss. We all know how to take off a few pounds but the trick is maintaining it.”14

Lyubomirsky and her colleagues have fine-tuned proven strategies into practical prescriptions to enhance happiness. “Different methods are a better ‘fit’ for different people,” she explains. “Keeping a daily gratitude journal seems hokey to some people, but writing a letter of gratitude may be very meaningful.” Timing and “doses” also matter. Performing five acts of kindness on a single day, she’s found, yields a greater halo effect than a single daily altruistic gesture. “But to sustain happiness you have to make the effort and commitment every day for the rest of your life,” she emphasizes. For enduring joy, the key is looking beyond fleeting pleasures to the two pillars of “authentic” happiness: engagement with family, work, or a passionate pursuit and finding meaning from some higher purpose.

Education, intelligence, gender, and race do not matter much for happiness. African Americans and Hispanics have lower rates of depression than white Americans, but they do not report greater happiness. Neither gender is clearly happier, but in different studies women are both happier and sadder than men.

In a recent study of college students, possessions mattered less to their personal satisfaction than how much they valued them. “The American undergraduates who are happiest in this life are not necessarily those who amass great numbers of things,” the researchers concluded. “Rather they are those who both have the things they want and want the things they have.”

In another survey of 222 college students, psychologists found that the “happiest” 10 percent, as determined by six different rating scales, shared one distinctive characteristic: a rich and fulfilling social life. Almost all were involved in a romantic relationship as well as in rewarding friendships. The happiest students spent the least time alone, and their friends rated them as highest on good relationships.

Even people we don’t know may make us happy. By analyzing 20 years of data on the social ties of almost 5,000 participants in the Framingham Heart Study, researchers found that happy people spread happiness to others. Spouses, neighbors, relatives, and friends benefit most, but so did more distant contacts. The more happy people you surround yourself with, the happier you—and your social network—are likely to be in the future.

This may also be true online—at least to a certain extent. According to a recent study of college students, their feelings of well-being increase along with the number of their Facebook friends—perhaps because seeing friends’ photos reminds them of their social connections and enhances their feelings of self-worth. However, the Facebook users who presented themselves honestly were more likely to receive meaningful social support from their online friends than those who, as the researchers put it, were always “hiding behind a smiling Facebook mask.”15 (See Chapter 5 for more on social networking.)
Become Optimistic

The dictionary defines optimism as “an inclination to anticipate the best possible outcome.” For various reasons—because they believe in themselves, because they trust in a higher power, because they feel lucky—optimists expect positive experiences from life. When bad things happen, they tend to see setbacks or losses as specific, temporary incidents. In their eyes, a disappointment is “one of those things” that happens every once in a while, rather than the latest in a long string of disasters. And rather than blaming themselves (“I always mess things up,” pessimists might say), optimists look at all the different factors that may have caused the problem.

As research over the last few decades has consistently shown, optimists and pessimists differ in how they confront problems and how they cope with adversity. These differences affect their physical and psychological well-being. People who expect good things respond to difficulty and adversity in more adaptive ways than those who expect bad things.

In terms of health, optimists not only expect good outcomes—for instance, that a surgery will be successful—but take steps to increase this likelihood. Pessimists, expecting the worst, are more likely to deny or avoid a problem, sometimes by drinking or other destructive behaviors. Optimism itself may protect against disease. In the large-scale Women’s Health Initiative, which studied 95,000 women over an eight-year period, optimists were significantly less likely to develop coronary heart disease or to die of heart disease or any other cause.16

Individuals aren’t born optimistic or pessimistic; in fact, researchers have documented changes over time in the ways that individuals view the world and what they expect to experience in the future. Cognitive-behavioral techniques (discussed in Chapter 3) have proven effective in helping pessimists become more optimistic. In a study with college students, learning to decrease automatic negative thoughts and increase more constructive ones reduced episodes of moderate depression.17

Manage Your Moods

Feelings come and go within minutes. A mood is a more sustained emotional state that colors our view of the world for hours or days. According to surveys by psychologist Randy Larsen of the University of Michigan, bad moods descend upon us an average of three out of every ten days. “A few people—about 2 percent—are happy just about every day,” he says. “About 5 percent report bad moods four out of every five days.”

There are gender differences in mood management: Men typically try to distract themselves (a partially successful strategy) or use alcohol or drugs (an ineffective tactic). Women are more likely to talk to someone (which can help) or to ruminate on why they feel bad (which doesn’t help). Learning effective mood-boosting, mood-regulating strategies can help both men and women pull themselves up and out of an emotional slump.

The most effective way to banish a sad or bad mood is by changing what caused it in the first place—if you can figure out what made you upset and why. “Most bad moods are caused by loss or failure in work or intimate relationships,” says Larsen. “The questions to ask are: What can I do to fix the failure? What can I do to remedy the loss? Is there anything under my control that I can change? If there is, take action and solve it.” Rewrite the report. Ask to take a makeup exam. Apologize to the friend whose feelings you hurt. Tell your parents you feel bad about the argument you had.

If there’s nothing you can do, accept what happened and focus on doing things differently next time. “In our studies, resolving to try harder actually was as effective in improving mood as taking action in the present,” says Larsen. You also can try to think about what happened in a different way and put a positive spin on it. This technique, known as cognitive reappraisal, or reframing, helps you look at a setback in a new light: What lessons did it teach you? What would you have done differently? Could there be a silver lining or hidden benefit?

If you can’t identify or resolve the problem responsible for your emotional funk, the next-best solution is to concentrate on altering your negative feelings. For example, try setting a quick, achievable goal that can boost your spirits with a small success. Clean out a drawer; sort through the piles of paper on your desk; send an e-mail or text message to an old friend.
Another good option is to get moving. In studies of mood regulation, exercise consistently ranks as the single most effective strategy for banishing bad feelings. Numerous studies have confirmed that aerobic workouts, such as walking or jogging, significantly improve mood. Even nonaerobic exercise, such as weight lifting, can boost spirits; improve sleep and appetite; reduce anxiety, irritability, and anger; and produce feelings of mastery and accomplishment.

Look on the Light Side
Humor, which enables us to express fears and negative feelings without causing distress to ourselves or others, is one of the healthiest ways of coping with life’s ups and downs. Laughter stimulates the heart, alters brain wave patterns and breathing rhythms, reduces perceptions of pain, decreases stress-related hormones, and strengthens the immune system.

Joking and laughing are ways of expressing honest emotions, of overcoming dread and doubt, and of connecting with others. They also can defuse rage. After all, it’s almost impossible to stay angry when you’re laughing. To tickle your funny bone, try keeping a file of favorite cartoons or jokes. Go to a comedy club instead of a movie. If you get an e-mail joke that makes you laugh out loud, don’t keep it to yourself—multiply the mirth by sharing it with a friend.

Develop Autonomy
One goal that many people strive for is autonomy, or independence. Both family and society influence our ability to grow toward independence. Autonomous individuals are true to themselves. As they weigh the pros and cons of any decision, whether it’s using or refusing drugs or choosing a major or career, they base their judgment on their own values, not those of others. Their ability to draw on internal resources and cope with challenges has a positive impact on both their psychological well-being and their physical health, including recovery from illness.

Those who’ve achieved autonomy may seek the opinions of others, but they do not allow their decisions to be dictated by external influences. For autonomous individuals, their locus of control—that is, where they view control as originating—is internal (from within themselves) rather than external (from others).

Spiritual Health
Whatever your faith, whether or not you belong to any formal religion, you are more than a body of a certain height and weight occupying space on the planet. You have a mind that equips you to learn and question. And you have a spirit that animates everything you say and do. Spiritual health refers to this breadth of life and to our ability to identify our basic purpose in life and to experience the fulfillment of achieving our full potential. Spiritual readings or practices can increase calmness, inner strength, and meaning; improve self-awareness; and enhance your sense of well-being. Religious support has also been shown to help lower depression and increase life satisfaction beyond the benefits of social support from friends and family.

Spirituality is a belief in what some call a higher power, in someone or something that transcends the boundaries of self. It gives rise to a strong sense of purpose, values, morals, and ethics. Throughout life you make choices and decide to behave in one way rather than another because your spirituality serves as both a compass and a guide.

The term religiosity refers to various spiritual practices. That definition may seem vague, but...
one thing is clear. According to thousands of studies on the relationship between religious beliefs and practices and health, religious individuals are less depressed, less anxious, and better able to cope with crises such as illness or divorce than are nonreligious ones. The more that a believer incorporates spiritual practices—such as prayer, meditation, or attending services—into daily life, the greater his or her sense of satisfaction with life. Individuals with religious affiliations are less likely to attempt suicide than others.19

Spirituality and Physical Health

A growing body of scientific evidence indicates that faith and spirituality can enhance health—and perhaps even extend life. Individuals who pray and report greater spiritual well-being consistently describe themselves as enjoying greater psychological and overall well-being.20

Church attendance may account for an additional two to three years of life (by comparison, exercise may add three to five extra years), according to researchers’ calculations. According to data on nearly 95,000 participants in the landmark Women’s Health Initiative, attending a weekly church service, regardless of an individual’s faith, lowers the risk of death by 20 percent, compared with those who don’t attend at all. Attending less frequently also reduces the risk, but by a smaller percentage. How does going to church add years to a life? Researchers speculate that the reason may be the sense of community or support or that people feel less depressed when they join in religious services.21

Prayer and other religious experiences, including meditation, may actually change the brain—for the better. Using neuroimaging techniques, scientists have documented alterations in various parts of the brain that are associated with stress and anxiety. This effect may slow down the aging process, reduce psychological symptoms, and increase feelings of security, compassion, and love.22

In a recent study, undergraduates with higher levels of spirituality coped with challenges by “turning to religion” along with other practical problem-solving strategies, such as positive reframing, acceptance, and humor. This implies that students who are already religious use their spirituality to bolster resources to focus on the problem at hand. Those who did not score high in spirituality but turned to religion in a crisis were more likely to do so as a way of avoiding or denying the problem, along with such maladaptive strategies as trying to distract themselves from it.23

Deeper Your Spiritual Intelligence

Mental health professionals have recognized the power of spiritual intelligence, which some define as “the capacity to sense, understand, and tap into the highest parts of ourselves, others, and the world around us.” Spiritual intelligence, unlike spirituality, does not center on the worship of a God above, but on the discovery of a wisdom within.

All of us are born with the potential to develop spiritual intelligence, but most of us aren’t even aware of it—and do little or nothing to nurture it. Part of the reason is that we confuse spiritual intelligence with religion, dogma, or old-fashioned morality. “You don’t have to go to church to be spiritually intelligent; you don’t even have to believe in God,” says Reverend Paul Edwards, a retired Episcopalian minister and therapist in Fullerton, California. “It is a scientific fact that when you are feeling secure, at peace, loved, and happy, you see, hear, and act differently than when you’re feeling

Giving and getting support from others is fundamental to good psychological health and emotional well-being.
insecure, unhappy, and unloved. Spiritual intelligence allows you to use the wisdom you have when you’re in a state of inner peace. And you get there by changing the way you think, basically by listening less to what’s in your head and more to what’s in your heart.”

Clarity Your Values

Your values are the criteria by which you evaluate things, people, events, and yourself; they represent what’s most important to you. In a world of almost dizzying complexity, values can provide guidelines for making decisions that are right for you. If understood and applied, they help give life meaning and structure.

There can be a large discrepancy between what people say they value and what their actions indicate about their values. That’s why it’s important to clarify your own values, making sure you understand what you believe so that you can live in accordance with your beliefs.

When you confront a situation in which you must choose different paths or behaviors, follow these steps:

1. Carefully consider the consequences of each choice.
2. Choose freely from among all the options.
3. Publicly affirm your values by sharing them with others.
4. Act out your values.

Values clarification is not a once-in-a-lifetime task, but an ongoing process of sorting out what matters most to you. If you believe in protecting the environment, do you shut off lights, or walk rather than drive, in order to conserve energy? Do you vote for political candidates who support environmental protection? Do you recycle newspapers, bottles, and cans? Values are more than ideals we’d like to attain; they should be reflected in the way we live day by day.

Enrich Your Spiritual Life

Do you attend religious services? Pray or meditate on a weekly basis? In a national survey, a majority of the members of the Class of 2011 answered yes: Eight in ten went to religious services frequently or occasionally, while a third prayed or meditated every week. These percentages are somewhat lower than in the past, but a growing number of students report frequent discussions of religion.

Whatever role religion plays in your life, you have the capacity for deep, meaningful spiritual experiences that can add great meaning to everyday existence. You don’t need to enroll in theology classes or commit to a certain religious preference. The following simple steps can start you on an inner journey to a new level of understanding:

- **Sit quietly.** The process of cultivating spiritual intelligence begins in solitude and silence. “There is an inner wisdom,” says Dr. Dean Ornish, the pioneering cardiologist who incorporates spiritual health into his mind-body therapies, “but it speaks very, very softly.” To tune into its whisper, you have to turn down the volume in your busy, noisy, complicated life and force yourself to do nothing at all. This may sound easy; it’s anything but.

- **Start small.** Create islands of silence in your day. Don’t reach for the radio dial as soon as you get in the car. Leave your earbuds on as you walk across campus but turn off the music. Shut the door to your room, take a few huge deep breaths, and let them out very, very slowly. Don’t worry if you’re too busy to carve out half an hour for quiet contemplation. Even ten minutes every day can make a difference.

- **Step outside.** For many people, nature sets their spirit free. Being outdoors, walking by the ocean, or looking at the hills gives us a sense of timelessness and puts the little hassles of daily living into perspective. As you wait for the bus or for a traffic light to change, let your gaze linger on silvery ice glazing a branch or an azalea bush in wild bloom. Follow the flight of a bird; watch clouds float overhead. Gaze into the night sky and think of the stars as holes in the darkness letting the light of heaven shine through.

- **Use activity to tune into your spirit.** Spirituality exists in every cell of the body, not just in the brain. As a student, you devote much of your day to mental labor. To tap into your spirit, try a less cerebral activity, such as singing, chanting, dancing, or drumming. Alternative ways of quieting...
your mind and tuning into your spirit include gardening, walking, arranging flowers, listening to music that touches your soul, or immersing yourself in a simple process like preparing a meal.

- **Ask questions of yourself.** Some people use their contemplative time to focus on a line of scripture or poetry. Others ask open-ended questions, such as What am I feeling? What are my choices? Where am I heading? Dr. Ornish ends his own daily meditations by asking, “What am I not paying attention to that’s important?”

  In her meditations, one minister often paints a lush scene with a golden meadow, a shade tree, and a gentle brook and invites the divine spirit to enter. “Rarely do I get an immediate answer or solution, but later that day something may happen—often just a random conversation—and I suddenly find myself thinking about a problem from a perspective I never considered before.”

- **Trust your spirit.** While most of us rely on gut feelings to alert us to danger, our inner spirit usually nudges us, not away from, but toward some action that will somehow lead to a greater good—even if we can’t see it at the time. You may suddenly feel the urge to call or e-mail a friend you’ve lost touch with—only to discover that he just lost a loved one and needed the comfort of your caring. If you ignore such silent signals, you may look back and regret the consequences. Pay a little more attention the next time you feel an unexpected need to say or do something for someone.

- **Develop a spiritual practice.**
  - **If you are religious:** Deepen your spiritual commitment through prayer; more frequent church attendance, or joining a prayer group.
  - **If you are not religious:** Keep an open mind about the value of religion or spirituality. Consider visiting a church or synagogue. Read the writings of inspired people of deep faith, such as Rabbi Harold Kushner and Rev. Martin Luther King, Jr.
  - **If you are not ready to consider religion:** Try nonreligious meditation or relaxation training. Research has shown that focusing the mind on a single sound or image can slow heart rate, respiration, and brain waves; relax muscles; and lower stress-related hormones—responses similar to those induced by prayer.

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**Consider the Power of Prayer**

Prayer, a spiritual practice of millions, is the most commonly used form of complementary and alternative medicine. However, only in recent years has science launched rigorous investigations of the healing power of prayer.

Petitionary prayer—praying directly to a higher power—affects both the quality and quantity of life, says Dr. Harold Koenig, director of Duke University’s Center for the Study of Religion/Spirituality and Health. “It boosts morale; lowers agitation, loneliness, and life dissatisfaction; and enhances ability to cope in men, women, the elderly, the young, the healthy, and the sick.”

People who pray regularly have significantly lower blood pressure and stronger immune systems than the less religious, says Dr. Koenig. They’re also less prone to alcoholism and less likely to smoke heavily, and are hospitalized less often. Science cannot explain the physiological mechanisms for what happens in human beings when they pray, but in cultures around the world throughout recorded history when people or their loved ones are sick, they pray.

Some scientists speculate that prayer may foster a state of peace and calm that could lead to beneficial changes in the cardiovascular and immune systems. Sophisticated brain imaging techniques have shown that prayer and meditation cause changes in blood flow in particular regions of the brain that may lead to lower blood pressure, slower heart rate, decreased anxiety, and an enhanced sense of well-being. Membership in a faith community provides an identity as well as support, although individuals vary in their religious practices and observances.

In recent research, praying for others has not improved their symptoms or recovery. In a study of patients undergoing heart procedures, prayers (whether by Christian, Muslim, Jewish, or Buddhist groups) and other complementary bedside therapies, such as imaging and therapeutic touching, did not measurably improve their outcome.
Will science ever be able to prove the power of prayer? No one is certain. “While I personally believe that God heals people in supernatural ways, I don’t think science can shape a study to prove it,” says Duke’s Dr. Koenig. “But we now know enough, based on solid scientific research, to recommend prayer, much like exercise and diet, as one of the best and most cost-effective ways of protecting and enhancing health.”

Cultivate Gratitude

A grateful spirit brightens mood, boosts energy, and infuses daily living with a sense of glad abundance. Although giving thanks is an ancient virtue, only recently have researchers focused on the “trait” of gratitude—appreciation, not just for a special gift, but for everything that makes life a bit better.

Gratitude is what researchers call “the quintessential positive personality trait, being an indicator of a worldview orientated toward noticing and appreciating the positive in life.” Grateful people feel more frequent and intense positive emotions, have more positive views of their social environment, use more productive coping strategies, sleep better, and appreciate their lives and possessions more. College students who keep gratitude journals report higher levels of optimism, feel better about their lives as a whole, are more likely to have made progress toward important personal goals, exercise more regularly, and report fewer negative health symptoms.

Men and women differ in the ways they perceive, experience, and express gratitude. In general women view gratitude as less complex, uncertain, and conflicting and as more interesting and exciting than men do. In research with college students, women responded to a gift with more gratitude and less sense of burden and obligation than men.

The reasons may be that women are more emotionally expressive and, with the exception of anger, experience emotions more intensely and frequently than men. In cross-cultural studies women’s most important values were understanding and improving relationships, while men rated power and achievement as higher priorities. Because they express more gratitude, women are more likely to receive additional benefits, whether in the form of nurturing or material possessions, from their benefactors.

In the last two decades gratitude has emerged as one of the most significant dimensions of positive psychology. Traditionally gratitude has been defined as appreciation for the helpful actions of others. However, psychologists have broadened this definition to include “a habitual focusing on and appreciating the positive aspects of life.” The “lifestyle orientation” of feeling grateful has been shown to reduce levels of stress over time and may be especially effective in promoting good sleep (discussed later in this chapter).

Among the most effective “gratitude interventions”—proven techniques for increasing appreciation—is keeping a diary and recording three things you are grateful for every day. In clinical studies, this
from the Greek for letting go, and that’s what happens when you forgive: You let go of all the anger and pain that have been demanding your time and wasting your energy.

To some people, forgiveness seems a sign of weakness or submission. People may feel more in control, more powerful, when they’re filled with anger, but forgiving instills a much greater sense of power. Forgiving a friend or family member may be more difficult than forgiving a stranger because the hurt occurs in a context in which people deliberately make themselves vulnerable.

When you forgive, you reclaim your power to choose. It doesn’t matter whether someone deserves to be forgiven; you deserve to be free. However, forgiveness isn’t easy. It’s not a one-time thing but a process that takes a lot of time and work involving both the conscious and unconscious mind.

**Your Strategies for Change**

**How to Forgive**

- **Compose an apology letter.** Address it to yourself, and write it from someone who’s hurt you. This simple task enables you to get a new perspective on a painful experience.
- **Leap forward in time.** In a visualization exercise imagine that you are very old, meet a person who hurt you long ago, and sit down together on a park bench on a beautiful spring day. You both talk until everything that needs to be said finally is. This allows you to benefit from the perspective time brings without having to wait for years to achieve it.
- **Talk with “safe” people.** Vent your anger or disappointment with a trusted friend or a counselor without the danger of saying or doing anything you’ll regret later. And if you can laugh about what happened with a friend, the laughter helps dissolve the rage.
- **Forgive the person, not the deed.** In themselves, abuse, rape, murder, and betrayal are beyond forgiveness. But you can forgive people who couldn’t manage to handle their own suffering, misery, confusion, and desperation.

Helping or giving to others enhances self-esteem, relieves stress, and protects psychological well-being.

**Forgive**

While “I forgive you” may be three of the most difficult words to say, they are also three of the most powerful—and the most beneficial for the body as well as the soul. Being angry, harboring resentments, or reliving hurts over and over again is bad for your health in general and your heart in particular. The word forgive comes
several stages in their journey to forgiveness. The initial response may involve anger, sadness, shame, or other negative feelings. Later, there’s a reevaluation of what happened, then reframing to try to make sense of it or to take mitigating circumstances into account. This may lead to a reduction in negative feelings, especially if the initial hurt turns out to be accidental rather than intentional.

Sleepless on Campus

You stay up late cramming for a final. You drive through the night to visit a friend at another campus. You get up for an early class during the week but stay in bed until noon on weekends. And you wonder: “Why am I so tired?” The answer: You’re not getting enough sleep.

You’re hardly alone. According to a recent report by the Centers for Disease Control and Prevention, only one-third of Americans say they get enough sleep. An estimated 50 to 70 million American adults suffer from sleep and wakefulness disorders. Women are more likely than men to report not getting enough sleep. African Americans reported getting less sleep compared with all other ethnic groups.35

In a national survey, 43 percent of respondents reported sleeping less than 7 hours a night during the week, with 20 percent of these sleeping less than 6 hours a night.36

Inadequate sleep has been linked to a host of problems, including mental distress, depression, anxiety, obesity, hypertension, diabetes, high cholesterol, and risky behaviors such as smoking, physical inactivity, and heavy drinking. Drowsy drivers are responsible for almost 20 percent of all serious car crash injuries.

Sleepy Students

College students, notorious for erratic sleep patterns, may be sleepier than ever. In the last decade the average sleep time of an undergraduate decreased from 7 hours 45 minutes to 7 hours. In a recent study, students reported sleeping an hour less than their ideal total sleep time; 43 percent slept less than five hours a night at least once a week.37 Cadets at the U.S. Military Academy average less than 5.5 hours of sleep on all school nights.38 (To see how you compare, see “How Do You Compare?: Student Night Life.”)

The most common sleep problems on campus are sleep deprivation and excessive daytime sleepiness, which can stem from many causes. Like other adolescents, undergraduates still in their teens may have what scientists call “delayed sleep phase” and not feel sleepy in the late evening. An estimated 59 percent of young adults between ages 18 and 29 describe themselves as
Health in the Headlines

Sleep Problems

Sleep problems have become an epidemic on college campuses and throughout the country. Research is revealing new insights into sleep and sleep disorders. Access the “Sleep Disorders” portal of Global Health Watch (found under Health & Wellness then Mental Health & Wellness) and scan the latest news. Then go to your online journal and comment about what you learned. Do you think sleep problems impact your health?

“night owls” who stay up late and have difficulty getting up early in the morning.39 Students also may not get adequate sleep because of late-night studying or socializing, a noisy residence hall or apartment, or an underlying sleep disorder (discussed later in this chapter). Many try to make up for sleep loss during the week by sleeping more on weekends—an average of 2.6 hours in a recent survey.40

In a recent study of 1,845 undergraduates, 86 percent reported waking up tired at least some of the time, and 27 percent had some type of sleep disorder. The most common was insomnia, which affected 15 percent of undergraduates.41 Too little sleep can affect every aspect of a student’s life, including moods, physical well-being, performance in class and on tests, and grades. Students with sleep disorders are more likely to have lower GPAs and poorer academic performance, possibly because of daytime sleepiness, lower levels of attention, and impaired memory and decision making.

Some students turn to medications and other substances either to sleep at night or to feel more alert in the day. About 5 percent of students use prescription sleep aids an average of two nights a week. Two percent use over-the-counter sleep aids, while 11 percent of those who use alcohol have a drink to help fall asleep. To boost alertness, 60 percent of undergraduates use some form of stimulant, including caffeinated beverages.42 Sleep problems start young. Nearly one-half of adolescents sleep less than eight hours on school nights; more than half report feeling sleepy during the day.43 College students are notorious for staying up late to study and socialize during the week and sleeping in on weekends.

In a national survey, three-quarters of undergraduates reported occasional sleep problems while 12 percent experienced poor sleep quality. The most common complaints are general morning tiredness and insomnia (Table 2.1). Risk behaviors linked with poor sleep include fighting, suicidal thoughts, smoking, and alcohol use.44

On average college students go to bed 1 to 2 hours later and sleep 1 to 1.6 hours less than students of a generation ago. When compared to exhaustion levels reported by workers in various occupations, college students score extremely high.

Sleep affects academic performance. In a recent study of undergraduates, the students reporting the poorest sleep quality had lower grades than those who slept better.45 Fortunately, college students can learn to sleep better. In an experiment with introductory psychology students—mostly freshmen—those who learned basic sleep skills significantly improved their overall sleep quality compared with students who did not receive such training.

Sleep’s Impact on Health

Sleep is essential for functioning at your best—physically and psychologically. The following are some of the key ways in which your nighttime sleep affects your daytime well-being:

- **Learning and memory.** When you sleep, your brain helps “consolidate” new information so you are more likely to retain it in your memory.

- **Metabolism and weight.** The less you sleep, the more weight you may gain. Chronic sleep deprivation may cause weight gain by altering metabolism (for example, changing the way individuals process and store carbohydrates) and by stimulating excess stress hormones. Loss of sleep also reduces levels of the hormones that regulate appetite (discussed in Chapter 6), which may encourage eating.

- **Safety.** People who don’t get adequate nighttime sleep are more likely to fall asleep

### Table 2.1 Sleepy Students

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took more than 30 minutes to fall asleep</td>
<td>18%</td>
</tr>
<tr>
<td>Had insomnia in the last three months</td>
<td>28%</td>
</tr>
<tr>
<td>Have difficulty falling asleep three or more days a week</td>
<td>11%</td>
</tr>
<tr>
<td>Have disturbed sleep three or more days a week</td>
<td>11%</td>
</tr>
<tr>
<td>Have nocturnal wakings three or more times a week</td>
<td>13%</td>
</tr>
<tr>
<td>Awakened too early three or more days a week</td>
<td>11%</td>
</tr>
<tr>
<td>Have general morning tiredness</td>
<td>82%</td>
</tr>
<tr>
<td>Used sleep medication at least once a week in past three weeks</td>
<td>2%</td>
</tr>
</tbody>
</table>

Your Strategies for Change

How to Sleep Better

• Keep regular hours for going to bed and getting up in the morning. Stay as close as possible to this schedule on weekends as well as weekdays.

• Develop a sleep ritual—such as stretching, meditation, yoga, prayer, or reading a not-too-thrilling novel—to ease the transition from wakefulness to sleep.

• Don’t drink coffee late in the day. The effects of caffeine can linger for up to eight hours. And don’t smoke. Nicotine is an even more powerful stimulant—and sleep saboteur—than caffeine.

• Don’t rely on alcohol to get to sleep. Alcohol disrupts normal sleep stages, so you won’t sleep as deeply or as restfully as you normally would.

• Although experts generally advise against daytime napping for people who have problems sleeping at night, a recent study of college students found that a 30-minute “power nap” lowers stress and refreshes energy with no disruption in nighttime sleep. (See “Sleep Power” in Labs for IPC.)

during the daytime. Daytime sleepiness can cause falls, medical errors, air traffic mishaps, and road accidents.

• Mood/quality of life. Too little sleep—whether just for a night or two or for longer periods—can cause psychological symptoms, such as irritability, impatience, inability to concentrate, moodiness, and lowered long-term life satisfaction. Poor sleep also affects motivation and ability to work effectively. Growing evidence suggests that disturbed sleep is associated with increased risk of psychiatric disorders.

• Life satisfaction. Sleep-deprived university students score lower on life-satisfaction scales. Students who get eight hours of sleep but shift their sleep schedules by as little as two hours suffer more depressive symptoms, lower sociability, and more frequent attention and concentration problems. They even get lower grades.

• Cardiovascular health. In a five-year study of middle-aged men and women, an extra hour of shut-eye was linked with healthier arteries and less build-up of calcium. Serious sleep disorders such as insomnia and sleep apnea have been linked to hypertension, increased stress hormone levels, irregular heartbeats, and increased inflammation (which, as discussed in Chapter 9, may play a role in heart attacks).

• Immunity/cancer prevention. If you get less than seven hours of sleep a night, you’re three times more likely to catch a cold. And if you sleep poorly, you’re five times more susceptible. Sleep deprivation alters immune function, including the activity of the body’s killer cells. For example, inadequate sleep at the time of a flu vaccination can reduce the production of flu-fighting antibodies. Keeping up with sleep may also help fight cancer. Harvard researchers have shown that women who work at night are at increased risk for breast and colon cancer, possibly because light at night alters production of melatonin, a hormone that helps put us to sleep.

What Happens When We Sleep?

A normal night of sleep consists of several distinct stages of sleep, divided into two major types: an active state, characterized by rapid eye movement (REM) and called REM sleep (or dream sleep), and a quiet state, referred to as non-REM or NREM sleep, that consists of four stages:

• In Stage 1, a twilight zone between full wakefulness and sleep, the brain produces small, irregular, rapid electrical waves. The muscles of the body relax, and breathing is smooth and even.

• In Stage 2, brain waves are larger and punctuated with occasional sudden bursts of electrical activity. The eyes are no longer responsive to light. Bodily functions slow still more.

• Stages 3 and 4 constitute the most profound state of unconsciousness. The brain produces slower, larger waves, and this is sometimes referred to as “delta” or slow-wave sleep (Figure 2.2).
After about an hour in the four stages of non-REM sleep, sleepers enter the time of vivid dreaming called REM sleep, when brain waves resemble those of waking more than those of quiet sleep. The large muscles of the torso, arms, and legs are paralyzed and cannot move—possibly to prevent sleepers from acting out their dreams. The fingers and toes may twitch; breathing is quick and shallow; blood flow through the brain speeds up; men may have partial or full erections.

**Sleep Disorders**

Three of four Americans struggle to get a good night’s sleep at least a few nights a week. According to the National Commission on Sleep Disorders Research, 40 million adults suffer from a specific sleep disorder, such as chronic insomnia or sleep apnea; an additional 20 to 30 million have occasional sleep difficulties. The estimated economic cost of sleeplessness may be higher than $300 million a year.

**Insomnia** Individuals with insomnia—a lack of sleep so severe that it interferes with functioning during the day—may toss and turn for an hour or more when they get into bed, wake frequently in the night, wake up too early, or not be able to sleep long enough to feel alert and energetic the next day. Most often insomnia is transient, typically occurring before or after a major life event (such as a job interview) and lasting for three or four nights. During periods of prolonged stress (such as a marriage breakup), short-term insomnia may continue for several weeks. Chronic or long-term insomnia, which can begin at any age, may persist for long periods. About three-fourths of insomniacs struggle to sleep more for at least a year; almost half, for three years.\(^{49}\)

For about a third of those with chronic insomnia, the underlying problem is a mental disorder, most often depression or an anxiety disorder. Many substances, including alcohol, medications, and drugs of abuse, often disrupt sleep. About 15 percent of those seeking help for chronic insomnia suffer from “learned” or “behavioral” insomnia. While a life crisis may trigger their initial sleep problems, each night they try harder and harder to get to sleep, but they cannot—although they often doze off while reading or watching a movie.

Sleeping pills may be used for a specific, time-limited problem—always with a physician’s supervision. (See Consumer Alert, p. 50.) In the long term, behavioral approaches, including the following, have proved more effective:

- **Relaxation therapy**, which may involve progressive muscle relaxation, diaphragmatic breathing, hypnosis, or meditation.
- **Cognitive therapy**, which challenges misconceptions about sleep and helps shift a poor sleeper’s mind away from anxiety-inducing thoughts.
- **Stimulus control therapy**, in which individuals who do not fall asleep quickly must get up and leave their beds until they are very sleepy.
- **Sleep restriction therapy**, in which sleep times are sharply curtailed in order to improve the quality of sleep.
Breathing Disorders (Snoring and Sleep Apnea) Although most people snore in certain positions or when they have stuffy noses, snoring can be a sign of a serious problem and increases the likelihood of health problems and of accidents. Caused by the vibration in tissues in the mouth and throat as a sleeper tries to suck air into the lungs, snoring can be so loud that it disrupts a bed partner or others in the same house. In young people, the cause is most likely to be enlarged tonsils or adenoids. In adults, extreme snoring may be a symptom of sleep apnea, which may itself be harmful to health.

Translated from the Greek words meaning “no” and “breath,” apnea is exactly that: the absence of breathing for a brief period. People with sleep apnea may briefly stop breathing dozens or even hundreds of times during the night. As they struggle for breath, they may gasp for air, snore extremely loudly, or thrash about.

Although apnea, which can lead to high blood pressure, stroke, and cardiovascular disease, may affect as many as 10 million Americans, most are unaware of the problem. More physical activity and fewer hours sitting can lead to improvements. Effective treatments include weight loss (if obesity is contributing to the problem), a nasal mask that provides continuous positive airway pressure (CPAP) to ensure a steady flow of air into the lungs, and, in severe cases, surgery to enlarge the upper airway.

Movement Disorders Restless legs syndrome, which may affect 12 million Americans, is a movement disorder characterized by symptoms that patients describe as pulling, burning, tingling, creepy-crawly, grabbing, buzzing, jitteriness, or gnawing. Many people with these symptoms have difficulty falling or staying asleep but do not realize that the cause is a medical disorder that can be treated with regular physical activity. Medications also are available.

Circadian Rhythm Sleep Disorders Problems involving the timing of sleep are called circadian rhythm disorders because they affect the basic circadian (“about a day”) rhythm that influences many biological processes. The most common causes are jet lag and shift work. Jet lag generally improves on its own within two to seven days, depending on the length of the trip and the individual’s response. Avoiding caffeine and alcohol and immediately switching to the new time zone’s schedule can help in overcoming jet lag.

A “shift work” circadian rhythm disorder consists of any inability to sleep when one wants or to stay alert when needed because of frequently changing work shifts. Behavioral strategies and good sleep habits can help. In addition, photo-therapy—exposure to bright light for periods ranging from 30 minutes to two hours—has shown promise as an experimental treatment to help shift workers adjust to their changing schedules.

How Much Sleep Do You Need?

Over the last century, we have cut our average nightly sleep time by 20 percent. More than half of us try to get by with less than seven hours of shut-eye a night. College students are no exception, with an average sleep time slightly less than seven hours, with little difference between men and women.

No formula can say how long a good night’s sleep should be. Normal sleep times range from five to ten hours; the average is seven and a half. About one or two people in a hundred can get by with just five hours; another small minority needs twice that amount. Each of us seems to have an innate sleep appetite that is as much a part of our genetic programming as hair color and skin tone.

To figure out your sleep needs, keep your wake-up time the same every morning and vary your bedtime. Are you groggy after six hours of shut-eye? Does an extra hour give you more stamina? What about an extra two hours? Since too much sleep can make you feel sluggish, don’t assume that more is always better. Listen to your body’s signals, and adjust your sleep schedule to suit them.

Are you better off pulling an all-nighter before a big test or closing the books and getting a good night’s sleep? According to researchers, that depends on the nature of the exam. If it’s a test of facts—Civil War battles, for instance—cramming all night works. However, if you will have to write analytical essays in which you compare, contrast, and make connections, you need to sleep to make the most of your reasoning abilities.
CONSUMER ALERT

Sleeping Pill Precautions

Chances are you’ve taken some form of sleep medication. After aspirin, they are the most widely used drugs in the United States. If sleeping pills seem the best option at a certain time in your life, use them with caution.

Facts to Know

• **Sleeping pills** are not a long-term solution to a sleep problem, but they can be helpful if travel, injury, or illness interfere with your nightly rest.

• **Prescription and over-the-counter sleep aids** can interact with other medications or a medical condition, so always check with your doctor before taking them.

• If taken too often or for more than several nights, some sleeping pills may cause rebound insomnia—sleeplessness that returns in full force when you stop taking the medication.

Steps to Take

• **Read carefully.** Take time to read through the informational materials and warnings on pill containers. Make sure you understand the potential risks and the behaviors to avoid.

• **Avoid alcohol.** Never mix alcohol and sleeping pills. Alcohol increases the sedative effects of the pills. Even a small amount of alcohol combined with sleeping pills can make you feel dizzy, confused, or faint.

• **Quit carefully.** When you’re ready to stop taking sleeping pills, follow your doctor’s instructions or the directions on the label. Some medications must be stopped gradually.

• **Watch for side effects.** If you feel sleepy or dizzy during the day, talk to your doctor about changing the dosage or discontinuing the pills.

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Sleeping Pills

The use of prescription sleeping pills has more than doubled since 2000, and increasing numbers of teenagers and young adults use these medications either occasionally or regularly. (See Consumer Alert.) An even greater number buy nonprescription or over-the-counter (OTC) sleep inducers. Others rely on herbal remedies, antihistamines, and other medications to get to sleep.

In the long run, good sleep habits, regular exercise, and a tranquil sleep environment are the cornerstones of high-quality sleep. But if circumstances, travel, injury, or illness have disrupted your sleep, you may consider sleep medications. Here is what you need to know about them.

• **Over-the-counter medications.** Various over-the-counter sleeping pills, sold in any pharmacy or supermarket, contain antihistamines, which induce drowsiness by working against the central nervous system chemical histamine. They may help for an occasional sleepless night, but the more often you take them, the less effective they become.

• **Dietary supplements.** The most widely publicized dietary supplement is the hormone melatonin, which may help control your body’s internal clock. The melatonin supplements most often found in health food stores and pharmacies are synthetic versions of the natural hormone. Although these supplements may help some people fall asleep or stay asleep and may sometimes help prevent jet lag, there are many unanswered questions about melatonin. Reported side effects include drowsiness, headaches, stomach discomfort, confusion, decreased body temperature, seizures, and drug interactions. The optimal dose isn’t certain, and the long-term effects are unknown. Other supplements—such as valerian, chamomile, and kava—have yet to be fully studied for safety or effectiveness in relieving insomnia.

• **Prescription medications.** The newest sleep drugs—nonbenzodiazepine hypnotic medications such as Lunesta (eszopiclone), Ambien/Ambien CR (zolpidem), and Sonata (zaleplon)—quiet the nervous system, which helps induce sleep. They’re metabolized quickly, which helps reduce the risk of side effects the next day. These medications are mainly intended for short-term or intermittent use.

• **Benzodiazepines,** such as Halcion (triazolam) and Restoril (temazepam), belong to an older class of sleeping pills that are more likely to cause drowsiness or headaches the next morning. They also may become habit forming.

The FDA has required stronger language about the potential risks of both nonbenzodiazepine and benzodiazepine sleeping pills. These include severe allergic reactions and complex sleep-related behaviors, including sleep-driving (driving while not fully awake after taking a sleeping pill with no memory of the driving).
Just like physical health, psychological well-being involves more than an absence of problems. By developing your inner strengths and resources, you become the author of your life, capable of confronting challenges and learning from them. As positive psychologists have discovered, you have greater control over how happy, optimistic, upbeat, and lovable you are than anyone or anything else. But only by consciously taking charge of your life can you find happiness and fulfillment. (See “Your Perfect Balance Point” in IPC.)

Here are some suggestions to enhance your emotional health now and in the future. Check the ones that you already practice and then work on adding others.

____ Recognize and express your feelings. Pent-up emotions tend to fester inside, building into anger or depression.

____ Don’t brood. Rather than merely mulling over a problem, try to find solutions that are positive and useful.

____ Take one step at a time. As long as you’re taking some action to solve a problem, you can take pride in your ability to cope.

____ Spend more time doing those activities you know you do best. For example, if you are a good cook, prepare a meal for someone.

____ Separate what you do, especially any mistakes you make, from who you are. Instead of saying, “I’m so stupid,” tell yourself, “That wasn’t the smartest move I ever made, but I’ll learn from it.”

____ Use affirmations, positive statements that help reinforce the most positive aspects of your personality and experience. Every day, you might say, “I am a loving, caring person,” or “I am honest and open in expressing my feelings.” Write some affirmations of your own on index cards and flip through them occasionally.

____ List the things you would like to have or experience. Construct the statements as if you were already enjoying the situations you list, beginning each sentence with “I am.” For example, “I am feeling great about doing well in my classes.”

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Well-Being Scale

**Part I**

The following questions contain statements and their opposites. Notice that the statements extend from one extreme to the other. Where would you place yourself on this scale? Place a circle on the number that is most true for you at this time. Do not put your circles between numbers.

**Life Purpose and Satisfaction**

1. During most of the day, my energy level is
   - very low
   - very high
   
   1 2 3 4 5 6 7
   
2. As a whole, my life seems
   - dull
   - vibrant
   
   1 2 3 4 5 6 7
   
3. My daily activities are
   - not a source of satisfaction
   - a source of satisfaction
   
   1 2 3 4 5 6 7
   
4. I have come to expect that every day will be
   - exactly the same
   - new and different
   
   1 2 3 4 5 6 7
   
5. When I think deeply about life
   - I do not feel there is any purpose to it
   - I feel there is a purpose to it
   
   1 2 3 4 5 6 7
   
6. I feel that my life so far has
   - not been productive
   - been productive
   
   1 2 3 4 5 6 7
   
7. I feel that the work* I am doing
   - is of no value
   - is of great value
   
   1 2 3 4 5 6 7
   
8. I wish I were different than who I am.
   - agree strongly
   - disagree strongly
   
   1 2 3 4 5 6 7

*The definition of work is not limited to income-producing jobs. It includes childcare, housework, studies, and volunteer services.
9. At this time, I have no clearly defined goals for my life 1 2 3 4 5 6 7 clearly defined goals for my life

10. When sad things happen to me or other people I cannot feel positive about life 1 2 3 4 5 6 7 I continue to feel positive about life

11. When I think about what I have done with my life, I feel worthless 1 2 3 4 5 6 7 worthwhile

12. My present life does not satisfy me 1 2 3 4 5 6 7 satisfies me

13. I feel joy in my heart never 1 2 3 4 5 6 7 all the time

14. I feel trapped by the circumstances of my life. agree strongly 1 2 3 4 5 6 7 disagree strongly

15. When I think about my past I feel many regrets 1 2 3 4 5 6 7 I feel no regrets

16. Deep inside myself I do not feel loved 1 2 3 4 5 6 7 I feel loved

17. When I think about the problems that I have I do not feel hopeful about solving them 1 2 3 4 5 6 7 I feel very hopeful about solving them

**Part II**

**Self-Confidence during Stress** (Answer according to how you feel during stressful times.)

1. When there is a great deal of pressure being placed on me I get tense 1 2 3 4 5 6 7 I remain calm

2. I react to problems and difficulties with a great deal of frustration 1 2 3 4 5 6 7 with no frustration

3. In a difficult situation, I am confident that I will receive the help that I need. disagree strongly 1 2 3 4 5 6 7 agree strongly

4. I experience anxiety all the time 1 2 3 4 5 6 7 never

5. When I have made a mistake I feel extreme dislike for myself 1 2 3 4 5 6 7 I continue to like myself

6. I find myself worrying that something bad is going to happen to me or those I love all the time 1 2 3 4 5 6 7 never

7. In a stressful situation I cannot concentrate easily 1 2 3 4 5 6 7 I can concentrate easily

8. I am fearful all the time 1 2 3 4 5 6 7 never

9. When I need to stand up for myself I cannot do it 1 2 3 4 5 6 7 I can do it easily

10. I feel less than adequate in most situations. agree strongly 1 2 3 4 5 6 7 disagree strongly

11. During times of stress, I feel isolated and alone. agree strongly 1 2 3 4 5 6 7 disagree strongly

12. In really difficult situations I feel unable to respond in positive ways 1 2 3 4 5 6 7 I feel able to respond in positive ways

13. When I need to relax I experience no peace—only thoughts and worries 1 2 3 4 5 6 7 I experience a peacefulness—free of thoughts and worries

14. When I am frightened I panic 1 2 3 4 5 6 7 I remain calm

15. I worry about the future all the time 1 2 3 4 5 6 7 never

**Scoring**

The number you circled is your score for that question. Add your scores in each of the two sections and divide each sum by the number of questions in the section.

- **Life Purpose and Satisfaction:** \[ \text{sum} \times 17 = \text{score}. \]
- **Self-Confidence during Stress:** \[ \text{sum} \times 15 = \text{score}. \]
- **Combined Well-Being:** (add scores for both) \[ \text{sum} \times 32 = \text{score}. \]

Each score should range between 1.00 and 7.00 and may include decimals (for example, 5.15).

**Interpretation**

- VERY LOW: 1.00 TO 2.49
- MEDIUM LOW: 2.50 TO 3.99
- MEDIUM HIGH: 4.00 TO 5.49
- VERY HIGH: 5.50 TO 7.00
These scores reflect the strength with which you feel these positive emotions. Do they make sense to you? Review each scale and each question in each scale. Your score on each item gives you information about the emotions and areas in your life where your psychological resources are strong, as well as the areas where strength needs to be developed.

If you notice a large difference between the LPS and SCDS scores, use this information to recognize which central attitudes and aspects of your life most need strengthening. If your scores on both scales are very low, talk with a counselor or a friend about how you are feeling about yourself and your life.

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Making Change Happen

Soul Food

There is more to you than intellect and passion, more than what resides between your ears or below your waist. Sometimes overshadowed by the speed and loud talk that surround you is the quieter, feeling part of you. Although immaterial, it is no less real. Tied to your spiritual self, it can be seen as your essence—what is always there and what is most essentially you.

If you feel you have been running too hard, need more down time, are close to burnout, or are in some way seeking to make better contact with your deeper self, “Soul Food” in Labs for IPC will help you provide the nourishment that your spirit needs. Here is a preview:

Get Real
To provide sound nutrition for the soul, you need to know what makes up such a diet. Here is the first step:

Assess your soul food diet.

For each of thirteen items, you will put a + (if you meet this daily requirement) or a − (if you don’t) in the space provided. Here are three examples:

• **Movement:** ____
  You consciously and intentionally pay disciplined attention to the movement of your body, be it in some slow, mindful exercise like yoga or tai chi, or in dance, or in stretching or walking.

• **Being:** ____
  You set aside a time when you are not multitasking—or tasking at all. It is one thing to do, and there is much to do. It is another thing to focus on being. Being there, being you—not working, worrying, or calculating. In this sitting-on-the-stoop or front-porch mode, you attune yourself to being alive in the moment.

• **Creating:** ____
  You daily take time to express your creative nature through painting, drawing, writing, composing music, choreographing dance, solving a problem, cooking—the possibilities are inexhaustible.

If you did not mark a plus by many activities listed in the lab, your soul food diet is insufficient. Progressing through the stages of change by completing the lab will help you correct this. We guarantee you are going to love the results.

Get Ready
We know that as a college student you are busy. You may need to cut or trim activities or reclaim time that currently goes to activities that do not feed your deeper, quieter self. Start with this step:

• **Examine your schedule.** When are you going to fit in, on a daily basis, time for soul food? Will your schedule require fine-tuning?

Get Going
In this stage your task is to provide yourself with soul food by completing each of thirteen activities a minimum of four times per week. Here are three examples of the minimum dietary requirements for feeding your soul:

• **Movement:** 5 minutes
• **Being:** 10 minutes
• **Creating:** 10 minutes

Lock It In
It will take time and practice to lock in the habit of feeding your soul on a regular basis. This is why we offer the following advice:

• Regardless of how often you have or have not done the activities in this lab, most of them are likely to seem completely natural. But some may present a challenge. Do not be concerned about whether you are moving, being, creating, or doing any of the other activities correctly. Just relax . . .
Review Questions

1. Lack of sleep
   a. improves memory and concentration.
   b. may cause irritability.
   c. may cause weight loss.
   d. enhances the immune system.

2. Which statement about sleep is correct?
   a. People cannot learn to sleep better.
   b. People dream during REM sleep.
   c. Drinking alcohol helps most people sleep better.
   d. Snoring may be a symptom of insomnia.

3. Normal shyness can usually be overcome by
   a. medication.
   b. psychotherapy.
   c. retail therapy.
   d. working at improving social skills.

4. Psychological health is influenced by all of the following except
   a. emotional health.
   b. physical agility.
   c. culture.
   d. a firm grasp on reality.

5. Which of the following activities can contribute to fulfillment?
   a. being a Big Sister or Big Brother to a child from a single-parent home
   b. being accepted by your first choice sorority or fraternity
   c. being a regular participant in an Internet chat room
   d. negotiating the price on a new car

6. Enduring happiness is most likely to come from
   a. winning a sweepstakes.
   b. work you love.
   c. a trip to the place of your dreams.
   d. having more money than your friends and neighbors.

7. Which activity is probably enriching the student’s spiritual life?
   a. Claire goes dancing with her friends.
   b. James takes a 15-minute walk along the river trail with a group of friends every day.
   c. Kate keeps a gratitude journal.
   d. Charlie goes to a taize music group with friends.

8. Which of these statements about self-esteem is true?
   a. Self-esteem is determined by genetics.
   b. Parents have little influence on a child’s self-esteem.
   c. A person’s sense of self-esteem can change over time.
   d. Self-esteem is seldom boosted by achievement.

9. People who pray regularly
   a. are less likely to get cancer.
   b. never get sick.
   c. recover from heart attacks more quickly.
   d. get better grades.

10. Individuals who have developed a sense of mastery over their lives are
    a. aware that their locus of control is internal, not external.
    b. skilled at controlling the actions of others.
    c. usually passive and silent when faced with a situation they don’t like.
    d. aware that their locus of control is external, not internal.

Answers to these questions can be found on page 672.

Critical Thinking

1. Would you say that you view life positively or negatively? Would your friends and family agree with your assessment? Ask two of your closest friends for feedback about what they perceive are your typical responses to a problematic situation. Are these indicative of positive attitudes? If not, what could you do to become more psychologically positive?

2. Were you raised in a religious family? If yes, have you continued the same religious practices from your childhood? Why or why not? If no, have you been to places of worship to explore religious practices? Why or why not?

3. What is your personal experience with lack of sleep? Have you suffered effects described in the text? Has cramming all night ever worked for you? Why or why not?
Media Menu

Visit www.cengagebrain.com to access course materials and companion resources for this text that will:

• Help you evaluate your knowledge of the material.
• Allow you to prepare for exams with interactive quizzing.
• Use the CengageNOW product to develop a Personalized Learning Plan targeting resources that address areas you should study.

• Coach you through identifying target goals for behavioral change and creating and monitoring your personal change plan throughout the semester using the Behavior Change Planner available in the CengageNOW resource.

Internet Connections

www.ppc.sas.upenn.edu
This positive psychology website at the University of Pennsylvania has questionnaires on authentic happiness and gratitude.

www.apa.org
The APA is the scientific and professional organization for psychology in the United States. Its website provides up-to-date information on psychological issues.

www.spiritualityhealth.com
Developed by the Publishing Group of Trinity Church, Wall Street in New York City, this website offers self-tests, guidance on spiritual practices, resources for people on spiritual journeys, and subscriptions to a bimonthly print magazine.

www.newvision-psychic.com/bookshelf/womenspirit.html
A comprehensive list of books dealing with women and spirituality.

www.beliefnet.com
An eclectic, informative guide to different forms of religion and spirituality.

Key Terms

The terms listed are used on the page indicated. Definitions of the terms are in the Glossary at the end of the book.

autonomy 39
culture 32
dominion 39
emotional health 32
emotional intelligence 33
locus of control 39
mental health 32
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Chapter 2
1. b; 2. b; 3. d; 4. b; 5. a; 6. b; 7. c; 8. c; 9. c; 10. a
Chapter 2


9. Ibid.

10. Seligman, Martin. Personal interview.


17. Ibid.

18. Larsen, Randy. Personal interview.


29. Ibid.


31. Ibid.


40. Ibid.

41. Ibid.

42. Taylor and Bramoweth, “Patterns and Consequences of Inadequate Sleep in College Students.”

43. “Sleep: Snooze or Lose.” University of Michigan Health Services, www.ums.mich.edu/wellness/other/sleep.html.


