

CHAPTER

The Disease-Resistant Personality

Optimism is the faith that leads to achievement...no pessimist ever discovered the secret of the stars, or sailed to an uncharted land, or opened a new doorway for the human spirit.

-Helen Keller

LEARNING OBJECTIVES

- Identify major stress buffers.
- Define the personality traits that help people resist disease.
- Identify healthful choices that will promote disease resistance.
- Describe personal qualities and coping styles highly associated with happiness and health.
- Suggest techniques to implement these qualities.

Too often we ask ourselves why someone became ill instead of how someone managed to stay well. As Pennsylvania State University's Evan G. Pattishall reflected, if we study twenty-five people who are exposed to the influenza virus and five of them get sick, "we tend to study the five who developed influenza, when we should be exerting even more effort studying the twenty who didn't become ill."

Howard S. Friedman echoed that sentiment when he wrote, "Each week the prestigious *New England Journal of Medicine* publishes a 'Case Record of the Massachusetts General Hospital,' detailing the pathology of an unusual or informative patient's case. There is no corresponding 'Case History of a Person Who Remained Well Throughout a Long Life.'"²

The World Health organization emphasizes that health is far more than the absence of disease—instead, it is about total *well-being*. So what are the essential features of such well-being? When studied closely, several principles emerge—principles that will be explored in detail throughout this book.

Researchers have long known that certain groups of people enjoy "remarkably good health and longevity." Among them are "Mormons, nuns, symphony conductors, and women who are listed in *Who's Who*." ³ What is it about the way these people live

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that provides such protection? Might it be that such abstractions as finding meaning, feeling love, finding fulfillment in accomplishment, or feeling hope play a role in diminishing the ill effects of stress? A pioneer in shifting the paradigm from disease to wellness about half a century ago, Abraham Maslow studied "self-actualizers" to determine their common characteristics, ways of thinking, and approaches to life in the hope that others might learn from them and have the same experience. Please review the summary of his findings provided in Appendix A (for easy repeat access.) The self-actualizers were highly functioning people who were making valuable contributions and who were fulfilled, happy, and mostly healthy. This emphasis on studying and implementing the characteristics of healthy, happy people requires a significant shift in perspective—away from the emphasis on avoiding the things that cause disease. In the same way, knowing what to do, rather than what *not* to do, is a great step forward in creating healthy behaviors.

The way we behave powerfully influences health, and our beliefs and philosophy of life direct our behavior. Whether we sip wine before dinner, start the day with a brisk walk, get enough sleep, smoke cigarettes, or eat fatty foods—all affect our health. (Suppose we felt great gratitude for all our body has done for us over the years, and we wanted to demonstrate that gratitude by caring for our body?) But could something other than *physical* behaviors play an even greater role in our ability to withstand stress and stay healthy? Researchers believe so. And the key may lie in personality—the way we habitually think and react to life—because these thoughts and reactions are apparently major determinants in how well we deal with life's inevitable stress.

The Role of Stress Resilience in Health

Chapter 2 details the way in which stress affects health. However, if stress research has shown one thing, it is that stress alone doesn't cause illness. How a person *reacts* to stress strongly influences whether that person becomes ill or stays well. In other words, your unique way of looking at things determines what impact stress has on you—and, to a large extent, determines your ability to stay healthy.

The decades of research that have focused on the human stress response and its associated ills have posed a fascinating question: why do some people who are submitted to chronic stress fall ill while others sail through unscathed? One of the researchers intrigued by that question was Suzanne Ouellette Kobasa, who taught psychology in the City University of New York's graduate school. She was familiar with the research that drew definite connections between stress and illness—but she believed there had to be a middle ground. Kobasa knew that it is impossible to avoid stress altogether; some stressful events (such as the death of a loved one) are completely beyond our control. Even if it were possible to completely avoid stress, she concluded that such would be "a prescription for staying away from opportunities as well as trouble. Since any change can be stressful, a person who wanted to be completely free of stress would never marry, have a child, take a new job, or move."

Kobasa had other concerns, too. The popular notion regarding stress and illness, she believed, ignored "a lot of what we know about people. It assumes we're all vulnerable and passive in the face of adversity. But what about human resilience, initiative, and creativity? Many come through periods of stress with more physical and mental vigor than they had before." 5







The more she pondered the stress-illness connection, the more engrossed Kobasa became with the people who didn't get sick under stress—and the more intent she became on discovering why. In 1975, she mobilized a group of her colleagues and went to work on a study of what she calls "the walking wounded of the stress war": a group of high-powered business executives faced with personal and career upheaval. They found that the stressor itself was not nearly as important to who suffered illness as were the attitudes the people had toward the stressor and the approach they took to deal with it. Kobasa and her team then described their results in terms of the differences between stress "hardiness" and stress vulnerability, which are discussed in more detail below. Many of the factors she identified were part of personality—meaning that personality could indeed determine the impact of stress on health.

So what is this thing called *personality*, and how does it affect health? As noted previously, personality has been seen as one's ways of perceiving the world and style of responding to it across time and situations. Hippocrates (460–370 bc), an ancient father of medicine, described "the four temperaments," each thought to be related to an excess of a body fluid or "humor" (the word *hormones* arises from this term):

- *Sanguine* type (thought to have too much *blood*, which led to "bleeding" sick people): sociable, impulsive, charismatic, confident, compassionate, creative problem solver
- Choleric type (too much yellow bile, which led to purging with vomiting agents): aggressive, passionate, energetic, angry, busy, controlling, prone to mood swings
- Melancholic type (too much black [mel] bile [chole], which led to using purging
 agents that cause black stools, like mercury): introverted, depressed, artistically
 creative, perfectionistic, preoccupied with tragedy
- Phlegmatic type (too much phlegm): calm, even, content, kind, prefer stability, controlled

The notions of these temperaments affecting illness persisted through the millennia right down to the prescientific "heroic" American medicine of the 1700s—remember, George Washington received bleeding and purgatives. So even before science confirmed the connection, the responses to life of people with different personality types have long been presumed to be associated with various illnesses—or, conversely, with health.

What did science show? It confirmed the general concept, but redefined the personality types. In 1992, Paul Costa and Robert McRae described the "five factor model" of personality: they tested and then characterized people as having more or less *Openness*, *Conscientiousness*, *Agreeableness*, *Extroversion*, and *Neuroticism* (OCEAN). (Chapter 3 discussed some of the past research on the health effects of a few of these five factors.) Today, these five factors are commonly used to study personality effects on health, most commonly using a test called the NEO Personality Inventory. You can take an online abbreviated test to find your own personality type at http://www.outofservice.com/bigfive/.7

Of the five factors, Neuroticism and Agreeableness appear to be most related to health, and good prospective studies show neuroticism and chronically depressed mood are clearly related to later proven serious disease and increased death rates. Of the five factors, Neuroticism and Antagonism (the opposite of Agreeableness) correlate highly with the cardiotoxic components of the Type A behavior pattern (discussed in Chapter 7). On the other hand, Optimism and Conscientiousnes, even measured in







childhood, predict longer life in multiple studies. ¹⁰ Such prospective designs, where the mental trait is present before the disease, avoids the speculation that the trait (such as depression or anxiety) was caused by the disease itself.

The best way to define personality, however, is still in flux. ¹¹ The five OCEAN categories are broad, and it is easier to study more limited components of each (such as anger, depression, or compassion). One of the shortcomings of studies of personality and health is that many of them depend more on self-reported symptoms than on organic disease, and people with the neurotic trait get more symptoms even when the disease is not present. ¹²

The good news is that personality types are not as unchangeable as once thought. If you have characteristics that put you at risk, they can be changed with conscious effort. But without such effort, personality traits tend to remain the same. Twin studies show that about half of your personality is genetically influenced and about half is learned. (Chapter 3 defined some risky characteristics to avoid or change.) More practically useful is to define the positive, health-promoting characteristics you want to create and nurture—the personality qualities toward which to transform. That is the emphasis of this chapter.

Early Studies of Who Gets Infected

Much of the redefining of personality has to do with varying styles of *responding to stress*. For example, classical older studies found that stress effects on immunity impacted who would get tuberculosis when exposed to it. The Irish are one example. When transplanted by the thousands to the eastern seaboards of America during the last century, their standard of living improved dramatically. Conditions were much cleaner, and they had plenty of food to eat—in contrast to the conditions in Ireland, where they had faced starvation. In spite of the improved conditions and nutrition, the death rate from tuberculosis among the Irish immigrants soared. While the transplanted Dubliners were better housed and better fed, their tuberculosis death rate was 100 percent higher than it was during the same period in Dublin, where the conditions were much worse. Why did the Irish die of tuberculosis despite such dramatically improved conditions? Not surprisingly, many of them had not wanted to migrate to America, and they were unprepared for the discrimination they faced.¹⁴

In another example, when the American Indians were forced off the Plains and onto reservations (often within only a few miles of where they had lived), they had much better sanitation and a higher standard of living in their new situations. Considering physical conditions alone, they should have enjoyed much better health. But that didn't happen. Again, deaths from tuberculosis increased. Why? The Indians were uprooted from the land of their forefathers. Their traditions were in danger. They felt powerless—and they gave in. Curiously, when people give in to their struggles, their immune system—which usually protects them from diseases like tuberculosis—also "gives in."

A third example is the Bantu natives of South Africa. They were moved in droves from their native villages into Johannesburg, where sanitation was dramatically better and where food and housing were vastly improved. Thousands became ill with tuberculosis. When hundreds of the dying were permitted to return to their native villages to die, the tuberculosis bacillus was then spread throughout the villages, but the people who had remained in the villages didn't get sick. ¹⁶







Was it the move alone that made these populations sick? To answer that question, consider the Chinese and Hungarian refugees who overcame great odds and dangerous political upheaval to immigrate to the United States. Although their new home represented a place vastly different than the one they left, they thrived. Why? Rather than seeing this upheaval as negative, they viewed their new lives as an opportunity and a challenge. This difference in perception about the changes with which they were confronted—a sharp contrast to the attitudes of the Irish, the Native Americans, and the Bantu—created very different health outcomes.

The effect is even more pronounced in populations in which one segment has a different outlook than another. Take, for example, a group of Portuguese who immigrated to Canada for better employment. The men who immigrated saw the move as a chance for a better job and a new future; their health actually *improved* after their move to Canada. Their wives saw the move as a disruption of their valued family ties in Portugal, and they were more likely to get sick. ¹⁸ All of this reveals that some ways in which we respond to stress worsen health, while other ways we respond to stress actually enhance health.

Mechanisms

Having studied the effects of personality on health for many years, Dr. Timothy W. Smith of the University of Utah suggests differing potential mechanism for how this happens. ¹⁹ Most of these describe personality as affecting how one appraises and copes with stressful situations, thus affecting the neuroendocrine and immune physiology of the stress. But it is also possible that personality affects health behaviors in response to stress—such as overeating; using drugs, tobacco, or alcohol to cope; or socially withdrawing—and how those behaviors lead to more stress. Nevertheless, even when these behaviors are controlled for in the studies, personality still exerts its health effects.

Stress Buffers

Stress buffers are elements that alleviate the harmful effects of stress. Researchers have generally shown that social support, a sense of control, physical fitness, a sense of humor, self-esteem, optimism, problem-solving coping styles, and Kobasa's "hardiness" personality all help to buffer stress.²⁰

In her classical studies on stress and illness, Kobasa and her colleague Salvatore Maddi commented, "We could not believe that the same human imagination responsible for urbanization and industrialization was somehow incapable of coping with the...ensuing pressures and disruptions. It seemed obvious that the individual differences in response to stress were important." We'll explore their fascinating findings of "stress hardiness" a bit later.

Other researchers have found the principles of stress hardiness to be remarkably consistent. Lawrence Hinkle and his associates in the departments of medicine and psychiatry at New York Hospital's Cornell Medical Center studied mind-body issues over a twenty-year period. They found that personality traits had a definite bearing on health.







They concluded that those with "a good attitude and an ability to get along with other people" enjoyed the lowest frequency of illness.²²

In another New York study, two psychiatrists, an endocrinologist, and a cancer specialist teamed up to determine the stress reactions and hormonal changes that occurred when people were faced with a truly life-threatening situation. To test their theories, they picked a group of thirty women who were undergoing biopsies for breast tumors at Montefiore Hospital and Medical Center.

To determine the amount of "physiological distress" each woman was suffering, researchers did tests to determine blood levels of cortisol—a hormone secreted by the adrenal gland in response to stress. Researchers measured the amount of cortisol each day for the three days preceding each woman's biopsy. At the end of the study, the researchers concluded that the crisis of possibly having cancer wasn't what determined how much or how little distress each woman experienced. Instead, the determining factor was each woman's "psychological defenses," or coping style—especially her outlooks and beliefs. For example, the lowest amount of the adrenal hormone was secreted by a forty-five-year-old woman who consistently used faith and prayer to deal with life's stressful events. The woman who fared the next best was a fifty-four-year-old who had a healthy philosophical acceptance of adversity.

In other words, resiliance is a greater determining factor than the stressor itself. Some key components that improve well-being in the face of stress include caring love (being committed to the fulfillment of the other), responsible free will (creating your own life experience and influencing events), integrity (being true to core values), challenge (enjoying growth), and hope (feeling positive expectation). The studies cited throughout this book confirm that these same resilient qualities have powerful effects on measurable health. Later we'll discuss how these same principles also underlie spiritual well-being (see Chapter 15). This group of resilience characteristics, then, mediates the crossover between mental, physical, and spiritual well-being.

Personality Traits That Keep Us Well

The cumulative results of studies conducted over the past three or four decades—Kobasa's as well as others—show beyond a doubt that certain personality traits keep us well, boost our happiness, and even improve both our behavioral and immune responses. Perhaps most convincing was a study of 650 children in Hawaii.

In their book *Vulnerable But Invincible*, researchers Emmy Werner and Ruth Smith report their study of the 650 children who were born and reared on the island of Kauai in Hawaii. The children in the study were followed from a few months before their birth until they were in their early twenties. Each was assessed at regular intervals with a battery of interviews, questionnaires, and examinations; researchers monitored the health records of each child closely.²³

By all standards, these children were at high risk. All were born into poor families and lived in chronic poverty. Many were born to single mothers, some of whom were depressed or schizophrenic. Of those who did have fathers in the home, the fathers were semiskilled or unskilled laborers. More children were born prematurely than would have been expected; many were victims of severe perinatal stress. The mothers had little formal education (none had graduated from high school). The families themselves were plagued by a multitude of problems.







The stresses didn't end there. As psychologist Robert Ornstein and physician David Sobel put it:

[These children] came of age in the years 1955 to 1979—a time of unprecedented social change. They had to deal with the influx of many newcomers from the U.S. mainland during the long war in Southeast Asia and later with the burgeoning of tourism. They witnessed the assassination of one president and the resignation of another. They were the first generation to deal with the invasion of the home by television. They faced unprecedented choices since they had access to contraceptive pills and mind-altering drugs.²⁴

The combination of these biological and social stresses took their toll on some of the children. By the age of ten—the first major interval used by the researchers—at least half of the children were in serious trouble. Many were in ill physical health, had serious behavioral problems, and had learning disabilities that impacted their ability to progress through the school system. By the age of eighteen, the next major follow-up period, an additional 25 percent—or three-fourths of all the children in the study—had very serious problems. Those who didn't have profound psychological problems often had learning disabilities, behavioral problems, and poor health. That didn't surprise anyone. After all, these kids had started out under the most dreadful conditions and had grown up in an environment charged with unrelenting stress. What did surprise researchers was the group of kids—approximately one-fourth of the group studied—who, despite all the stress, rallied. They prevailed with strong psychological adjustment, good health, and enviable school records. Ornstein and Sobel describe three of them:

Life did not start out well for Michael. His mother was sixteen years old, unwed, and lived with her mother and grandmother. She managed to hide her pregnancy from her own mother until the third trimester when she married a nineteen-year-old boy. The child's biological father was very much against the marriage. The mother did not receive any medical care until the seventh month of pregnancy, and Michael was born prematurely and weighed only four pounds ten ounces. Michael spent the first three weeks of his life in an army hospital. At two, Michael's adoptive father was sent with the army to Korea, where he remained for two years. At age eight, Michael's parents divorced and his mother left, leaving him with his father and three younger siblings.

Early life was also not easy for Kay. She was born to seventeen-year-old unmarried parents. They had both been asked to leave school because of the pregnancy, and the father was without a job. Family Court sent Kay's mother to a Salvation Army Home to have her baby; placing her for adoption was considered but rejected, and the parents were eventually married when Kay was six months old despite objections from their parents. Kay's parents later separated.

Mary got off to a rough start as well. Her mother's pregnancy occurred after many unsuccessful attempts to conceive and a previous miscarriage. Her mother was very much overweight and had various minor medical problems during pregnancy. She was hospitalized three times for severe false labor and eventually was in labor for more than twenty hours. During Mary's childhood her parents experienced financial difficulties, and her mother found it necessary to work outside the home for short periods. Between Mary's fifth and tenth birthdays, her mother had several major illnesses, surgeries, and two hospitalizations for "unbearable tension," nervousness, annoyance with her children, and fears that she might harm them.²⁵

How did things turn out for the three? Despite everything, they grew up to be healthy, well-adjusted, successful adults. Michael ranked at the top of his class and was







awarded a college scholarship. Well-liked by his peers, he was described as confident, persistent, self-assured, dependable, and realistic. Kay did well also. She was an alert, healthy, affectionate, and robust baby; as a child, she had above-normal grades in school and was described as agreeable, relaxed, and mentally normal. As an adult, she was described as poised, sociable, self-assured, respectful, and accepting of others as well as a person who made good use of the abilities she had. She planned to go into the entertainment field and to marry. Mary was described as having high self-esteem, persistence, concern for others, and an outgoing personality; she was willing to open herself up to new possibilities after only initial hesitancy. She planned to enroll in college and was keeping her future career goals open. At eighteen, Mary described herself this way:

If I say how I am it sounds like bragging—I have a good personality and people like me.... I don't like it when people think they can run my own life—I like to be my own judge. I know right from wrong, but I feel I have a lot more to learn and go through. Generally, I hope I can make it—I hope.²⁶

What made the difference? *Hope* seemed to be a key attitude with the children who prevailed over their difficult circumstances. So did *perseverance*. They were what Indiana psychiatric social worker Katherine Northcraft calls "transcenders"—people who, "in the worst of times, envision themselves as elsewhere, imagining that they can do great things despite their surroundings."²⁷ Also, despite difficult family situations, these resilient children developed *strong bonds* with a parent, grandparent, sibling, or other caretaker, usually early in life (almost always during the first year). When they felt confused or troubled, they sought help—but they were also children who eagerly *accepted challenge*. These children had personalities that kept them healthy and enabled them to overcome adversity. They were, in Kobasa's terms, "hardy."

Where do resilient traits come from? No one knows for sure. Some of them may be inborn. Werner found that most of the resilient children in her study had been alert, sociable, even-tempered, responsive infants. "There seems to be a group of children who temperamentally and probably constitutionally have a better chance of making lemonade out of lemons," she believes. Does that doom the rest—those who are introverted, shy, or difficult? Not necessarily, she says—it's just that "it's easier for those who are more outgoing to find support." 28

According to psychologist Ann Masten, associate director of the University of Minnesota's Institute of Child Development, the fact that Werner's resilient children had a strong adult figure is important. "When resilient adults talk about how they made it, virtually everyone mentions a key adult," she explains. That adult doesn't have to be a parent. In fact, in her study of more than two hundred resilient children, many found inner strength through bonds they developed with a neighbor, family friend, teacher, minister, or other respected adult.²⁹

Hardiness

Suzanne Kobasa studied a large group of Illinois Bell Telephone executives who lost their jobs when the telephone company monopoly divested and many new companies emerged.³⁰ She found that some of the newly jobless thrived—often even coming out of it better than before ("stress hardy")—while others were blown away by the difficulty ("stress vulnerable"). Those who were vulnerable had more physical illness. She then analyzed and compared how differently the two types approached life's







problems. Her later studies of other groups (such as lawyers under stress³¹ and women in medical offices) found the same differences. It was not the stressful events that were the most important; rather, it was their coping styles.

What were the common elements in those who did well? According to Kobasa, it's hardiness, "a set of beliefs about oneself, the world, and how they interact. It takes shape as a sense of personal commitment to what you are doing, a sense of control over your life, and a feeling of challenge." Her prospective study of 259 executives tracked their health over five years, checking their medical records. Under periods of stress, those managers identified at the beginning as high in a sense of control, commitment, and challenge ("hardy") were found to develop half the illness as those low in these qualities ("vulnerable"). 32

Kobasa thus defines the key components of hardiness as "the three C's": commitment, control, and challenge. *Commitment* is an attitude of purpose and meaning, making a difference to what is happening around you; *control* is the belief that you can influence events and that you are in charge of you, instead of becoming a victim; and *challenge* is the belief that change brings a chance for growth instead of the fear that change is threatening.³³

Commitment Commitment refers to believing in the importance and meaningfulness of your experiences and activities—an attitude of curiosity and involvement in what is happening around you. It means a commitment to yourself, your work, your family, and the other important values in your life. If spiritually inclined, it is a trusting commitment to the sources of one's spiritual empowerment. It is not a fleeting involvement but a deep and abiding interest. People committed in this way have a deep involvement with their work and their families, a deep sense of meaning, and a pervasive sense of direction in their lives. In one study involving students at Harvard Medical School, students best able to withstand stress were personally committed to a goal or mission of some kind.³⁴ Altruism is an important quality associated with commitment (see Chapter 16).

A sense of commitment may drive us to a hectic pace filled with plenty of pressures; however, it is healthy because there is a drive to live life to its fullest and there is a sense of mission in the work. The important element, say some researchers, is commitment to an ideal greater than oneself.³⁵ For some people, that commitment comes in the form of commitment to a religion or a way of living felt to be inspired; for others, it's a commitment to political reform or to a certain philosophy. Some healthy people have a deep sense of commitment to something as simple as a meaningful hobby. Each of these involves "making a positive difference" to something outside of one's self or to making something happen that is important to you. Thus, commitment involves a deep sense of *purpose and meaning*—both to one's life and work and to what is happening at the moment.

A perfect example is Mohandas K. Gandhi, a man who by all standards was a driven workaholic. He went on countless fasts, depriving himself of nourishment, and spent months in prison—one of the most stressful scenarios possible. Yet he was strong and healthy until his assassination at the age of seventy-seven. Many believe his good health was because of his unwavering commitment to become one of the world's great leaders and to win political freedom for his homeland without violence. Similarly, older people who retire *to* something that makes a difference in their world thrive much better than those who simply retire *from* something they want to escape.







Control A sense of control refers to the belief one has that his or her actions will create desired outcomes; control also refers to taking responsibility for one's choices. However, there is a wonderful paradox about control: the more you try to control the external world, the more out of control it begins to feel. Want a great example? Just try to control someone in your family who's acting belligerent. A healthy sense of control is not about controlling the world out there.

The flip side of the paradox is this: the more you accept what's out there and let go of trying to control external factors, choosing to respond in wise ways you would deeply admire, the greater your internal sense of control. Acceptance does *not* mean doing nothing about it; rather, it means acknowledging that what's there is there and that it needs to be dealt with wisely. This lets go of denial or blame and the sense of feeling like a victim. If you were to imagine how someone of great wisdom, strength, and goodness—a person you would admire—would respond to what has happened, and you choose to respond that way yourself, you will feel the kind of internal control we are talking about. It has to do with feeling control of yourself, not of the world outside yourself. A strong sense of internal control involves integrity to your deepest values. It requires taking full responsibility for how you respond.

This kind of control is the belief that you can cushion the hurtful impact of a situation by the way you look at it and react to it. The kind of control that keeps you healthy is the opposite of helplessness. It involves a deep sense of choice about how to be in this present moment with what is here. You can't control the past or the future. What you can control is how you are going to be and act right now. It's the refusal to be victimized. It is not the erroneous belief that you can control your environment, your circumstances, or other people; that kind of controlling behavior leads to illness, not health. The control that keeps you healthy is a belief that you can control yourself and your own reactions to what life hands you. This internal locus of control not only creates resilience (stress hardiness), but also has significant health effects (see Chapter 6).

In the Harvard Medical School study discussed earlier, the healthiest students were those who approached problem solving with a sense of control; the least healthy were those who were passive.³⁶ The healthiest and hardiest people are those who focus on what they can control, ignoring the rest. Hope and control are closely linked for these individuals: they believe that through skill, planning, diligent attention to detail, integrity, and kindness, every problem has a solution.

We all want to be able to predict what will happen to us, but we can't reliably do so. We all crave a sense of mastery,³⁷ but the only way to feel that mastery is to stop blaming external events for controlling your life, feelings, or behavior and to accept responsibility for how you respond. The moment you point your finger in blame, your sense of control disappears. Forgiveness is a key to sensing this kind of control (see Chapter 15). A sense of *internal* control—a belief that you can control your *own* behavior, not necessarily that you can control the people and events around you—promotes health. It endows you with the belief that even if everything around you gets bad, you will still be fine.

Challenge Challenge is the ability to see change as an opportunity rather than as a threat—an opportunity for growth, creativity, and excitement. Excitement is critical because boredom puts people at a high risk for disease. ³⁸ People who are constructively challenged are more healthy; one German philosopher mused that one of the two biggest foes of human happiness is boredom. Excitement—and, as a result, challenge—surrounds







the good kind of stress (eustress) that *improves* health. This challenge component of stress hardiness may explain its close correlation with Openess to Experience in the Five-Factor personality model.³⁹

A person who is not healthy and hardy views change with fear, helplessness, and alienation. A healthy, hardy person can face change with confidence, self-determination, eagerness, and curiosity. Change in the form of creating improved newness becomes an eagerly sought-after challenge, not a threat. Joan C. Post-Gorden, psychologist at the University of Southern Colorado, says that healthy people don't even see the negatives because they thoroughly expect a positive outcome.⁴⁰ Once again, a sense of challenge is coupled closely with *hope*.

That healthy view of challenge is exemplified by Mary Decker Slaney, a world-class runner who broke four world records. The stress of competition is crushing—yet she stayed healthy and kept competing. When asked why, she responded, "I love it. Running is something I do for myself more than anything else." ⁴¹ Healthy competition is that prompting personal challenge and commitment, rather than having to prove oneself better than someone else. A good hurdler sees the hurdles as something to smoothly glide over. And since every life is filled with obstacles, it stands to reason that the way we view those obstacles—whether as crushing problems or as challenges to be eagerly met—determines in part how healthy we are.

A sense of challenge can be powerful. Research showed that among more than sixty HIV-positive gay men, those who treated their HIV-positive status as a challenge (even an opportunity to refocus their lives on that most important to them) and then developed strategies to deal well with it had improved natural killer cell activity and longer survivals. University of Miami psychiatrist Karl Goodkin, who spearheaded the study, observed that an active coping style, along with good social support, led to improvement of natural killer cell activity and immunity.⁴²

The enjoyment of challenge goes well beyond stress hardiness. It is also a key component in human happiness. In a classic study of the great—even joyful—moments in people's lives, Mihaly Csikszentmihalyi found that those moments did not come at times devoid of stress but rather at times when one was responding to a challenge with a sense of "flow": feeling control, often in connection with others, creatively rising to the occasion with a certain sense of handling the challenge in a great way. It was the "We did it!" moments that were the great ones.

Coherence and Connectedness Two more C's need to be added to Kobasa's "three C's." One is *coherence*—a "pervasive, enduring though dynamic feeling that one's internal and external environments are predictable and that there is a high probability that all things will work out as well as can be reasonably expected." This might also be called *hope*.

Another additional C of resilience is *connectedness*. Research verifies that stress-resistant personality traits include the ability to relate well to others and the ability to interact in a strong social network. The most vulnerable people are those who are socially isolated. The healthiest Harvard Medical School graduates sought out other people, were actively and empathically engaged with other people, and had strong social networks. Resilient connectedness also includes a sense of connection with nature and the cosmos, oneness with one's sources of spiritual strength, and, indeed, connecting with one's deepest, wisest self. The health effects of this connectedness will be further explored later (see Chapters 11–14).







Healthful Choices

People with a disease-resistant personality seem to make healthier lifestyle choices, which could be a factor in their ability to resist disease. For one, they tend to exercise regularly; 80 percent of the healthiest Harvard Medical School students engaged in regular aerobic exercise, while only 20 percent of the ill students did. Scientists at the Institute for Brain Aging and Dementia at the University of California, Irvine, have also shown that exercise increases the neurotrophic chemicals in the brain that help thinking nerve cells work better. The discontinuation of the second percentage of the second percent

The healthy students also relax for at least fifteen minutes a day. ⁴⁸ The more formal practice this relaxation takes, the better, but any form helps (see Chapter 20). In the Harvard study, healthy students limit refined sugars in their diet and use a minimum of "substances" (things they considered to be drugs or drug-like, including stimulants like nicotine and caffeine). ⁴⁹ Part of the reason "hardy" people under stress are more resistant to disease is that they engage more consistently in such healthy behaviors. ⁵⁰ And healthy behaviors like exercise and relaxation skills increase hardiness.

Thus the stress-resistant personality traits combine with healthy behaviors to resist disease. "When individuals have high health concern they are more likely to engage in appropriate health behavior if they are at the same time high in hardiness," one researcher concluded. "When hardy people become concerned about their health, they are more likely than nonhardy people to engage in appropriate health-protective behaviors." Part of stress resilience is a knack for problem solving.

The hardy (or disease-resistant) personality is summed up in a profile provided by Ornstein and Sobel:

A small, neat man in his mid-50s, Chuck L. introduced himself as someone who enjoys solving problems. In the company, his specialty is customer relations, even though he was trained as an engineer. His eyes light up as he describes the intricacies of investigating customer needs and complaints, determining the company's service capabilities and obligations, formulating possible solutions that appear fair to all parties, and persuading these parties to agree. He thinks customer relations work is more demanding as the company streamlines and approaches reorganization. Asked in a sympathetic manner whether this is making his job unmanageable, he notes an increase in stress but adds that the work is becoming all the more interesting and challenging as well. He assumes that the role he plays will become even more central as the company's reorganization accelerates. He looks forward to this and has already formulated plans for a more comprehensive approach to customer relations.

Chuck doesn't seem to neglect family life for all his imaginative and energetic involvement at work. He married in college, and the couple has two grown children. His wife has returned to school to finish a college degree long ago interrupted. Although her absence from the home causes Chuck some inconvenience, it is clear that he encouraged her. He is full of plans about how he can preserve a close home life. Should he find too much time to himself, he imagines he will get involved in useful community activities.

In the past, Chuck's family life has hardly been uneventful. His daughter's twoyear-old son died; then her husband divorced her, and she returned home for a year. This was a difficult time not only for her but for Chuck and his wife, who felt their daughter's pain and sense of failure in a very personal way. Chuck describes the long talks they had. Although he mentions their crying together, it is also clear that he was always searching for a way, a formula, to relieve mutual pain. He encouraged his







daughter to pick up the pieces of her life, learn from what had happened, and begin again. He tried to help his wife see that she had little responsibility in what had happened and that it was not the end of the world. He told himself the same thing. This difficult time, in his view, drew the three of them closer together.⁵²

Note how Chuck's resilient approach to difficult problems consisted of creating deeper *connectedness*, *hope*, and a sense of *internal control* ("We can deal well with this").

In a comprehensive year-long study of college students, researchers at Boston University School of Medicine concluded that a definite series of events precedes illness. Here's what they believe happens:⁵³ a person perceives a distressing life situation. For whatever reason, he or she is not able to resolve the distressing situation effectively. As a result, the person feels helpless, hopeless, and anxious; those feelings of lack of control weaken the immune system and thus the resistance to disease. Finally, the person becomes more vulnerable to disease-causing agents that are always in the environment.

The traits of a disease-resistant personality interrupt this cycle and therefore help prevent illness. With resilience, a sense of control and challenge replaces helplessness. When one expects to somehow deal well with the challenge, hope replaces hopelessness; both anxiety and vulnerability subside.

There's a real difference between the way healthy people and ill people look at things. ⁵⁴ Healthy people, for example, tend to maintain reasonable personal control in their lives. If a problem crops up, they look for resources and try out solutions. If one doesn't work, they try another one. People who are frequently ill, on the other hand, leave decisions up to others and try to get other people to solve their problems. Their approach tends to be passive. We of course are speaking of general patterns here. Anyone exposed to enough of a pathogen can get sick—and this pattern certainly does not imply that anyone with illness has a vulnerable personality. The issue is who gets sick the most and what can be done to best prevent that.

Researchers have observed that healthy people are generally committed to a goal of some kind, and they typically spend at least a few hours every week doing something that provides a sense of challenge or enhances their sense of meaningful participation in life. What they do holds personal significance for them. People who are ill, on the other hand, often report being bored; they are not able to find things that interest them. Healthy people generally seek out other people and are actively involved with them. Ill people, on the other hand, tend to be more socially isolated.

In discussing people who were able to overcome disease and heal themselves, *Psychology Today* editor Marc Barasch said that if "there is a thread that stands out, it is that each person, some readily, some reluctantly, wound up doing the opposite of what sick people are supposed to: rather than only trying to 'get back to normal,' they embarked on a voyage of self-discovery. Like early circumnavigators, they seemed to cling to an instinctive faith that the only way home was forward, into the round but unknown world of the self." 55

What all these experts are describing is resilience and hardiness. Following the initial phase of their landmark study at Illinois Bell, discussed earlier, Kobasa and Maddi began training the stressed telephone executives in hardiness; that is, they began helping them develop disease-resistant personalities. Specific health benefits came to the people who received the training. They not only enjoyed more job satisfaction but also had reduced anxiety, less depression, fewer physical ills (such as headaches), lower blood pressure, and better sleep. ⁵⁶







An entire spectrum of studies verifies the findings: people with the traits of a "disease-resistant" personality do indeed enjoy better health. They have fewer episodes of illness, even when people around them have contagious diseases. And if they do get ill, preliminary studies show that a resilient personality may help boost recovery. In fact, scientists have identified what they call a "self-healing personality"—and they say it's characterized by enthusiasm, alertness, responsiveness, energy, curiosity, security, and contentment. Scientists say "self-healing" people have a continual sense of growth and resilience; achieve balance in meeting their biological needs, gaining affection, and having self-respect; are good problem solvers; have a playful sense of humor; and have good relationships with others.⁵⁷ The large concept is that resilience in the face of mental stress translates to physical resilience when body systems are confronted with the stress of organic causes of disease.

Positive Psychology

Prior to World War II, the practice of psychology had three distinct goals: (1) to cure mental illness; (2) to help people make their lives happier, more productive, and more fulfilling; and (3) to identify and nurture exceptional talent and genius.⁵⁸ Once the war ended, psychology narrowed its focus to just one thing—curing mental illness. *Positive psychology* aims to bring attention back to the other two original goals: the pursuit of happiness and the nurturing of genius and talent.⁵⁹ Put simply, positive psychology changes the focus from the worst things in life to the things that make life worth living.⁶⁰

Martin Seligman, one of the founders of the positive psychology movement, believes that "the time has finally arrived for a science that seeks to understand positive emotion, build strength and virtue, and provide guideposts for finding what Aristotle called 'the good life.'"⁶¹

Seligman lists four long-term goals of positive psychology:⁶²

- 1. Foster better prevention by buffering.
- 2. Supplement available therapy techniques by training practitioners to identify and build on strengths.
- 3. Curtail the "promiscuous victimology" so pervasive in the social sciences.
- 4. Move psychology from the egocentric to the philanthropic.

Positive psychologists focus on resilience⁶³; turning points as opportunities for growth⁶⁴; optimism⁶⁵; meaning, personal goals, and virtue⁶⁶; relationships⁶⁷; creativity and genius⁶⁸; altruism⁶⁹; and positive feelings elicited by acts of virtue or moral beauty (something known as *elevation*)⁷⁰.

The millennial issue (2000) of the prestigious journal American Psychologist supported the aims of positive psychology with its focus on a fresh approach to human psychology. Rather than the traditional emphasis on mentally ill people and how to treat such mental illness, the article drew on seminal work studying highly effective, happy, and mentally healthy people. The focus was on determining the common elements of such well-being and happiness. Rather than getting rid of what makes people suffer, it asked how we might promote, even from an early age, patterns of responding to life through key principles that make life worth living. Five years later in the same journal, Martin Seligman, Christopher Peterson, and their colleagues reviewed the progress that had been made with this approach.







Some psychologists had been skeptical that negative personality characteristics were difficult to change; they felt these characteristics were basically "locked in." Others felt that people could indeed make the change to the positive qualities—and research in how to do that was just beginning at the time the article was published. Much of that new positive psychology research had been first directed toward clearly identifying the healthy traits to foster, and a great deal has been accomplished in this regard.

As part of their work, Seligman and Peterson published for the American Psychological Association a book describing these proven qualities; it was thought that their book, Character Strengths and Virtues: A Handbook and Classification (the CSV), 71 could do for well-being research what the Diagnostic and Statistical Manual of Mental Disorders had done for mental illness. Six virtues and twenty-four character strengths were well validated across forty countries and were nearly universally recognized as the keys to human happiness and well-being. These virtues and character strengths are shown in Table 4.1.72 These characteristics confirm the core resilience principles and further break them down into subcomponents, allowing more directed implementation. Regarding those virtues and strengths, Seligman believes that "each person possesses several signature strengths. These are strengths of character that a person self-consciously owns, celebrates, and exercises every day in work, love, play, and parenting.... [The good life is] using your signature strengths every day in the main realms of your life to bring abundant gratification and authentic happiness." 73

The review in 2005 also described some simple online interventions that have been shown to increase some of these qualities and to then significantly improve measures of both happiness and depression.⁷⁴ These interventions included practices as simple as:

- Write a letter of gratitude to someone who is particularly kind.
- Each day write down three things that went well and explain why.
- Take a test to identify personal strengths and then use one of these in a new way
 each day.

The increased happiness and reduced depression created by these simple one-week interventions lasted for six months, but the increase was even greater if the interventions were continued for longer than a week. However, in a field this young, much more research on implementing these positive principles is needed. What has been done so far does seem to show that old habits can be lastingly changed if one is motivated to do so. As you might suspect, the changes occur much more quickly if the methods used are experiential—a process in which you practice doing or visualizing the changes—rather than only thinking or talking about them. (For more information, see the six-step process at the end of this chapter.)

One extraordinary proof of the impact of these principles of resilience on long-term health outcomes came with George Vaillant's remarkable thirty-five-year study of 185 men who had been Harvard students⁷⁵ (a forty-five-year extension to age sixty-five included 178 men).⁷⁶ As sophomores in college, their typical styles for dealing with stress (coping styles) were studied. Their styles of responding were categorized into four groups: (1) denial (just don't deal with it); (2) blaming (victimizing: it's out there being done to me); (3) repression/intellectualization (burying it or intellectually explaining it away); (4) mature and adaptive. We all tend to use each of these methods from time to time, but the study identified each person's predominant style of coping and then followed each participant prospectively for thirty-five years.







CHAPTER 4

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Table 4.1 Classification of Six Virtues and Twenty-Four Character Strengths of Positive Psychology

	Virtue and Strength	Definition
1.	Wisdom and knowledge	Cognitive strengths that entail the acquisition and use of knowledge
	Creativity	Thinking of novel and productive ways to do things
	Curiosity	Taking an interest in all ongoing experience
	Open-mindedness	Thinking things through and examining them from all sides
	Love of learning	Mastering new skills, topics, and bodies of knowledge
	Perspective	Being able to provide wise counsel to others
2.	Courage	Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition (external or internal)
	Authenticity	Speaking the truth and presenting oneself in a genuine way
	Bravery	Not shrinking from threat, challenge, difficulty, or pain
	Persistence	Finishing what one starts
	Zest	Approaching life with excitement and energy
3.	Humanity	Interpersonal strengths that involve "tending and befriending" others
	Kindness	Doing favors and good deeds for others
	Love	Valuing close relations with others
	Social intelligence	Being aware of the motives and feelings of self and others
4.	Justice	Civic strengths that underlie healthy community life
	Fairness	Treating all people the same and according to notions of fairness and justice
	Leadership	Organizing group activities and seeing that they happen
	Teamwork	Working well as a member of a group or team
5.	Temperance	Strengths that protect against excess
	Forgiveness	Forgiving those who have done wrong
	Modesty	Letting one's accomplishments speak for themselves
	Prudence	Being careful about one's choices; <i>not</i> saying or doing things that might later be regretted
	Self-regulation	Regulating what one feels and does
6.	Transcendence	Strengths that forge connections to the larger universe and provide meaning
	Appreciation of beauty and excellence	Noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life
	Gratitude	Being aware of and thankful for the good things that happen
	Норе	Expecting the best and working to achieve it
	Humor	Liking to laugh and tease; bringing smiles to other people
	Religiousness	Having coherent beliefs about the higher purpose and meaning of life

Source: C. Peterson and M.E.P. Seligman, Character Strengths and Virtues: A Handbook and Classification (New York: Oxford University Press/Washington, DC: American Psychological Association, 2004).







Researchers looked at the men in their forties and found that they tended to cope the same way they had as sophomores in college. In other words, unless we consciously change the way we respond to life, we tend to just keep doing things the way we did as youth. Then at age fifty-three, researchers assessed the physical health of each man. Among those using the first three less adaptive styles, 37 percent had some form of chronic physical illness or had died. Of those responding in mature, adaptive ways, only 3 percent had chronic illness. When researchers assessed the men again at age sixty-five, the pattern was similar. That's impressive long-term data about the importance of creating a "mature adaptive style."

This kind of twelve-fold difference makes us ask what the key elements of this remarkably protective coping style are—and makes us wonder how we can learn to adopt that protective style and change from less mature styles. It appears that such a change can be made—your coping style can be changed if you consciously and experientially pursue the change (see Chapter 21).

Sounding almost repetitious with the above, the key elements of this health-giving "mature, adaptive style" appear to be (1) an internal locus of control (integrity to one's deep wisdom and values regardless of external pressures); (2) a sense of connectedness; (3) a sense of purpose and meaning (both for one's life and for the events currently occurring, including high altruism); (4) hope (optimism and positive expectation); and (5) constructive humor.⁷⁸ Also of great interest was the role of loving parents in teaching this style of responding.⁷⁹

Seligman sums up the theory of positive psychology in a way reflective of these exact elements:

Positive psychology takes seriously the bright hope that if you find yourself stuck in the parking lot of life, with few and only ephemeral pleasures, with minimal gratifications, and without meaning, there is a road out. This road takes you through the countryside of pleasure and gratification, up into the high country of strength and virtue, and finally to the peaks of lasting fulfillment: meaning and purpose. ⁸⁰

Practices and Methods for Increasing Resilience

Despite the research and scientific backup, disease resistance is an extremely individual thing. What works for one person might not necessarily work for another, so we need to exercise great caution and resist the tendency to create universal "formulas." In expressing that thought, Friedman wrote, "Self-healing personalities have an inherent resilience, but they are not identical. They share an emotional equilibrium that comes from doing the right combinations of activities appropriate for the individual."

Bernie Siegel, Yale cancer surgeon, sums up the entire personality/wellness picture by advising people to take control over their own lives and to have hope. Siegel concludes that there is no such thing as false hope, believing instead that hope is real and physiological. When working with cancer patients Siegel found that even people with dismal survival odds can get well. Keep in mind that a person with a terminal illness can choose to live "well" if the elements of wellness are known and enriched. Sometimes a dangerous illness is the catalyst to create that choice.

Is it possible to develop hardiness? Researchers believe so. But it appears to be far more effective to do it experientially (through experiences) than to just talk about it. Kobasa herself has two exercises she recommends to people who are trying to develop a more disease-resistant personality.







The first is called compensating through self-improvement. What it entails, she says, is an important strategy that helps you overcome stressful situations that you can't control by experiencing personal growth in an area you can control. Here's how it works: say the company you work for is purchased by a larger corporation, and your division is abolished as part of the merger. Or say a favorite brother-in-law is killed in a traffic accident. You can't control either of those things so, says Kobasa, you compensate. How? You might learn to pilot a small-engine plane, write the family history you've been researching for a decade, or learn a difficult foreign language that has always interested you. Simply stated, you focus your energies on a new challenge instead of on the stress you can't control. This strategy, she says, helps you feel confident and in control.

Kobasa's second strategy is what she calls reconstructing stressful situations. In essence, it's a clever way of "rewriting" your own history—only this time, you come out the winner. Here's how: start by mentally recalling a stressful event that happened to you; the more stressful the better, the more recent the better. Rehearse the whole thing in your mind, and concentrate on remembering as many details as you can. Now, write down three ways the event could have been worse. You might even feel some gratitude that it didn't turn out worse. Finally, write down three ways it could have been better; in other words, what could you have done to improve the situation? What did you learn from this? In other words, is there something of value—a purpose—in this experience that makes you wiser?

This kind of an exercise does three things for you, says Kobasa. First, it helps you realize that things weren't as bad as they could have been (a realization that, in itself, can help change your perspective on stress). Second, it gives you ideas about what to do better next time (ideas that can help relieve worry about the future). Third, and most important, it gives you a sense of control by teaching you that you can influence the way things turn out. And even more importantly, it helps you feel some personal control about how you will be or respond regardless of how it turns out.

Following are some additional suggestions on things you can do that might help increase your resilience:

- Do whatever you can to develop creativity, to find new ways of looking at things, or to transform confusion into order. The creative expressions you make through writing, playing a musical instrument, dancing, or painting can also help you work through inner strife.
- When confronted with a challenge, rely on keen insight. Ask tough questions; be a careful observer; use brainstorming techniques to come up with as many ways as possible to look at the situation. You can learn from the experience of others, but trust what inherently feels right to you.
- If you start to feel stressed, break your problems down into smaller "chunks" that you can face more easily. Take on the easiest challenges first; those help you gain confidence and make the next problem easier to solve.
- Change your perspective on problems: instead of seeing them as negatives, try finding the positives—the exciting challenges that can result. An upcoming professional examination is an undisputed stress; however, look at studying for it as a chance to hone your skills, increase your knowledge, and give yourself an edge for success in the job market.







• Do whatever you can to build your network of social support. If a friend has failed you, that's okay—start now to cultivate a circle of even better friends. As a result, identify what it means to be a good friend and *be* that. Laugh together. Develop a sense of humor, a sense of compassion, and empathy. Whatever happens, stay involved with the people around you—start a study group, join a church committee, get involved in a political campaign, or volunteer at your child's school.

Take time now to study carefully Appendix A, Appendix B, and Appendix C at the end of this book. They are placed there, instead of in this chapter, so you can easily return to them repeatedly and contemplate what you've learned. The qualities listed there derive from careful studies of "self-actualized" people, "highly effective people" and of the high-functioning but misunderstood "Type B" personality (the person who is protected from heart disease). Meditate on what specific situations would look like to you if you were looking through resilient eyes. Note how seeing the experience from this hardy standpoint changes it for you.

- 1. If you know (or can imagine) someone very much like the resilient people described in this chapter or in the appendixes, and if you admire the way they handle challenging situations, then do the following: imagine what that person would do in the challenging situation before you. Picture that person doing it.
- 2. Write down in some detail what you admire and would want to emulate about the way that person responds. Include physical details such as the look on his face, her body posture, the tone of voice, the action chosen, and his deeper intent: something you can see clearly. Your words and images create newness. Choose them wisely. What you admire and capture in writing reflects your own deeper wisdom and values about the way a good, wise, capable person would respond and initiates an active process. Trust this.
- 3. Visualize yourself doing it that way in a selected situation. First, try seeing it "out there" like a movie, until it feels good to you. Finally, put yourself into the movie and mentally experience behaving in this resilient way; this time, look out from within yourself at the situation. Feel what it is like to do it this new way.
- 4. Mentally experience responding to the challenge with a sense that you are in *control* of your response, handling it in a way that increases *connectedness*, seeing the larger *purpose* of this and *hopeful* of handling it wisely and well. Note that the very process of visualizing doing it well creates a sense of control and hope. (Throughout this book, you will see that the four italicized mental principles in this step are highly associated with not only resilience, but also better health.)
- 5. Repeat this mental visualization four or five times for that specific experience so that it penetrates the different levels of memory.
- **6.** Go through the same process for other situations, until you begin to respond in this way almost automatically.

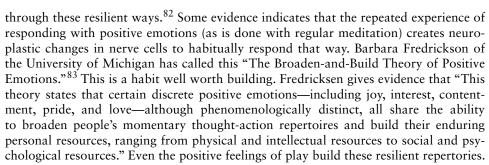
Developing resilience means developing an internal sense of control—of recognizing that you are ultimately the one in charge of your experience regardless of what you encounter.

Beyond this straightforward visualization process, both mindfulness and compassion meditation techniques have been shown to enhance the principles of positive psychology, moving from the small to "upward spirals" of habitual responding broadly









Overall, one of the best tips comes from psychiatrist Steven Wolin and developmental psychologist Sybil Wolin: "Get revenge by living well instead of squandering your energy by blaming and faultfinding." 84

Box 4.1

KNOWLEDGE IN ACTION

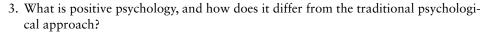
Take the personality test at www.outofservice.com/bigfive to help determine if there are areas that could be cultivated toward better health. For a current or past stressful event, ask yourself, "Did I handle it in a way that connected us more deeply (eustress) or disconnected us (distress)? Did I handle it in a way that increased my inner sense of control (wisdom), or diminished it (blame)? That increased hope and saw purpose, or created hopelessness and felt meaningless? If the answers undermined these five healthy principles, rethink the situation as to how you could have done it differently to enhance those principles. Visualize doing it the new, wiser way. Remember the five principles to filter more of your stress responses, and become aware of habitual response patterns that could be improved toward resilience. If necessary, use Kobasa's strategy for reconstructing stressful situations (discussed above).

CHAPTER SUMMARY

Creating health (total well-being) goes well beyond just avoiding illness. Five principles of stress resilience that strongly correlate with good mental and physical health include: (1) an internal locus of control (integrity to one's deep wisdom); (2) a sense of connectedness; (3) a sense of purpose and meaning (both for one's life and work and for life's events); (4) hope; and (5) constructive humor. Responding to life through these five principles turns distress to eustress, thus improving health. Positive psychology focuses on how to respond to life in ways that create health and happiness, rather than just getting rid of what causes distress.

WHAT DID YOU LEARN?

- 1. What is the five-factor model of personality? What are the five factors, and which of those factors most affect health?
- 2. Describe Kobasa's "three C's" of stress hardiness and what they mean.



- 4. What are four mental principles highly associated with better health outcomes? In the long-term Harvard study, how much health effect did these principles have?
- 5. Which of the characteristics of self-actualized people or effective Type B from the appendixes are most appealing to you? How do you plan to further develop those characteristics?
- 6. Describe a visualization process you could use to experience responding in resilient ways to stressful situations.

WEB LINKS

www.usnews.com (Search for "How Your Personality Affects Your Health" by Angela Haupt)

Questionnaires measuring character strengths and aspects of happiness: www.authentichappiness.sas.upenn.edu









ENDNOTES

- 1. Evan G. Pattishall, "The Development of Behavioral Medicine: Historical Models," *Annals of Behavioral Medicine* (November 1989): 43–48.
- 2. Howard S. Friedman, The Self-Healing Personality (New York: Henry Holt and Company, 1991), 99.
- 3. Claudia Wallis, "Stress: Can We Cope?" Time (June 6, 1983): 48-54.
- 4. Suzanne Ouellette Kobasa, "How Much Stress Can You Survive?" American Health (September 1984): 67.
- 5. Suzanne Ouellette Kobasa, "How Much Stress Can You Survive?" American Health (September 1984): 67.
- P. T. Costa Jr. and R. R. McCrae, Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Manual (Odessa, FL: Psychological Assessment Resources, 1992).
- 7. The Big Five Personality Test by Jeff Potter, accessed April 2011 at http://www.outofservice.com/bigfive/
- T. W. Smith and P. Williams, "Personality and Health: Advantages and Limitations of the Five-Factor Model," *Journal of Personality*, 60 (1992): 395–423.
- J. Suls and J. Bunde, "Anger, Anxiety, and Depression as Risk Factors for Cardiovascular Disease: The Problems and Implications of Overlapping Affective Dimensions," *Psychological Bulletin*, 131 (2005): 260–300. Also see T. W. Smith, "Personality as Risk and Resilience in Physical Health," *Current Directions in Psychological Science*, 15 (2006): 227–231.
- H. S. Friedman, et al., "Childhood Conscientiousness and Longevity: Health Behaviors and Cause of Death,"
 Journal of Personality and Social Psychology, 68 (1995): 696–703. Also see A. J. Christensen, et al., "Patient
 Personality and Mortality: A 4-year Prospective Examination of Chronic Renal Insufficiency," *Health Psychology*,
 21(2002): 315–320.
- 11. F. De Fruyt, B. J. De Clercq, L. de Wiele, and K. Van Heeringen, "The Validity of Cloninger's Psychobiological Model versus the Five-factor Model to Predict DSM-IV Personality Disorders in a Heterogeneous Psychiatric Sample: Domain Facet and Residualized Facet Descriptions," *Journal of Personality* 74, no. 2 (2006): 479–510. See also C. R. Cloninger, D. M. Svrakic, and T. R. Przybeck, T. R. (1993), "A Psychobiological Model of Temperament and Character," *Archives of General Psychiatry* 50, no. 12 (1993): 975–990.
- T. W. Smith and P. Williams, "Personality and Health: Advantages and Limitations of the Five-Factor Model," *Journal of Personality* 60 (1992): 395–423.
- McGue Bouchard, "Genetic and Environmental Influences on Human Psychological Differences," Journal of Neurobiology 54 (2003): 4–45
- W. F. Adams, Ireland and Irish Emigration to the New World (New Haven, CT: Yale University Press, 1932); and G. J. Drolet, "Epidemiology of Tuberculosis," in B. Goldberg, ed., Clinical Tuberculosis (Philadelphia, PA: F. A. Davis, 1946).
- 15. L. J. Moorman, "Tuberculosis on the Navajo Reservation," American Review of Tuberculosis 61 (1950): 586.
- 16. J. B. McDougal, Tuberculosis—A Global Study in Social Pathology (Baltimore, MD: Williams & Wilkins, 1949).
- L. E. Hinkle, "The Effect of Exposure to Culture Change, Social Change, and Changes in Interpersonal Relationships on Health," 9–44 in B. S. Dohrenwend and B. P. Dohrenwend, eds., Stressful Life Events: Their Nature and Effects (New York: Wiley, 1974).
- 18. E. Roskies, M. Iida-Miranda, and M. G. Strobel, "Life Changes as Predictors of Illness in Immigrants," 3–21 in C. D. Spielberger and I. G. Sarason, eds., *Stress and Anxiety* (Washington, DC: Hemisphere, 1977).
- 19. T. W. Smith, "Personality as Risk and Resilience in Physical Health," Current Directions In Psychological Science 15 (2006): 227–231.
- 20. Robert J. Wheeler and Monica A. Frank, "Identification of Stress Buffers," Behavioral Medicine 14, no. 2 (1988): 78-79.
- 21. Joshua Fischman, "Getting Tough," Psychology Today (December 1987): 26-28.
- 22. L. E. Hinkle and H. G. Wolff, "Ecologic Investigations of the Relationship between Illness, Life Experiences and the Social Environment," *Annals of Internal Medicine* 49 (1958): 1373–1388.
- Emmy E. Werner and Ruth S. Smith, Vulnerable but Invincible: A Longitudinal Study of Resilient Children and Youth, 3rd ed. (Adams Bannister Cox Publishers, 1989).
- 24. Robert Ornstein and David Sobel, The Healing Brain (New York: Simon & Schuster, 1987), 228-230.
- 25. Robert Ornstein and David Sobel, The Healing Brain (New York: Simon & Schuster, 1987), 228-229.
- 26. Robert Ornstein and David Sobel, The Healing Brain (New York: Simon & Schuster, 1987), 229.
- Kenneth Pelletier, Sound Mind, Sound Body: A New Model for Lifelong Health (New York: Simon & Schuster, 1994) 57
- 28. Susan Chollar, "The Miracle of Resilience," American Health (April 1994): 74.
- 29. Susan Chollar, "The Miracle of Resilience," American Health (April 1994): 74.
- 30. S. C. Kobasa, S. R. Maddi, and S. Courington, "Personality and Constitution as Mediators in the Stress-Illness Relationship," *Journal of Health and Social Behavior* 22 (1981): 368.







- 31. S. C. Kobasa, "Commitment and Coping in Stress Resistance among Lawyers," *Journal of Personality and Social Psychology* 42, no. 4 (1982): 707–717.
- 32. S. C. Kobasa, S. R. Maddi, and S. Kahn, "Hardiness and Health: A Prospective Study," *Journal of Personality and Social Psychology* 42, no. 1 (1982): 168–177.
- 33. Joan Borysenko, Minding the Body, Mending the Mind (Reading, MA: Addison-Wesley, 1987), 24.
- 34. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 1-3.
- 35. Howard S. Friedman, The Self-Healing Personality (New York: Henry Holt and Company, 1991), 110.
- 36. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 1-3.
- 37. Howard S. Friedman, The Self-Healing Personality (New York: Henry Holt and Company, 1991), 106.
- 38. Howard S. Friedman, The Self-Healing Personality (New York: Henry Holt and Company, 1991), 111.
- T. W. Smith and P. Williams, "Personality and Health: Advantages and Limitations of the Five-Factor Model," *Journal of Personality* 60 (1992): 406–407.
- Darius Razavi, et al., "Psychosocial Correlates of Estrogen and Progesterone Receptors in Breast Cancer," Lancet 335 (1990): 931–933.
- 41. Howard S. Friedman, The Self-Healing Personality (New York: Henry Holt and Company, 1991), 114.
- 42. K. Goodkin, et al., "Active Coping Style Is Associated with Natural Killer Cell Cytotoxicity in Asymptomatic HIV-1 Seropositive Homosexual Men," *Journal of Psychosomatic Research* 36, no.7, (1992): 635–650; also see C. L. Mulder, et al., "Active Confrontational Coping Predicts Decreased Clinical Progression Over a One-Year Period in HIV-Infected Homosexual Men," *Journal of Psychosomatic Research* 39, no. 8 (1995): 957–965.
- 43. Mihaly Csikszentmihalyi, Flow: The Psychology of Optimal Experience (New York: Harper Perennial, 1991).
- 44. Paula Tedesco-Carreras, "Maintaining Mental Wellness," National Student Nurses Association, *Imprint* (February/March 1988): 38.
- 45. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 1-3.
- 46. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 1-3.
- 47. A. A. Russo-Neustadt, et al., "Physical Activity and Antidepressant Treatment Potentiate the Expression of Specific Brain-Derived Neurotrophic Factor Transcripts in the Rat Hippocampus," *Neuroscience* 101, no. 2 (November 7, 2000) 305–312; also, Zhe Ying, "Exercise Restores Levels of Neurotrophins and Synaptic Plasticity Following Spinal Cord Injury," *Experimental Neurology* 193 (2005): 411–419.
- 48. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 1-3.
- 49. Raymond E. Flannery, Jr., "Towards Stress-Resistant Persons: A Stress Management Approach to the Treatment of Anxiety," *American Journal of Preventive Medicine* 3, no. 1 (1987): 26.
- T. Edward Hannah, "Hardiness and Health Behavior: The Role of Health Concern as a Moderator Variable," Behavioral Medicine (Summer 1988): 59–62.
- T. Edward Hannah, "Hardiness and Health Behavior: The Role of Health Concern as a Moderator Variable," Behavioral Medicine (Summer 1988): 59–62.
- 52. Robert Ornstein and David Sobel, Healthy Pleasures (Reading, MA: Addison-Wesley, 1989), 280-281.
- M. A. Jacobs, A. Spilken, and M. Norman, "Relationship of Life Change, Maladaptive Aggression, and Upper Respiratory Infection in Male College Students," *Psychosomatic Medicine* 31, no. 1 (1969): 31–44.
- 54. Raymond B. Flannery, "The Stress-Resistant Person," Harvard Medical School Health Letter (February 1989): 5-6.
- 55. Marc Ian Barasch, "The Healing Path: A Soul Approach to Illness," in *Proceedings of the Sixth International Conference of the National Institute for the Clinical Application of Behavioral Medicine*, The Psychology of Health, Immunity, and Disease, Hilton Head Island, vol. B (December 1994): 9.
- 56. Joshua Fischman, "Getting Tough," Psychology Today (December 1987): 26–28.
- 57. Howard S. Friedman and Gary R. VandenBos, "Disease-Prone and Self-Healing Personalities," *Hospital and Community Psychiatry* 23, no. 12 (1992): 1178.
- 58. M. E. P. Seligman, "Foreword: The Past and Future of Positive Psychology," pp. xi–xx in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Life Well-Lived (Washington, DC: American Psychological Association, 2003), xiv.
- 59. M. E. P. Seligman, Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment (New York: Free Press, 2002).
- 60. M. E. P. Seligman, Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment (New York: Free Press, 2002), 266–267.
- 61. M. E. P. Seligman, Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment (New York: Free Press, 2002), xi.
- 62. M. E. P. Seligman, "Foreword: The Past and Future of Positive Psychology," pp. xi–xx in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003), xvii.







103c ENDNOTES

- 63. C. D. Ryff and B. Singer, "Flourishing Under Fire: Resilience as a Prototype of Challenged Thriving," pp. 15–36 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- 64. E. Wethington, "Turning Points as Opportunities for Psychological Growth," pp. 37–53 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- 65. C. Peterson and E. C. Chang, "Optimism and Flourishing," pp. 55–79 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- 66. R. A. Emmons, "Personal Goals, Life Meaning, and Virtue: Wellsprings of a Positive Life," pp. 105–128 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003); and J. Nakamura and M. Csikszentmihalyi, "The Construction of Meaning through Vital Engagement," pp. 83–104 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- H. T. Reis and S. L. Gable, "Toward a Positive Psychology of Relationships," pp. 129–159 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- V. J. Cassandro and D. K. Simonton, "Creativity and Genius," pp. 163–183 in C. L. M. Keyes and J. Haidt, eds., *Flourishing: Positive Psychology and the Live Well-Lived* (Washington, DC: American Psychological Association, 2003).
- J. A. Piliavin, "Doing Well by Doing Good: Benefits for the Benefactor," pp. 227–247 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- 70. J. Haidt, "Elevation and the Positive Psychology of Morality," pp. 25–289 in C. L. M. Keyes and J. Haidt, eds., Flourishing: Positive Psychology and the Live Well-Lived (Washington, DC: American Psychological Association, 2003).
- 71. C. Peterson and M E. P. Seligman, *Character Strengths and Virtues: A Handbook and Classification* (New York: Oxford University Press/Washington, DC: American Psychological Association, 2004).
- Martin Seligman, et al., "Positive Psychology Progress: Empirical Validation of Interventions," American Psychologist 60 (2005): 410–421.
- 73. M. E. P. Seligman, Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment (New York: Free Press, 2002), 160–161.
- 74. Online information and participation in such interventions is available at the following websites: www.positivepsychology.org; www.apa.org/science/postivepsy/html; and www.bus.umich.edu/Positive/
- 75. G. E. Vaillant, "Natural History of Male Psychologic Health: Effects of Mental Health on Physical Health," *New England Journal of Medicine* 301, no. 23 (1979): 1249–1254; also G. E. Vaillant, "Natural History of Male Psychological Health. III. Empirical Dimensions of Mental Health," *Archives of General Psychiatry* 32, no. 4 (April 1975): 420–426.
- G. E. Vaillant and C. O. Vaillant, "Natural History of Male Psychological Health, XII: A 45-Year Study of Predictors of Successful Aging at Age 65," American Journal of Psychiatry 147, no. 1 (1990): 31–37.
- 77. G. E. Vaillant, "Natural History of Male Psychologic Health: Effects of Mental Health on Physical Health," New England Journal of Medicine 301, no. 23 (1979): 1249–1254; also see G. E. Vaillant, "Natural History of Male Psychological Health, IV: What Kinds of Men Do Not Get Psychosomatic Illness," Psychosomatic Medicine 40, no. 5 (1978): 420–431.
- 78. G. E. Vaillant, *Aging Well* (Boston: Little, Brown, 2000); also, Martin Seligman, *Learned Optimism* (New York: Knopf, 1990), 179–181.
- Linda G. Russek and Gary E. Schwartz, Feeling of Parental Caring Predict Health Status in Midlife: A 35-Year Follow-up of the Harvard Mastery of Stress Study 20 (1997): 1–13.
- 80. M. E. P. Seligman, Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment (New York: Free Press, 2002), xiv.
- 81. Howard S. Friedman and Gary R. VandenBos, "Disease-Prone and Self-Healing Personalities," *Hospital and Community Psychiatry* 23, no. 12 (1992): 1178.
- 82. E. L. Garland, B. Fredrickson, A. M. Kring, D. P. Johnson, P. S. Meyer, and D. L. Penn, "Upward Spirals of Positive Emotions Counter Downward Spirals of Negativity: Insights from the Broaden-and-Build Theory and Affective Neuroscience on the Treatment of Emotion Dysfunctions and Deficits in Psychopathology, Clinical Psychology Review 30, no. 7 (2010): 849–864.
- 83. Barbara L. Fredrickson, "The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions," *American Psychologist* 56, no. 3 (2001): 218-226.
- 84. Susan Chollar, "The Miracle of Resilience," American Health (April 1994): 75.



