Chapter 4 PHYSICAL AND MENTAL HEALTH ISSUES

Understanding Health: Physical Health as a Starting Point

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The 2009 death of pop singer Michael Jackson was initially received with much shock around the world.

The June 2009 death of pop singer and icon Michael Jackson was initially received with much shock around the world. However, following his death, it became clear that there were many unsettling aspects of Jackson's health habits that may have undermined his well-being and perhaps precipitated his untimely death. Many reports suggested that Jackson had great difficulties in sleeping; as such, it is widely believed that Jackson's alleged use of the drug *Diprivan* may have specifically caused his fatal coronary arrest. Jackson's apparent struggles with various physical and mental issues have been widely reported through the years (e.g., Taraborrelli, 2009).

The life and death of Michael Jackson is a clear reminder as to the importance of maintaining good physical and mental health. While I feel blessed with the fact that my family and I are in relatively good health, clearly there are many who are not as fortunate; and indeed, a health crisis of some sort can impact anyone at any time. So, let us heed the words of the famed Greek physician Hippocrates: "A wise man should consider that health is the greatest of human blessings, and learn how by his own thought to derive benefit from his illness."

UNDERSTANDING HEALTH: PHYSICAL HEALTH AS A STARTING POINT

health
a complex multifaceted dimension that encompasses physical, mental, emotional, spiritual, social, and vocational aspects of one's condition

physical health
the condition of the body's physical functioning

mental health
the logical organization of one's thoughts as he/she copes with life

social health
how an individual forms relationships with others and the ways by which he/she relates

emotional health
the ways that one expresses emotions and reacts to the emotions of others

Most of us strive to maintain a good sense of health. As a child, I still recall a placard in my dentist's office that effectively stated, *Without health, what is life?* Curiously, even as a youngster, that mantra has stayed with me throughout my life since I have witnessed those who either struck me as "healthy" or "unhealthy" individuals. As such, I have generally tried to emulate the behaviors of those "healthy" individuals while attempting to prevent those behaviors that I deemed to be "unhealthy." What does it mean to display **health**? This question is far more complex than it may initially appear. Health is a complex, multifaceted dimension that encompasses physical, mental, emotional, spiritual, social, and vocational aspects. Meggitt (2001) notes that the *World Health Organization (WHO)* defines health as follows:

> "… a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 1).

Meggitt (2001) further helps to differentiate the various dimensions of health. **Physical health** is arguably the easiest to measure since it involves assessing the body's physical functioning. There is much veracity to this point. For instance, most psychologists would agree that measuring one's *blood pressure* is generally more straight-forward than assessing a seemingly more amorphous dimension such as *personal happiness*. Our **mental health** pertains to the logical organization of our thoughts; we will have much more to say about this dimension a bit later in the chapter. **Social health** has to do with how we form relationships with others and the ways in which we relate. **Emotional health** subsumes the ways we express our own

emotions and react to others' emotions. **Spiritual health** involves a consideration of our personal codes, values, and morals as well as a sense of how to express our religious beliefs and practices. There is also **environmental health**, which encompasses the array of social and environmental factors that can influence our well-being, such as our occupation, pollution, and overcrowding. Meggitt (2001) adds an important point by noting that all of these facets of health are interconnected such that an improvement or deterioration in one can have a clear impact on another.

As you can already appreciate, the answer to "What is health?" is quite elusive in many ways. Let us probe this question a bit further. First, you may have been surprised to read that good health is not the equivalent of being free of disease. Interestingly, there is just as much (if not more) controversy in the literature as to how psychology and medicine should define **disease**. Stein and Baldwin (2000) take a more conservative view of disease by suggesting that it should be primarily viewed as a "systemic, physiological, or biochemical abnormalit[y]" (p. 41). This view tends to emphasize the physical aspects of health and disease, such as whether one is showing physical signs of cancer or heart disease.

spiritual health
a consideration of one's personal codes, values, and morals, as well as a sense of how to express religious beliefs and practices

environmental health
encompasses the array of social and environmental factors that can influence our well-being, such as our occupation, pollution, and overcrowding

disease
a systemic, physiological, or biochemical abnormality

In order to further appreciate the subtle distinction between the constructs of health and disease, consider the definition of **sexual health**. Robinson and colleagues (2002) suggest that sexual health is akin to a positive sense of one's sexuality, including personal knowledge, responsibility, and self-acceptance, as well as an ability to share intimacy with one's partner. This definition is consistent with our earlier discussion that the dimension of health has many facets to it, such as emotional, mental, social, spiritual and physical components. Edwards and Coleman (2004) add that it is also reasonable to view sexual health as the absence of disease—but that point in and of itself does not completely define sexual health. So, for instance, one could be free of the *human immunodeficiency virus (HIV)* that causes **Acquired immune deficiency syndrome (AIDS)**—or the disease that can ravage the immune system and potentially lead to death due to intimate contact, such as unprotected sex or sharing of drug paraphernalia—and yet, still lead a life that is the exact opposite of sexual health. Perhaps due to a growing sense that AIDS can be a controllable disease, many have pointed out that many heterosexual adolescents and young adults often still take a lax attitude about risky sexual behavior (e.g., Fergus, Zimmerman, & Caldwell, 2007). Given that AIDS initially affected the homosexual community so dramatically in the 1980s, it is surprising that many gay men still do not use protection (e.g., Garofalo et al.,

With the help of health care professionals we can find out about our health.

sexual health
akin to a positive sense of one's sexuality, including personal knowledge, responsibility, and self-acceptance, as well as an ability to share intimacy with one's partner

acquired immune deficiency syndrome (AIDS)
the disease that can ravage the immune system and potentially lead to death due to intimate contact, such as unprotected sex or sharing of drug paraphernalia

2007). This example clearly highlights that one can technically be free of disease but not practicing healthful behaviors.

Leibson and colleagues (1999) offer another important point about health: It has both *subjective* and *objective* qualities. As we noted earlier, particularly in the context of discussing physical health, there are a number of concrete measures that can be taken in order to gauge your health. You or I can fairly easily measure several of these variables on our own, such as our *weight*, *height*, and *pulse*. With the assistance of a health care professional, you can usually find out the values of other critical indices of your health, such as our *blood pressure*, *cholesterol*, *fasting glucose (sugar) level*, and *white blood cell count*. Interestingly though, as Leibson et al. (1999) point out, there can often be a discrepancy between an objective and subjective measure of health. You might claim to your doctor that you (subjectively) feel ill, yet your physician may claim that there is no (objective) evidence to substantiate that claim. Particularly in the realm of mental health (as we'll consider), you may claim that you weren't experiencing any personal problems, yet your physician or others may suggest otherwise. As we'll highlight throughout this chapter, much of the study of health involves navigating the tug that is often present between these physical and objective markers.

TO SUM UP …

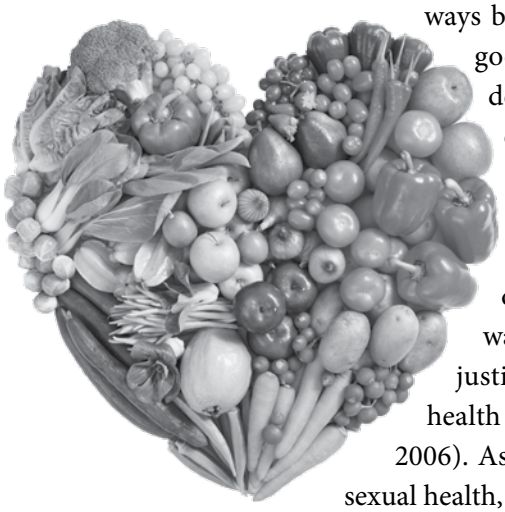
- Health is a complex multifaceted dimension that involves physical, mental, emotional, spiritual, social, vocational, and environmental aspects.
- Physical health involves assessing the body's physical systems.
- Health is not defined as the mere absence of disease. It is possible to be free of disease and yet still be unhealthy.
- Health has both subjective and objective qualities. Subjective qualities refer to your personal feelings about health and disease whereas objective qualities refer to the outside evidence that speaks to your health or disease. Sometimes, there is a discrepancy between the two.

PROMOTING HEALTHY BEHAVIOR: AN OVERVIEW OF PHYSICAL, BEHAVIORAL, AND PSYCHOLOGICAL FACTORS

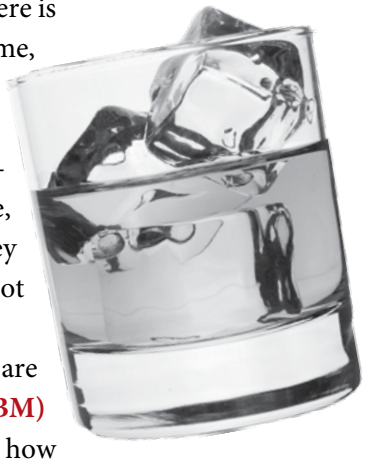
Would you believe that, of all things, a popular superhero movie could actually deliver an important health tip? There's a scene in the film *Spiderman 2* where Spiderman's alter ego, Parker (played by actor Tobey Maguire), quickly makes use of some of his superhuman strengths in order to avert an accident. Upon witnessing Parker's feats, two young boys question him as to how he was able to use such seemingly superhuman powers. Parker utters a very matter-of-fact response by suggesting that working out, getting plenty of rest, and eating lots of green vegetables were key. When they were

younger, I would often remind my two sons about this *Spiderman 2* quote since it absolutely creates a basic truth about **health promotion**. Health promotion refers to the ways by which we foster, encourage, and maintain good health through our personal and group decisions as well as through our societal and educational systems. In just a moment, we'll actually focus a bit more on the importance of diet, exercise, and sleep to our health.

health promotion
the ways by which we foster, encourage, and maintain good health through our personal and group decisions as well as through our societal and educational systems



Interestingly, emotion can serve as a double-edged sword in that it can be used in ways to encourage healthy living or subjectively justify why one should not be concerned with health promotion (e. g., Pravettoni & Maglioretti, 2006). As we noted in the previous section regarding sexual health, individuals sometimes believe that AIDS and other sexual diseases won't affect them personally or that there is no need to worry about these ill effects. How do we combat such attitudes? For some, education about these health issues is key (e.g., Simpson & Freeman, 2006). For others, a moderate amount of *fear* can help to promote behavioral change (e.g., Hale & Dillard, 1995) in that if one can be convinced that one's behaviors and cognitions are unhealthy in some way, then change can occur (e.g., Lench & Levine, 2005). The problem though is that many times individuals are well aware that they are partaking in potentially destructive behavior, such as alcohol abuse, but cannot or will not change (Nace, 2003).



You may be still intrigued with the question of why and when individuals are concerned with health promotion. Rosenstock's (1990) **health belief model (HBM)** is generally viewed as one of the most important frameworks for understanding how individuals assess the nature of their health and whether it is wise to modify aspects of their health. This model relies very heavily on some of the subjective qualities of health that we have covered earlier in this chapter, such as our *perceived susceptibility* to a given condition or disease, *perceived severity* of the condition or disease, *perceived benefits* of taking action one way or the other, perceived barriers towards taking action, and our own *self-efficacy*, or personal belief that we are capable of executing successful action. To illustrate this model, consider a hypothetical individual who entertains the idea of whether to quit smoking. Suppose this person is young, relatively healthy, and does not have an extensive family history of disease. Let us further presume that this individual finds benefits in smoking such as a way of maintaining stress and a belief that it would be too difficult to quit smoking. However foolish we may find such logic, this model reminds us that it is our subjective assessment that matters most in deciding whether to change aspects of our health.

health belief model
one of the most important frameworks for understanding how individuals assess the nature of their health and whether it is wise to modify aspects of their health

The **stages of change model** of Prochaska, DiClemente, and Norcross' (1992) helps to pinpoint our psychological sense of how ready we are to make health related changes in our lives. In brief, this model consists of five distinct changes that increasingly represent readiness to change. In the *precontemplation stage*, one is largely unaware of the potential health-related problems or concerns one should be addressing.

stages of change model
a model that consists of five distinct changes that increasingly represent readiness to change: precontemplation stage, contemplation stage, preparation, action stage, and maintenance stage

In the *contemplation stage*, there is some awareness of the health concerns, but there are no immediate plans to make any personal changes. The third stage is known as *preparation*; here, the individual may seek change and may be making some plans to carry out change. In the *action stage*, the individual is in fact practicing and promoting change for at least about six months. Finally, in the *maintenance stage*, the individual is successful in continuing to practice their learned behavioral changes. Have you ever gone through (or currently are going through) any of these stages in order to alter aspects of your health behavior?

In theory, there are so many facets of our health that one may seek to change. Given the very broad conceptualization of health that we have adopted, there are many areas of this text that discuss ways to improve various aspects of our health. For now, let us turn our attention to three basic aspects of our physical health—our diet, exercise, and sleep habits—that many of us wish we could alter.

biopsychosocial perspective
ways to improve or alter aspects of our health

The discussion about ways to improve or alter aspects of our health helps to illuminate the growing importance of the **biopsychosocial perspective** in psychology in order to understand health processes. Suls and Rothman (2004) suggest the following:

> "This perspective holds to the idea that biological, psychological, and social processes are integrally and interactivity involved in physical health and illness" (p. 119).

Indeed, this chapter sets out to understand physical and mental health by having an appreciation for all three of these processes and how they can influence each other. Suls and Rothman (2004) add that the biopsychosocial perspective has come to serve as the critical framework for the study of *health psychology*, which was initially discussed in Chapter 1.

overweight
condition of being 10–20% above one's "ideal" weight range

obese
condition of having a weight higher than 20% of one's "ideal" weight range

body mass index (BMI)
index designed to assess the healthfulness of one's weight, technically calculated as one's weight (in kilograms) divided by one's height (in meters) squared

On Losing Weight and Staying Fit: Diet and Exercise Habits.

So many of us are (or should be) concerned with our body weight. So many of us struggle, as do I, with attempting to stay fit by maintaining a "proper" weight. Yet, what does it mean to attain a "proper" weight? Is losing weight and staying fit simply just about diet and exercise? Before we take a closer look at both of these questions, let us offer a few basic definitions. Traditionally, individuals have been viewed to be **overweight** if they were 10–20% above their "ideal" weight range, whereas the **obese** are viewed to have a weight higher than 20% of their "ideal" weight range (e.g., Brownell & Horgen, 2004). How we determine what is an ideal weight remains somewhat of a controversy, but one's **body mass index (BMI)** arguably is the most popular index designed to assess the healthfulness of one's weight. Technically, BMI is calculated as one's weight (in kilograms) divided by one's height (in

So many of us are concerned with our body weight. We may struggle with staying fit, so we diet and exercise.

meters) squared (e.g., Flegal, Tabak, & Ogden, 2006). It is estimated that nearly two-thirds of Americans are overweight or obese, up from roughly 55% in the late 1980s (Gupta, 2007). These figures have lead many to conclude that country is experiencing an *obesity epidemic* due to the ever-increasing number of Americans who are developing unhealthy weights (e.g., Hill & Peters, 1998). In fact, it is widely assumed that obesity will soon outpace smoking as the leading cause or reason of death in the United States and much of Western society (e.g., Jia & Lubetkin, 2010).

The simple answer to achieving a successful **weight maintenance** program, or achieving and subsequently maintaining a personally healthy weight, is continued care at having an appropriate diet and exercise habits (e.g., Wadden, 1995). Quite simply, those who look at a "diet" as a simple end goal may very well be setting themselves up for failure. Successful diets are about weight maintenance, which necessarily implies that there have been changes in lifestyle habits, (see Figure 4.1). There is ample evidence to suggest that weight loss is particularly likely to be successful to the degree that an individual personally wants to produce change in their lifestyle habits (e.g., Wee, Davis, & Phillips, 2005) and alter their thinking about food and exercise (e.g., Ogden, Karim, Choudry, & Brown, 2007). Interestingly, the decision to pursue a healthy weight can be influenced by both *intrinsic motivation* and *extrinsic motivation*, which refers to factors emanating from oneself (e.g., self-image or personal health) or relating to others (e.g., social influence), respectively. Satia and Galanko (2007) found that white Americans and African-Americans, alike, are more motivated to alter diet habits for the intrinsic reason of improving one's health. Which factors do you think might motivate you to pursue a healthy weight?

weight maintenance
maintaining a personally healthy weight

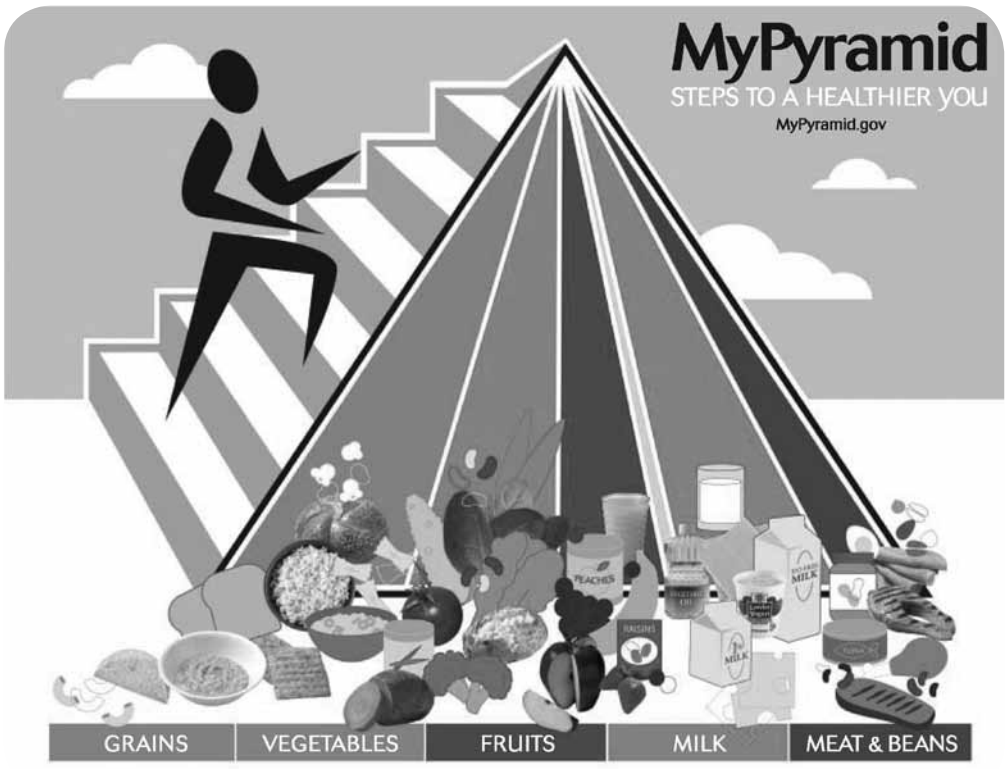


Figure 4.1
U.S.D.A.'s New Food Pyramid Guidelines

Up until fairly recently, the U.S. Department of Agriculture (U.S.D.A) devised a new method of conceptualizing how Americans can achieve a healthy lifestyle and weight. In addition to modifying the food components of the pyramid, you'll also note how it emphasizes the role of exercise. In 2011, however, the U.S.D.A. altered this icon to reflect a plate depicting the sorts of foods we should strive to regularly consume; on it, fruits and vegetables are particularly emphasized.

Source: U.S. Department of Agriculture.

Obviously, however, in order to maintain a healthy weight, one needs to first achieve a healthy weight. Vogels and Westerterp-Plantenga (2007) found that a critical factor that allowed for successful long-term maintenance was **dietary restraint**, or one's ability to consciously limit or control the portions of food one consumes. Gupta (2007) offers some very compelling evidence from examining the dietary practices of Japanese Okinawans, where the longest average life span in the world can be found. Among the Okinawan tradition is the saying *hara hachi bui*, or eating until one is only about 80% full and then refraining from further food intake. Gupta (2007) adds,

dietary restraint
one's ability to consciously limit or control the portions of food one consumes

> "From a neuroscience perspective, this makes a lot of sense. That area of the brain that lets us know that we are really full usually lags several minutes behind our actual eating. So eating more slowly serves us well in terms of regulating the number of calories we consume. If you just wait a few minutes between bites, you will feel remarkably full, even if you were hungry just a few minutes before" (p. 20).

calories
a unit of measurement that is a function of energy intake and expenditure

There are a number of commercial, non-medical weight programs available to individuals to assist in weight loss, such as *Weight Watchers*, *Jenny Craig*, and *Nutrisystem* (e.g., Womble, Wang, & Wadden, 2002) that are designed around portion control and limiting one's caloric intake. Caloric intake, of course, refers to the number of **calories** we have consumed, where calories refer to a unit of measurement that is a function of energy intake and expenditure (e.g., Stotland & Larocque, 2005). Compared to similar controls, many of these programs do offer weight loss benefits (e.g., Rock, Pakiz, Flatt, & Quintana, 2007).

There are many commercial, non-medical weight programs available. One of these is Weight Watchers.

There are many other popular diet choices available to individuals. Many are correct to caution that one should not latch one's weight loss hopes to the latest *fad diet* to come around (e.g., Nance, Hendricks, & Lewis, 2007). Other popular diets have been considered to be fad diets, at least in part, due to concerns over how these diets are formulated (e.g., Volek, VanHeest, & Forsythe, 2007). Unlike the aforementioned diet programs mentioned in the last paragraph, many of these diets dramatically limit the consumption of certain food groups. Diet programs such as *Atkins*, *Ornish*, and the *Zone* diet tend to feature low carbohydrate, low fat, and high protein qualities (Eckel, 2005). Curiously though, there is evidence that *all*

of these programs can produce weight loss and improve one's overall *blood chemistry profile* (e.g., Dansinger, Gleason, Griffith, Selker, & Schaefer, 2005). Indeed, we should not just be concerned with our sheer weight. Most physicians are particularly concerned with one's *lipid profile*, or the amount of fat in the blood (e.g., Hivert et al., 2007). Perhaps the best-known lipid by laypersons is **cholesterol**, which refers to fats that accumulate in the body's cardiovascular system. Physicians though caution that we should not be hoodwinked into thinking that the lower one's *total cholesterol*, the better our health will be. Actually, there are two forms of cholesterol: low-*density lipoprotein cholesterol (LDL)* and *high-density lipoprotein (HDL) cholesterol*. LDL cholesterol, in fact, is the form of cholesterol that you want to be as low as possible since it plays a key role in the accumulation of fatty patches in one's arteries. However, HDL cholesterol appears to have a protective function by ridding the body of the ill effects of the fatty components of cholesterol. Use the mnemonic analogy of the "L" in LDL is to "lousy" as the "H" in HDL" is to "healthy" in order to remember this distinction. While both proper diet and exercise can improve both forms of cholesterol, it does appear as though HDL is more influenced by one's exercise activity level whereas LDL is more affected by one's dietary habits (e.g., Couillard et al., 2001).

cholesterol
fats that accumulate in the body's cardiovascular system

In considering the content of diets, however, many—including the American Heart Association (2010)—contend that any diet that severely restricts any one given *food group* is a diet to be avoided since variety is needed to promote good health. Although there is still some confusion about how appropriate each of the main food groups (i.e., grains, vegetables, fruits, milk, meats and beans, and oils) are to the health and well-being of a given individual, there is a sense that each group can and does contribute to a healthy lifestyle (e.g., Yamini, Juan, Marcoe, & Britten, 2006). In fact, there is growing intrigue about the prospect of certain *superfoods*—such as blueberries, wild salmon, soy, walnuts, and tea—as having properties that can vastly improve health and prevent disease (e.g., Pratt & Matthews, 2003). While alcohol has not been dubbed a *superfood* per se, there is evidence that moderate alcohol consumption may prolong life, at least in mice (e.g., Bujanda et al., 2006). Of particular interest is a chemical substance found in red wine known as **resveratrol** that appears to have antioxidant and anti-inflammatory qualities. The news of this potential discovery brings hope in that it may assuage or prevent symptoms associated with cardiovascular disease (e.g., Bau et al., 2007) and diabetes (e.g., Schmatz et al., 2009). However, these researchers also caution that we do not want to trade one ill for another since excessive alcohol consumption is fraught with potential danger. Like any drug, excessive use of alcohol that is impeding the quality of one's life could be indicative of a *substance-related disorder* known as *alcoholism*. Since the National Institute on Alcohol Abuse and Alcoholism (2010) estimates that roughly one out of ten Americans abuse alcohol, it should be used with appropriate caution and moderation.

resveratrol
a chemical substance that appears to have antioxidant and anti-inflammatory qualities

Let us also note some evidence that food variety may help to enhance our senses that, in turn, provide a sense of **satiation**, or a feeling of fullness (Hetherington et al., 2006). Satiation is a critical feature behind an increasingly popular diet plan known as

satiation
feeling of fullness

Volumetrics
popular diet plan that is as much about healthy nutrition as it is about basic psychology

Volumetrics (Rolls, 2007). The *Volumetrics* plan is as much about healthy nutrition as it is about basic psychology. Specifically, this plan encourages individuals to eat *high water-soluble foods*, or foods with high water content, such as vegetables, fruits, and soups. The basic point behind this plan is that individuals tend to like to eat. Accordingly, listen to your stomach *and* brain by eating! The trick is to load up on healthy foods by enjoying them in a way that is visually appealing and appetizing. As an example, instead of going for a hot fudge sundae, consider having a cup full of fat-free yogurt topped with some blueberries and a bit of fat-free or low-fat whipped cream. This plan encourages us to eat well since these foods tend to be healthier—all the while fooling us into thinking that we are eating a good deal. The *Volumetrics* plan features many other mind-fooling tricks such as reducing our portion sizes by eating our meals on a child's-size plate. In this case, we are again fooling our minds by "cleaning our plates" without increasing our waist size with overindulging in too many calories and fats.

Which of these looks better to you—the fruit yogurt parfaits above or the brownie on the right? You can eat so much more by choosing healthier foods, like fruit, and topping them with a light whipped cream! Such a technique is a key premise of the Volumetrics diet plan.

To sum up, there does not appear to be a "magic secret" to successful weight loss. However, those who lose weight and keep it off tend to do so by having continuous low-level caloric diets with modest fat intake, minimal "fast food," and high levels of physical activity (e.g., Phelan, Wyatt, Hill, & Wing, 2006). Dohm and colleagues (2001) add that successful weight-loss maintainers tend to seek out help particularly when facing a possible weight relapse or gain.

With all of this focus on diet, we should not at all overlook the profound importance of *exercise*. The net positive effects of exercise are overwhelming for both facets of physical and mental health. Some of these benefits, such as promoting weight loss or improved cholesterol are not terribly surprising, whereas other benefits, such improving one's mood, enhancing brain activity, and preventing various other physical and mental illnesses are more novel effects (e.g., Miller, 2007). A significant reason why we often simply feel good after exercise is due to the release of **endorphins** in the bloodstream, which is a biochemical produced in the brain that helps to relieve pain (e.g., Oktedalen, Solberg, Haugen, & Opstad, 2001). Of course, there are different types of exercises that we can do. The basic broad categories of exercise include **aerobic exercise**, where one increases one's heart rate and provides the body with general activity, (e.g., Reed & Ones, 2006) and **strength training**, where one works to strengthen certain muscles of the

endorphins
a biochemical produced in the brain that helps to relieve pain

aerobic exercise
type of exercise that increases one's heart rate and provides the body with general activity

strength training
exercise that works to strengthen certain muscles with the use of weights or other equipment designed to target certain areas of the body

body with the use of weights or other equipment designed to target certain areas of the body (e.g., Lachman et al., 2006). While both forms of exercise are beneficial, there is evidence to suggest that the concurrent use of both forms of exercise offers the greatest benefits to health (e.g., Henry, Anshel, & Michael, 2006).

You might be wondering whether there are any disadvantages to having an exercise program. Overall, the clear answer is that the advantages to having an exercise routine are far greater than any potential disadvantages. However, there are a few caveats worth noting. As with any sport or physical activity, injury is always a possibility (e.g., Cresswell & Eklund, 2006). Consulting with one's physician before undertaking a new exercise program and having proper instruction as how to use exercise equipment can usually prevent injuries. One needs to be mindful of maintaining proper hygiene, particularly at public gyms. This concern has grown in recent years with increased prevalence of disease-causing bacteria such as *Methicillin-resistant Staphylococcus aureus (MRSA)*. This condition is particularly troubling since it is an infection which an individual can transmit to others, and it cannot be treated with routine antibiotics (e.g., Hawkes et al., 2007).

The only other major drawback to exercise has to do with the matter of *perceived benefits* and *perceived barriers* that we discussed earlier. For instance, oftentimes individuals feel as though they do not have the time required in order to commit to an exercise program (e.g., Harne & Bixby, 2005). Many others face some seemingly real barriers to exercise, whether they are individuals living in an impoverished neighborhood where there are few community-based exercise or recreational opportunities (e.g., Romero, 2005) or elderly individuals who have general concerns about walking around their neighborhood (e.g. Dawson, Hillsdon, Boller, & Foster, 2007). While these can be legitimate concerns for many individuals, be mindful that you need not train for a marathon with fancy equipment in order to reap the benefits of exercise! Hartley, Lee, and Ferrari (2007) suggest that we should incorporate brief "exercise snacks" into our daily lives by doing chores, taking the stairs, and so on. On days that I know that I cannot make it to the gym or walk or run outside, I simply put on my *iPod* and start walking around my house! However unorthodox that may be, at least I'm satisfied that I was able to get moving on a given day.

Recall that psychologists strive to understand health from a biopsychosocial perspective. With that in mind, you might be wondering whether it is possible to achieve a healthy weight with just exercise and good eating habits. Well, yes and no. You certainly can eat right and exercise, but you also need to be mindful that there are other biogenetic and social-environmental factors at play that may be affecting your ability to achieve a healthy weight. Let us briefly highlight a few of these factors.

Exciting research continues to be done as to the biological and genetic causes of weight gain and obesity. In 2007, *Orlistat* (known better by the name *Alli*) became the first anti-obesity drug approved by the *Food and Drug Administration (FDA)* to be available without a prescription. Hertzman (2005) provides evidence that overweight individuals on this drug have a 15.5% weight loss over a one-year period as contrasted with a 7.9% weight loss for those on a diet of some sort. However, *Orlistat* works to remove fat from ingested food—not on biochemical changes in the brain. Levin (2005) summarizes much of the literature on weight gain and obesity by stressing that we

cannot understand this topic without examining biogenetic influences. First, while the precise mechanisms governing it are still debated, it is believed that our bodies have a certain set point, or a general personal weight range that each body seeks to maintain. Research with rats suggests that set points can be lowered with the use of *nicotine* (Frankham & Cabanec, 2003). While such a result may give some hope that our **set points** can be manipulated, certainly the use of nicotine—with its addictive and detrimental effects—would not be a recommended route by which we should follow to the path of weight loss. More challenging yet is that our set point may be influenced through genetics. Indeed, there is much evidence that having obese parents makes a child much more likely to be obese him or herself—moreover, being an obese child or adolescent greatly increases the likelihood of becoming an obese adult (e.g., Myers & Barbera, 2009). Trying to separate cause and effect in such genetic studies can be tricky: Is it sheer genetics that fosters this link, learned behavioral patterns, or both that may contribute to childhood obesity? Levin (2005) also emphasizes the role of the hormone **leptin**, which is increasingly released by fat cells as one becomes obese—and for *obesity-prone individuals*, they will already have a likely predisposition towards the accumulation of leptin.

set point
a general personal weight range which our bodies seek to maintain

leptin
a hormone that is increasingly released by fat cells as one becomes obese

In terms of social-environmental factors, there are so many reasons why we may overeat. An important interdisciplinary field of psychology known as *judgment* and *decision making* (which pertains to the conscious and unconscious methods by which we rely on our cognitions, beliefs, and emotions to arrive at decisions or choices) contributes to our understanding of how we make health-related decisions; this field shows that conflict plays an important role in the decision making process (Weber, Baron, & Loomes, 2001). Many of these decisions do not necessarily involve thoughtful deliberations but rather more impulsive or "gut level" choices. Shiv and Fedorikhin (1999) did an intriguing experiment where subjects had a choice between a dessert, such as chocolate cake, which was associated with *positive affect* (or emotion) and fewer *positive cognitions* (or thoughts and attitudes) versus a dessert, such as fruit salad which had the opposite pattern. In other words, most of us would opt for the chocolate cake over the fruit salad because just the thought of chocolate cake sounds great! Of course, though, we realize that fruit salad is the healthier choice. The highlight of this particular study is that *processing resources* helps to make the determination as to whether we select the chocolate cake or the fruit salad. When we do not have to make an impulsive choice, we are likely to make a healthier choice. A considerable amount of research has found that we are more likely to make better decisions, particularly when faced with conflicting decisions, when we are able to bide our time (e.g., Diederich, 2003). Then again, we can engage in unhealthy behaviors, such as overeating, when we are simply bored and not in a time rush (Ogden, 2003). How do we resolve this apparent paradox? An intriguing study by Morewedge, Huh, and Vosgerau (2010) suggests that individuals may actually eat less by imagining consumption of their favorite foods. What do you think of this practice?

emotional eater
one who turns to food as a means of trying to cope with stress or other negative emotions in life

Of course, sometimes the decision to engage in poor health habits, such as overeating, is much more deeply rooted in our fundamental personality and psychological makeup. Many individuals, such as **emotional eaters**, turn to food as a means of trying to cope with stress or other negative emotions in lives; not surprisingly, this is not an

effective or healthy coping strategy (e.g., Spoor et al., 2007). There is also much evidence that *portion sizes* at restaurants have grown incredibly over the past few decades along with an overabundance of dining choices—and with it, our waist lines (e.g, Young & Nestle, 2007)! Perhaps not surprising, also, is that adults tend to underestimate the amount of calories in their meals—which can clearly lead to weight gains (e.g., Chandon & Wansink, 2007). When we are constantly bombarded with images and signs suggesting for us to eat, it may be difficult not to do so—especially for children who are often particularly susceptible to marketing ploys (e.g., Taveras et al., 2007). Particularly troubling is that neighborhoods with higher percentages of minorities or poverty tend to have higher concentrations of fast-food restaurants and more limited options to purchase healthier foods—which often tend to be more expensive (e.g., Powell, Chaloupka, & Bao, 2007; Macdonald, Cummins, & Macintyre, 2007). More generally, there is evidence that healthier foods are quickly growing more expensive than "junk food" options (e.g., Monsivais & Drewnowski, 2007). In addition, there is the troubling point that, for those Americans who do have adequate *health care coverage*, most of these programs are designed to cover treatments due to illnesses—and not initiatives designed to improve health (e.g., Dulmus & Rapp-Paglicci, 2005). Perhaps the health care industry needs a reminder of what "health" is truly all about!

eating disorder
a very unhealthy, even dysfunctional, attitude about food and eating

To end this section on a sober note, we need to be mindful that individuals sometimes develop very unhealthy and even dysfunctional attitudes about food and eating to such a degree that they may be diagnosed with an **eating disorder**. The two most prominent eating disorders are *anorexia nervosa* and *bulimia nervosa*. According to Berkman, Lohr, and Bulik (2007), roughly 0.3% of U.S. and Western European women suffer from anorexia nervosa, where individuals cannot maintain a healthy body weight and often drop to 85% below their normal weight. About 1% of Western female populations show evidence of bulimia nervosa where they show extreme food reactions (e.g., eating a large volume of food and then purposely vomiting). While both disorders are associated with depression, anorexia nervosa appears to have greater risks to health, including a marked risk of *mortality*.

The two most prominent eating disorders are anorexia nervosa and bulimia nervosa.

The notion that individuals, particularly women, who are concerned with conforming to largely unrealistic societal expectancies of beauty may be more likely to develop an unhealthy preoccupation with one's weight and eating patterns has been well-established (e.g., Thompson & Smolak, 2001; Wolf, 1991). Furr and Ross (2006) note that roughly one-fifth of all college women may show evidence of some eating disordered symptoms; family or parental dysfunction and childhood sexual abuse can fuel these symptoms. There is much evidence that personality traits help to explain why eating disorders develop such as negative emotionality, neuroticism, perfectionism, and obsessive-compulsive impulses as well as a drive for thinness (Lilenfeld et al., 2006; Cassin & von Ranson, 2005). The treatments for eating

disorders can vary depending on the precise circumstances of the patient. In treating anorexia nervosa, it may be necessary to hospitalize the patient in order to prevent starvation. Those with eating disorders may benefit from a combination of psychological therapies designed to help the patient manage emotions related to food, their disorder, and relations with loved ones; in some cases, antidepressant medications may be helpful too (Nolen-Hoeksema, 2001).

sleep disorder
disorder that interferes with and interrupts regular, normal sleeping patterns and can present serious health risks

insomnia
condition where an individual has consistent difficulty in falling and remaining asleep

rapid eye movement sleep (REM)
the sleep stage in which one's eyes move rapidly but the muscles do not and the brain shows activity patterns as though one were awake

Sleep: A Good Night Really Equals Good Health.

In January 2008, the 28-year old actor Heath Ledger died in his New York City apartment of an apparent accidental drug overdose. Fairly soon after his death, it became clear as though Ledger was having serious problems in trying to sleep—and that Ledger may have been taking such medications in order to help him get to sleep (Rubin, 2008). **Sleep disorders** tend to consistently interfere with and interrupt regular normal sleeping patterns and can present serious health risks (e.g., Perlis & Lichstein, 2003). Perhaps the best-known sleep disorder is **insomnia**, where an individual has consistent difficulty in falling and remaining asleep; and while this disorder may accompany other psychiatric conditions, it should be viewed as its own separate clinical disorder (e.g., Atalay, 2006). As evidence to the point that so many facets of our health are interconnected, there is much evidence that the serious and potentially fatal condition of *sleep apnea*, where one periodically struggles to breathe during sleep, is likely to be accompanied by obesity (e.g., Kalra et al., 2005).

Insomnia is when an individual has consistent difficulty falling and remaining asleep.

Although these disorders might seem extreme, they highlight the importance that a good night's sleep helps to put us on the path to good health. It is well known that sleep represents an essential *circadian rhythm* such that our bodies follow a daily pattern of adjustment and regulation (e.g., Van Someren, 2000). It is also well established that we sleep in *cycles*. Of particular note is **rapid eye movement sleep (REM)**, where our eyes move rapidly but our muscles do not; and yet, during this stage, we show brain activity patterns as though we were awake, which may help to facilitate the *consolidation* of memories (Smith, Nixon, & Nadler, 2004). Some of the other health effects and consequences of sleep are sometimes not as well known by the general population. Gottlieb and colleagues (2006) found that consistently having fewer than seven to eight hours of sleep per night was associated with increased **hypertension**, or high blood pressure. Short sleep duration is also associated with higher BMI rates and obesity (e.g., Bjorvatn et al., 2007). Motivala and Irwin (2007) postulate that poor sleep habits take a toll on the body's *immune system* as well. In particular, lack of sleep causes the production of molecules known as **cytokines**, which promote inflammatory processes that can have adverse consequences for a variety of conditions including heart disease and arthritis. Poor sleep habits do not merely have

hypertension
high blood pressure

cytokines
molecules that promote inflammatory processes which can have adverse consequences for a variety of conditions, including heart disease and arthritis

significance for our individual lives, however. Many argue that poor sleep, sleep disorders, and even *work shift changes* profoundly increase the likelihood of mishaps, including motor vehicle accidents (e.g., Pandi-Perumal et al., 2006).

How much sleep should we get and how do we achieve a good night's sleep? There actually is some debate as to whether sleeping much past eight to nine hours per night is necessarily associated with any positive or negative health effects (e.g., Knutson & Turek, 2006). However, the literature is very convincing about those who consistently sleep less than seven to eight hours per night: they tend to have a much higher rate of *mortality* or death (e.g., Heslop et al., 2002). Trying to achieve a good night's sleep can sometimes be easier said than done. Turk and Winter (2006) maintain that it is important to physically and mentally relax before going to bed. Maintaining a sound *sleep environment* is also critical to a good night's sleep (e.g., Bootzin, Epstein, Engle-Friedman, & Salvio, 1996). Some of these factors can include having a comfortable bed, a darkened room, and learning to associate the bed with sleep behavior (as opposed to a place to watching television, surfing the Internet, and so on).

TO SUM UP …

- Health promotion refers to the ways by which we try to maintain good health through personal and group decisions, and our societal and educational systems.
- Health processes are increasingly understood through a biopsychosocial perspective where the consideration of biological, psychological, and social factors takes place.
- Individuals may understand that certain behaviors carry health risks and yet still carry out those unhealthy behaviors. The health belief model (HBM) attempts to asses the key factors that dictate whether one feels it is necessary to pursue behavioral change in order to improve their health. These factors include perceived susceptibility, perceived benefits, perceived severity, perceived barriers, and self-efficacy.
- The stages of change model helps to predict our readiness and willingness to make behavioral changes in our lives. The five stages of this model include precontemplation, contemplation, preparation, action, and maintenance.
- Individuals are overweight if they are 10–20% over their ideal body weight, whereas obese individuals are over 20% their ideal body weight. The body mass index (BMI), which is a measure of your weight and height, is a widely used measure of one's weight healthfulness.
- In order to achieve a personally healthy weight through weight maintenance, it is essential for an individual to both eat a balanced diet, while watching their caloric intake, and to exercise regularly.
- Dietary restraint, or limiting one's portion sizes and calories, may be critical to achieving successful weight loss.
- There is not an absolute consensus as to which diet plan is "best" or most effective at losing weight. However, many of the principles of Volumetrics have been shown to be sound both in terms of its physical and psychological components.

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(continued)

- Our lipid profile is another critical index of physical health. We should strive to have a low LDL cholesterol value and a high HDL cholesterol value. Eating healthy foods seems to particularly affect the former, while exercise particularly impacts the latter.
- A chemical in red wine known as resveratrol may contain some health-promoting qualities. However, it is always wise to use alcohol in moderation.
- There is overwhelming evidence that exercise (both aerobic exercise and strength training) produces profoundly positive physical and psychological effects. Other than injury, there are very few negative effects associated with exercise.
- It is also important to stress that our weight is not merely influenced by the personal food choices we make and the level of exercise we pursue. There are several biogenetic and social-environment factors at play too.
- In order to maintain good health, it is essential to strive for at least seven to eight hours of sleep (on average) per night. Consistently sleeping fewer than that has been associated with several serious physical and mental problems.

COPING WITH ILLNESS

The latter part of this text explicitly explores the themes and dimensions of *coping*. In many ways, some of the basic qualities of coping are just as applicable to dealing with disease or illness as they are for other life events. In the last chapter, we established that we should not presume that one would necessarily chart a particular path of adjustment or coping on the basis of experiencing a given event. For instance, someone could respond more strongly against the news that they have been fired from a job than the news that one is facing a serious illness. Moreover, it is possible to have two different individuals with the same exact *diagnosis* and yet have each cope or respond in two very different ways.

Acute illnesses like the common cold are usually short-lived but can develop quickly.

When we are faced with illness or disease, there are often unique challenges and issues that set this experience apart from other stressful events. Accordingly, Moos (1982) proposed **crisis theory** in order to highlight the factors that influence how individuals adjust to illness and disease. There are three basic factors to consider: illness-related factors, physical or social-environmental factors, and personal characteristics of the individual. Let us first discuss the factor that differentiates the unique qualities of coping with illness itself: *illness-related factors*. These factors pertain to the nature and severity of the illness in question. There are many possible categories of illness. Let us briefly highlight the three most common, broad categories of illness. **Acute illness** generally is short-lived but can develop rather quickly. Some examples of acute illness can include the common cold, influenza, headaches, and abdominal pain (e.g., Lemanek & Koontz, 1999). Usually these ailments

will improve in time and with appropriate medical regimens. In contrast though, chronic illness and (especially) terminal illness have the potential to be much more disruptive and even destructive to our lives (e.g., Gatchel & Oordt, 2003; Carver & Scheier, 2002). **Chronic illnesses** tend to develop over time but their influence on one's life tends to last for longer periods than acute illnesses. In fact, some chronic illnesses require individuals to manage them over their entire lifespan (e.g., Stanton, Revenson, & Tennen, 2007). Chronic illnesses are, by no means, the effective equivalent of a "death sentence." However, under certain conditions chronic illness can ultimately lead to death, thereby becoming a **terminal illness**. An example of this could be **cancer**, where unrestrained and rapid cell growth can lead to the development of *malignant tumors*. While cancer can be a manageable although chronic condition, there can come a point where such a patient is faced with imminent death. Indeed cancer is the second leading cause of death in the United States (Xu, Kochanek, Murphy, & Tejada-Vera, 2010). Heart disease remains the leading cause of death, however. The good news is that the numbers of heart attack deaths in the U.S. has steadily declined since the 1980s. This figure may be due to the skyrocketing number of less invasive heart surgery procedures, such as **angioplasty** (which involves the widening of an clogged blood vessel or artery), conducted during this same time period (Kahn, 2007).

Obviously, we have been primarily focusing on illnesses that are physical in nature. Later in this chapter we will consider how *mental illness* can profoundly affect the lives of individuals, and their families as well. Many of the key variables that help individuals and their families contend with serious physical illness are also quite effective in coping with a loved one's mental illness, such as social support, a healthy self-image, and general cohesion within the family unit (e.g., Greeff, Vansteenwegen, & Ide, 2006).

Returning to Moos' (1982) crisis theory, he further adds that coping with illness, much like coping with other life events, involves a consideration of physical or social-environmental factors, as well as personal factors of the patient. Oftentimes illness requires hospitalization and adjusting to the role as patient. In a well-known study, Taylor (1979) discusses the "*good*" patient role and the "*bad*" *patient role*. Taylor (1979) contends that the "good" patient role, where individuals take on a passive role and ask very little of their attending physicians, actually is bad for one's health since such patients do not receive needed health information; the exact opposite pattern is found for the "bad" patient role in that such individuals may be viewed as troublesome by health care providers but such patients are helping themselves by being an advocate for their health care. Do you typically take on the "good" or "bad" patient role? Speaking of the patient role, there is evidence that patients may be more satisfied with their care if they perceive their personality as more similar to their physician (Krupat, Yeager, & Putnam, 2000). Ultimately, these and other factors lead to one's *cognitive appraisal* of the illness, which is where one attempts to have a personal understanding of the meaning of their health problems. In doing so, individuals can develop ways to cope with the illness or the treatment itself and enhance their general psychosocial functioning.

crisis theory
theory that highlights the factors influencing how individuals adjust to illness and disease

acute illness
a short-lived illness that can develop rather quickly

chronic illness
an illness that tends to develop over time but the influence it has on one's life tends to last for longer periods than acute illnesses

terminal illness
an illness that can lead, ultimately, to death

cancer
disease in which unrestrained and rapid cell growth can lead to the development of malignant tumors

angioplasty
surgical procedure that widens a clogged blood vessel or artery

TO SUM UP …

- Crisis theory examines how individuals cope and adjust to illness and disease. This theory suggests that illness-related factors, personal characteristics of the patient, and physical or social-environmental factors—all help to predict how an individual makes a cognitive appraisal of the disease such that they have a personal understanding of how to proceed with coping.
- The three most common, broad categories of illness include acute illness, chronic illness, and terminal illness.
- Heart disease and cancer remain the first and second leading causes of death in the United States.
- It has been argued that displaying a "good patient role," where one does not ask many questions of one's health care provider, is often associated with poorer outcomes. In contrast, the "bad patient role," where one takes a more active role in one's care, tends to produce more beneficial outcomes.

LINKING PHYSICAL AND MENTAL HEALTH: THE POTENTIALLY HARMFUL EFFECTS OF STRESS

In the last chapter, we considered an overview of what it means to experience *stress*. We noted that there are different forms of *stressors* that one can endure. In addition, we emphasized the point that not everyone will look at the stress in the same light. An event that you may find to be very stressful could be one that I do not, or vice-versa. However, what is of significant importance for this chapter—and more broadly, for our everyday lives—is the ever-expanding body of research that highlights the potentially very harmful effects of stress. As we will consider later on in this chapter (and indeed throughout this text), stress can ravage the mind and increase the likelihood of developing a whole host of *mental disorders*, including depression and anxiety. Psychologists have highlighted how **chronic distress**, or a persistent negative emotional state that does not necessarily accompany the presence of a severe stressor, can adversely impact both physical and mental health (e.g., Wilson, Schneider, Boyle, Arnold, Tang, & Bennett, 2007; Delahanty et al., 1997; Baum, 1990).

chronic distress
a persistent negative emotional state that is not necessarily accompanied by the presence of a severe stressor

vulnerability-stress approach
approach that further helps to answer the enduring nature-nurture debate at least in terms of the question of which factor can be best understood to explain disease or illness

diathesis
term used interchangeably with the term vulnerability in order to highlight how some individuals may be at greater risk for developing a certain disease, physical or mental, due to biological or genetic factors that are largely beyond one's control

For years, many psychologists and psychiatrists have forwarded a **vulnerability-stress approach** (or *diathesis-stress approach*) to illness (e.g., Wong, 2006; Ingram & Luxton, 2005; Zuckerman, 1999). This approach further helps to answer the enduring *nature-nurture debate*, at least in terms of the question of which factor can be best understood to explain disease or illness, nature (or biological and genetic factors) or nurture (or environmental and social factors). The simple answer is that both factors matter in that they both advance to our understanding of both physical and mental illness.

The term **diathesis** is often used interchangeably with the term *vulnerability* in order to highlight how some individuals may be at greater risk for developing a certain disease—physical (e.g., Wenzel & Glanz,

2004) or mental (e.g., Phelan, 2002)—due to biological or genetic factors that are largely beyond one's control. For instance, as we discussed earlier, your *blood cholesterol* is beyond your control (to some degree) in that family history is a very significant factor that can determine its numeric value (e.g., van den Niuwenhoff, Helene, Mesters, Gielen, & de Vries, 2007). That is to say, for someone with high cholesterol, a significant diathesis would be your genetic predisposition, or propensity, to simply have high cholesterol. However, if you are leading a life where you have a poor diet and eat fatty foods, exercise little or not at all, and feel a great sense of psychological stress in your life, then you are setting yourself up for a situation where you will likely have a higher level of cholesterol and possibly even *coronary heart disease*. The good news, however, is that modifications in these areas can all lead to possibly lower levels of cholesterol and lower risk of coronary heart disease (e.g., Daubenmier et al., 2007). The larger point here is that the stress component of the vulnerability- (or diathesis-) stress model refers to social and environmental factors that are largely within our control. As we've considered in the aforementioned example, psychological stress can be one such environmental factor that stresses the body—but it is not the only one. Poor eating habits and lack of exercise can be conceptualized as environmental risk factors that *stress* or tax the body by putting it at greater risk for disease. Unlike a diathesis—whether we are considering psychological stress, diet, exercise, or other social-environmental factors—the stress component here is largely *within* our control.

One final point to make about the vulnerability-stress model is that it is reasonable to presume that when one has *both* a diathesis and environmental stress present, then the likelihood of acquiring a certain disease generally is all the more significant (e.g., Wright, Carbonari, & Voyles, 1992). This model has emphasized the possible **interactions** between biogenetic vulnerabilities and social-environmental factors (e.g., Glei, Goldman, Chuang, & Weinstein, 2007). In this model, an interaction can be construed as a combination of certain biological or genetic conditions coupled with the presence of particular social-environmental factors that make the occurrence of a certain disease or ailment more likely. In our earlier example, it is possible that one could have high cholesterol due to family history (i.e., a diathesis or vulnerability) or due to social-environmental factors such as poor diet. However, someone with both a family history and a poor diet may be at greatest risk of developing high cholesterol. The general concept of interactions may have some relevance for the cutting-edge research topic of *epigenetics*. Epigenetics refers to heritable changes in our genetic DNA that come about without actual changes to our DNA (Rodenhiser & Mann, 2006). This field presumes that certain environmental conditions can potentially trigger how certain aspects of our genes will impact our lives; this field may help to explain why some family members are affected by certain physical and mental disorders while others are not (Rodenhiser & Mann, 2006; Petronis, 2004).

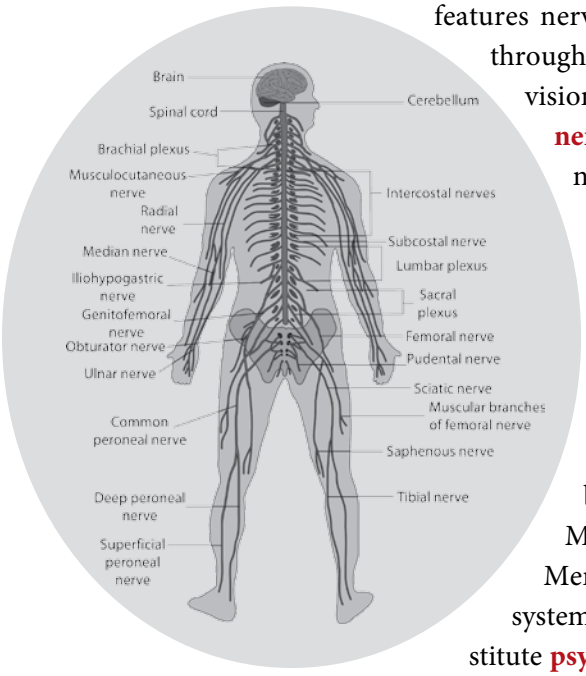
interaction
a combination of certain biological or genetic conditions coupled with the presence of particular social-environmental factors that make the occurrence of a certain disease or ailment more likely

With this framework in mind, let us note that most diseases have their own physiological-based properties. That is to say that whether we are considering a physical disease (such as heart disease or cancer) or a mental one (such as bipolar depression or schizophrenia), there are unique physical changes that happen to the human body that serve as both causes and consequences of the given disease. This section will entertain and provide an overview of how sometimes physical and mental health interconnect, particularly in terms of how stress can damage our health (e.g., Harbuz &

nervous system
system of cells—or neurons—tissues, and organs that helps to facilitate communication throughout the body in response to internal and external stimuli

Bicknell, 2000). Let us accomplish this task by offering a brief overview of some select *physical systems of the human body* and how they are impacted by stress. To clarify, our bodies consist of a series of disparate, yet interlinked, physical components or systems that work together to carry out the basic functions of living (e.g., Ahn, 2005; Your Health Now, 2006).

Psychologists have a natural affinity for the study of the **nervous system**, which features nerve cells, or *neurons*, that help to facilitate communication throughout the body. The nervous system has several important divisions. The brain and spinal cord help to comprise the **central nervous system**. The **peripheral nervous system** involves the network of neurons scattered throughout the body. The peripheral nervous system can be divided into the **somatic nervous system** and the **autonomic nervous system**. The somatic nervous system largely pertains to the neurons that facilitate the movement of muscles. In contrast, the autonomic nervous system helps to promote communication and feedback with internal organs, such as our heart and lungs, which we cannot personally control. Some of the most basic stress responses, such as sensitivity to headaches (e.g., Martin, Lae, & Reece, 2007) and muscle aches and pains (e.g., Mense, 2009), are clearly linked to components of the nervous system. In fact, conditions such as headaches and pains often constitute **psychophysiological disorders** in that they represent a genuine physical problem—but they may be caused (in part or primarily) or worsened by psychosocial factors (Andrasik, 2006). There is even some intriguing evidence that severe stress can actually reduce the portion of brain, known as the *hippocampus*, responsible for storing most of our personal memories (Bremner & Vermetten, 2001).



central nervous system
system consisting of the brain and spinal cord

peripheral nervous system
part of the nervous system consisting of the network of neurons scattered throughout the body

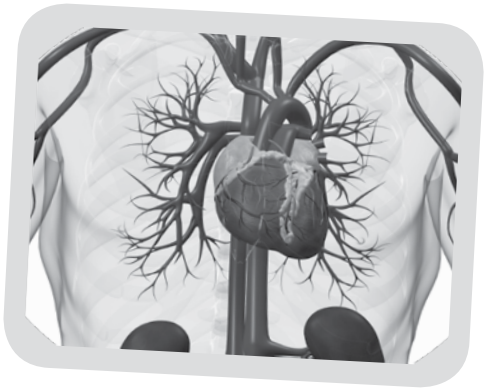
somatic nervous system
part of the nervous system that largely pertains to the neurons that facilitate the movement of muscles

autonomic nervous system
part of the nervous system that helps to promote communication and feedback with internal organs, such as our heart and lungs, which we cannot personally control

While it may seem somewhat intuitive that stress has psychological and social components, the physical and biological components of stress should not be overlooked. You likely have heard of psychologist Walter Cannon's **fight or flight response**, which was the first critical understanding of how our bodies respond to intensely stress situations. To put it simply, threatening circumstances stimulate our **sympathetic nervous system**, which consists of **neurons**, or nerve cells, linked between the spinal cord and much of the body. These neurons are designed to quickly activate and warn us of impending, possible danger. Through stimulation of this system, **hormones**, which are chemical substances further designed to provide communication in the body, help to enhance this effect. In particular, the hormones of *epinephrine* (or *adrenaline*) and *norepinephrine* are released. Epinephrine helps to quickly zone in on a threatening situation by increasing heart rate and blood pressure. Similarly, norepinephrine helps to heighten our focus on the situation at hand. It is almost as if these hormones serve as an alarm bell for us to immediately pay attention to what is going on around us. Threats stimulated through the fight or flight response are typically construed as short-term or immediate concerns rather than the concerns we may feel about a given situation after some thoughtful contemplation. Though this model is roughly eighty years old or so, it still generally greeted with much endorsement today. Some researchers quibble over the precise physiological mechanisms

at work in the fight or flight response. For instance, Jansen and colleagues (1995) suggest that this response is also triggered by the firing of neurons located in the *brainstem*, which is the lowest area of the brain where the spinal cord begins, and the **hypothalamus**, which is a structure located in the center of the brain that has several important functions pertaining to emotional and motivational processes. Marx et al. (2008) suggest that the fight or flight response might be more apt to be termed "freeze, fight, flight, or fright" since threats often cause a brief, initial freezing response known as *tonic immobility*. Taylor and colleagues (2000) argue for a social/evolutionary approach by suggesting that the fight or flight response may be incorrect for roughly half of the population: that is, females. Namely, they suggest that women respond to stress with a pattern called **tend and befriend**. According to this perspective, women seek to nurture and protect themselves and their offspring by aligning themselves with those, particularly other women, who can most effectively provide the greatest assistance.

A significant body of research has examined the unique vulnerabilities of the **circulatory system**, which primarily includes our heart along with the vessels—veins, arteries, and capillaries—that help to transport blood throughout our body. There is much evidence that psychosocial stress can contribute to the development of **coronary heart disease (CHD)**, which can occur when the vessels that transport blood develop fatty plaques leading to a condition known as **artherosclerosis** (e.g., Suchday, Tucker, & Krantz, 2002). There is also evidence that increased stress tends to be associated with a higher level of the hormone *cortisol*, which is linked with a higher incidence of blood pressure and heart disease (e.g., Ghiadoni et al., 2000). Some people are apt to feel and experience stress and anger; such individuals are often classified as having *Type A personalities*.



Perhaps the best-known characteristic to have been shown to have harmful effects to both our mental and physical health is **Type A behavior**. Three major behavior components—competitive achievement orientation, time urgency, and anger/aggressive hostility—have traditionally characterized Type A behavior (Friedman, 1996). While none of these qualities are beneficial to your well-being, anger/aggressive hostility is particularly damaging to health. In fact, some have deemed the mix of anger, aggressiveness, and hostility to be the *deadly emotion* of Type A since it is this characteristic that is so injurious to our health (Johnson, 1990).

What is so bad about Type A behavior, particularly its components of anger/hostility? Despite some conflicting evidence, Myrtek (2007) reports that Type A behavior and hostility are widely believed to be a risk factor for *coronary heart disease (CHD)*. Why exactly is hostility, in particular, so bad for the heart? Researchers are continuing to unravel this question. It appears that there is both a physiological and psychological reason for the ill effects of hostility. Smith (1992) notes that hostile people tend to have poorer health habits to begin with, which sets them at a clear disadvantage. He adds that hostile

psychophysiological disorders
disroders that represent a genuine physical problem—but may be caused in part or primarily, or worsened by, psychosocial factors

fight or flight response
how our bodies respond to intensely stressful situations.

sympathetic nervous system
part of the nervous system that consists of nerve cells, linked between the spinal cord and much of the body, that are designed to quickly activate and warn us of impending, possible danger

neurons
nerve cells

hormone
chemical substance released by a cell or gland that is designed to provide communication with cells in another part of the body

hypothalamus
a structure located in the center of the brain that has several important functions pertaining to emotional and motivational processes

tend and befriend
the pattern of how women respond to stress

circulatory system
system of the body that includes the heart along with the vessels—veins, arteries, and capillaries

coronary heart disease (CHD)
disease that can occur when the vessels that transport blood develop fatty plaques

artherosclerosis
condition when the vessels that transport blood develop fatty plaques

Type A behavior
behavior of individuals characterized by three major components: competitive achievement orientation, time urgency, and anger/aggressive hostility

reactivity
physical changes that occur, such as heart rate and blood pressure, when individuals are aware that they are being observed

Type B
personality that tends to be more non-hostile and relaxed

metabolic syndrome
group of risk factors that are commonly associated with increased risk for coronary heart disease

stress-inoculation training
technique designed to teach individuals skills that allow them to alleviate their stress

Type D personality
personality of people that tend to show higher levels of both negative affectivity, or negative emotions such as depression, worry, and irritability—as well as social inhibition, or feelings of shyness, unease in social situations, and lack of social poise

digestive system
system of the body that converts the food and drink consumed into energy for the body's consumption and ultimately eliminating or excreting what the body does not need

individuals tend to show higher rates of **reactivity**, or physical changes in both as reflected by measures such as heart rate and blood pressure. In essence, the hearts of Type A individuals are working out—and wearing out—more so than their **Type B** counterparts who tend to be more non-hostile and relaxed. Consider what happens when you are working out in the gym and overuse a muscle: it tends to get sore and may hurt. The same analogy can be said of the heart when it is overworked. The precise physiological mechanism by which hostility may trigger heart disease is still a matter of ongoing study. There is some evidence that hostility may help to trigger *platelet activation*, which helps to promote coagulation or clotting of the blood (Markovitz, 1998). Niaura and colleagues (2002) add that hostility appears to be a unique predictive factor contributing to heart disease even controlling for other **metabolic syndrome** factors that are commonly associated with increased risk for coronary heart disease (such obesity, higher blood pressure, and poor cholesterol values). These researchers add that the underlying physiological measures of CHD are still unclear, but it is possible that hostility may further undermine those with a preexisting cardiac condition such as a *cardiac arrhythmia*.

Hostility also has significant psychological dimensions. Carmody, Crossen, and Wiens (1989) suggests that hostility is strongly related to neuroticism and interpersonal alienation. Clearly, when we express hostility we repel others. Think about which television characters from yesteryear you would rather share a meal: cranky Archie Bunker from *All in the Family* or affable Dr. Cliff Huxtable from *The Cosby Show*. For a more contemporary example, consider with which of the *American Idol* judges you would rather dine! Seriously, the presence of hostility in intimate relationships is no laughing matter. In a study involving over nine thousand subjects, De Vogli et al. (2007) found that those who viewed themselves as being in an unhappy marriage or intimate relationship had a 34% likelihood of having a coronary event twelve years later in a study follow-up. The good news is that those who are hostile need not always be hostile. There is a form of therapy known as **stress-inoculation training** that is designed to teach individuals (particularly those who display hostile Type A behavior) skills that allow them to alleviate their stress (Meichenbaum, 1985). Such training often involves having individuals keep track of those events that cause stress and their reactions to how they are confronting and reacting to it.

This personality characteristic is associated with an overall higher level of cardio*vascular reactivity* such that it is associated with higher elevations and changes in blood pressure, pulse rates, and similar indices. There is much evidence that such reactivity places a great strain on the heart and increases the risk of heart disease (e.g., Hendrix & Hughes, 1997). Due to questions over the reliability of the Type A construct, Denollet (2005) has proposed the development of a **Type D personality** as a more accurate predictor of heart disease. Those with Type D personalities tend to show higher levels of both *negative affectivity*—or negative emotions such as depression, worry, and irritability—as well as *social inhibition*, or feelings of shyness, unease in social situations, and lack of social poise.

Next, we have the **digestive system**, which helps to convert the food and drink we have consumed into energy for the body's consumption and ultimately eliminating or excreting what we do not need. When we *ingest* food and drink, digestive processes obviously begin with the mouth and continue within the human body through such structures as the stomach and liver, and ultimately to the intestines and anus. There

are several conditions where many believe stress can adversely impact some of these digestive processes. Traditionally, it has often been assumed that *peptic ulcers*, or sores in the lining of the *gastrointestinal tract* or digestive system, are caused by stress; more research recent has suggested that such ulcers are caused by bacterial infections, although stress has not been completely ruled out as a cause (e.g., Sharma, Ghosh, & Sharma, 2004; Spiro, 2000). A much more common digestive disorder is the feeling of *heartburn*, or digestive distress, that we may have after eating certain foods. In reality, heartburn has nothing to do with the heart. Rather, it pertains to acid coming up from the stomach and into the bottom part of the esophagus. Individuals who have continuous feelings of heartburn may be diagnosed with *gastroesophageal reflux disease (GERD)*. Many researchers believe, at the very least, stress helps to exacerbate the discomfort associated with GERD (e.g., Frese & Naliboff, 2007; Johnston, 2005). GERD is a disorder which primarily impacts the beginning of the digestive process, and *irritable bowel syndrome* is a disorder which affects its end prcoesses. Irritable bowel syndrome affects those who regularly show stomach distress and a feeling of discomfort when excreting waste. There remains much debate as to whether irritable bowel syndrome is fundamentally a medical or psychological problem (e.g., Lydiard, 2007), and whether irritable bowel syndrome primarily causes sufferers a sense of distress or whether stress itself is the trigger for this disorder (e.g., Blanchard, 2001). While this condition has often been viewed as more of a psychological disorder, many researchers are beginning to appreciate the complex "brain-gut" interactions between the brain and digestive system (e.g., Jarcho & Mayer, 2007).

Stress can affect many other important systems. For instance, *asthma* can be a potentially life threatening condition involving the *respiratory system*, which aids our breathing. Asthma is a chronic disorder where one's airways constrict and become clogged with mucous. Stress has long been viewed as a possible trigger associated with the potential occurrence of an asthma attack, although not necessarily a direct cause (e.g., Aboussafy et al., 2005). However, Joachim and colleagues (2003) found that, at least in mice, exposure to stress can lead to airway inflammation. Let us quickly turn to another essential body system, the *reproductive system*, which of course, is the system that pertains to our sexual health and the ability to *reproduce* or sire an offspring. There is some evidence that not only can infertility, or the inability to successfully reproduce, can be quite stressful for couples, but it may also be a cause of it (e.g., Wasser, 1994). Other sexual dysfunctions such as *erectile dysfunction* in men (e.g., Wylie & Machin, 2007) and premenstrual syndrome in women (e.g., Figert, 2005) may be linked with stress.

We have focused so much of our attention on systems within the body that we should not overlook an important system that we can plainly see: the *integumentary system*, or the outside coverings of the body, such as the skin, nails, and hair. There are many ailments that are believed, at least in part, to be caused or exacerbated by stress. For instance, *psoriasis* is a non-contagious skin disease that

can cause sufferers to develop red, scaly plaques over various parts of the body's skin, nails, or scalp. Psoriasis can cause stress for those with this condition, although many speculate that stress may be implicated as a contributing factor to this disorder as well (e.g., Schmitt & Ford, 2007).

Thus far, many of the underlying processes as to how stress adversely affects the body remains modestly understood at best. However, the body system that has perhaps been most vigorously studied in order to ascertain how stress directly impacts it is the **immune system**. The immune system works to keep the body healthy by defending it against potential disease. Before we highlight some of the basic components of the immune system and how they operate, let us be clear that we often partake in behavioral patterns that threaten our immune system when faced when stress. Stress can take a toll on our physical and psychological well-being. We may not only be more prone to feel depressed, anxious, or anger, we are also less likely to take care of ourselves by not having a healty diet, maintaining proper exercise or activity level, and maintaining healthy relationships with others (e.g., Hamer & Boutcher, 2006; Sachser, Durschlag, & Hirzel, 1998); Groer, Thomas, Droppleman, & Younger, 1994). In fact, there is a fascinating area of study known as **psychoneuroimmunology** that seeks to understand the how the mind and brain impact the immune system, particularly in terms of promoting health and warding off disease (e.g., Kemeny, 2007). Many researchers have argued that the immune system (like all of the body's systems) should not be merely construed as its own independent entity since it impacts all of the body's other systems (e.g., Hash-Converse & Kusnecov, 2011).

immune system
bodily system that works to keep the body healthy by defending it against potential disease

psychoneuro-immunology
the study that seeks to understand how the mind and brain impact the immune system

The immune system is quite complex and multifaceted. In brief, our *white blood cells* have two basic forms: **lymphocytes**, which act to warn and protect the body against foreign substances (e.g., bacteria, virus) and **phagocytes**, which aggressively destroy these substances (e.g., Kiecolt-Glaser & Glaser, 1995). Kiecolt-Glaser and colleagues (2005) have demonstrated that stressful situations, such as marital strife or arguments, can actually delay the healing of personal wounds and a decline in *cytokine* production at these wounds (which help to promote health through its anti-inflammatory properties). Using experimental methods, Cohen and colleagues (1995, 2006) have found that both one's personal perception of stress and one's personal emotional reaction to stress can greatly influence the development of catching a cold when exposed to a cold-causing virus (e.g., a *rhinovirus*). In short, fewer reports of stress and positive emotional reactions both seem serve as protective agents against viruses that cause the common cold.

lymphocyte
one of the basic forms of white blood cells that act to warn and protect the body against foreign substances

phagocyte
one of the basic forms of white blood cells that aggressively destroy foreign substances

TO SUM UP …

- Chronic distress takes a toll on one's physical and mental health.
- The vulnerability-stress approach (or diathesis-stress approach) remains a very important means of understanding the origins of physical and mental disorders. In brief, some individuals may possess an increased vulnerability or diathesis towards having a given disorder. This predisposition is often biological or genetic in nature. The "stress" component refers to all possible social-environmental factors that may stress the body in some way.

- It is widely believed that the interactions between biogenetic vulnerabilities and the presence of certain social-environmental factors might offer the most complete understanding of why disease develops.
- The human body has many physical systems that work together in order to carry out the basic functions of living. All of these systems can be adversely affected by psychological stress.
- The nervous system, which facilitates communication throughout the body, can be implicated in stress related reactions through the experience of headaches or other body or muscular aches or pains.
- The circulatory system, which helps to transport blood throughout the body, has been shown to come under threat particularly with respect to individuals who often respond to hostility and other negative emotions.
- The digestive system is responsible for converting the food and drink we consume into energy and removing unneeded waste. Stress is believed to perhaps play a role in a number of digestive disorders such as GERD, peptic ulcers, and irritable bowel syndrome.
- The respiratory, reproductive, and integumentary systems—all feature certain conditions that many believe are at least worsened by stress.
- Much research has focused on how the immune system, which works to keep the body healthy and fight off disease, is influenced by stress. In particular, the field of psychoneuroimmunology examines the interplay of the mind and the immune system. Indeed, there is evidence to suggest that stress may prolong the healing of wounds and may make one more susceptible to catching a cold.

MENTAL HEALTH

As we suggested earlier in this chapter, *mental health* is sometimes viewed as the logical organization of our thoughts (e.g., Meggitt, 2001). We also established that health, in general, is much more than the mere absence of disease. Curiously though, the overwhelming amount of literature invariably tends to conceptualize—or at least significantly frame—mental health in exactly that way (e.g., Mechanic, 1999). In fact, Seligman and Csikszentmihalyi (2000) suggests that a key reason why he is such a proponent of the *positive psychology movement* is because of his belief that psychology has placed too much of an emphasis on mental health as sickness and disease, and not enough on those virtues and qualities that exemplify human strengths. Indeed, from its inception, the field of psychology has primarily done just that. In the earlier part of the twentieth century, the term *mental hygiene* was quite popular to connote what was (or should be) "normal" behavior (e.g., Richardson, 1989).

It is unfair to suggest that the field of psychology solely focuses on "mental health" as the pure presence or absence of *abnormal behavior*. In fact, as we'll note in just a moment, the field of psychology has long struggled with trying to define precisely what is meant by "abnormal behavior." Ko (1982) quite simply suggests that those who show good mental health tend to have many *self-promoting* and few *self-defeating* habits. When considered through that particular prism, it becomes much clearer that so much of psychological research—whether it involves, among other topics, how to foster self-worth, achieve personal happiness, or develop satisfying relationships—all

relate to mental health. This point highlights why it is essential to put forth clearer *operational definitions* when trying to identify the essence of mental health. In addition to construing it as the absence of disease, Kaplan (1976) suggests that *conformity*, *competence*, and *adjustment* have all figured into widespread understandings of the essence of mental health. Let's take a closer look at all three of these variables with a particular emphasis on how adjustment—or failure to adjust can lead to mental health problems.

Why Failure to Adjust Can Lead to Psychological Disorders

From the outset of this text, we have reasoned that one of life's few certainties is change. There is much veracity to the cliché, time stops for no one. We get older with the passage of time; this point, in and of itself, often requires change from us. Many researchers characterize difficulties that one faces with respect to the self as **internalizing problems**; in contrast, **externalizing problems** tend to involve conflicts that one has with others or the environment (e.g., Wangby, Bergman, & Magnusson, 1999). Oftentimes situations demand change from us—whether we necessarily want it or not. Some of these situations requiring change may be positive endeavors that are natural and logical extensions of a successful completion of a given event or task. For instance, graduation from college usually then requires one to consider the next logical step or direction in life—whether that be full-time entry into the workplace, continued educational pursuits, or some other endeavor. Some have argued that following college, many young adults (particularly men) desire to enter a period of extended adolescence where parties, video games, and other frivolities take precedence over the more adult life goals of financial independence and commencing a secure family life through marriage (e.g., Hymowitz, 2008)—and that this development is unproductive for both young adults and society at large. Sometimes, however, life's challenges are thrust upon us in ways we would rather not have had to contend with or endure. As we discussed earlier in this chapter, individuals typically do not wish or seek to become ill—yet declines in our physical health tend to be realities of life for most of us at some point. How we respond to such challenges can be critical turning points. For instance, Kurylo, Elliott, DeVivo, and Dreer (2004) found that caregivers who showed negative reactions to a loved one's congestive heart failure condition was related to these patients showing poorer adjustment with their health condition and general outlook in life. This study also reminds us that how we adjust is also (at least to some degree) a function of how others in our lives treat us.

internalizing problems
behavior challenge and mood or emotion disturbances—focused on sadness, guilt, worry, etc.—that one faces with respect to the self

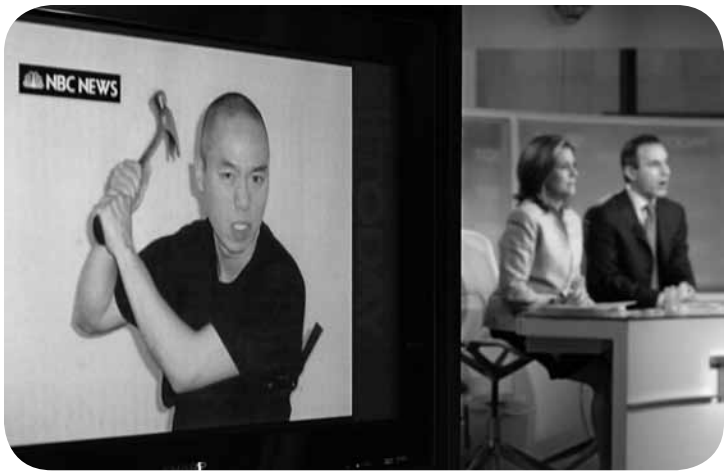
externalizing problems
involve conflicts that one has with others or the environment resulting in acting out, aggression, etc.

Yet, there remains a fine line between everyday life problems and a serious **psychological disorder**. Everyone sometimes has a bad day or two. It is not uncommon to feel worried or nervous every so often as well; and as we've noted, life is often a general struggle for adjustment to the events and situations that do arise. These events and situations surely can bring us stress from time to time. However, psychological disorders tend to be more pervasive and long-lasting. They also tend to be accompanied by feelings of **subjective distress**, where one is personally troubled by one's lot in life. Those with psychological disorders often tend to show *dysfunction*, or serious problems with social relationships and difficulties at work or school. An increased risk of disability or even death is also possible with a psychological disorder (American Psychiatric Association, 1994).

psychological disorder
mental disorder where one tends to show dysfunction or serious problems in social relationships and difficulties at work or school

subjective distress
one is personally troubled by one's lot in life

When trying to describe psychological disorders, it is often helpful to illuminate certain *case studies*; by doing that, the fine line between everyday problems and serious psychological disorders becomes much clearer. Think about your own life as a college student. If your experience is anything like the hundreds of students whom I've taught through the years, you will likely endure your share of "ups and downs." Some of your top concerns may include worries about grades, distress over friendships or romantic relationships that are not going well, or unease about what you should do with your life in the future. These are all perfectly "normal" reactions to life as an "average" college student. Now, contrast these concerns with that of former Virginia Tech college student Seung-Hui Cho who committed the single-most deadly act of mass murder (by a single individual) in U.S. history at his college campus on April 16, 2007, when he killed thirty-two of his classmates and professors before ultimately taking his own life. Soon after the killings, a chilling tape and notes emerged whereby Cho proclaimed, "You caused me to do this" (Potter et al., 2007).



In the single-most deadly act of murder, Seung-Hui Cho (pictured above) murdered thirty-two of his classmates and professors at Virginia Tech University on April 16, 2007. Could this tragedy have been prevented? Perhaps if our society had different approaches to understanding and treating those with overt psychological problems it could have.

Cho's tragic case clearly crosses the line of everyday adjustment problems into one of **psychopathology** (or **mental illness** or **abnormal behavior**). Psychopathology involves the study and nature of disordered thought and behavior that can significantly impede an individual's functioning. Making decisions about what is psychopathology forces us to consider what is"normal"versus "abnormal" behavior, and how this is often determined by cultural and social factors (e.g., Mechanic, 1999). Certainly, by anyone's stretch or judgment, the decision to wantonly murder so many innocent people—as happened at the Virginia Tech Campus—is behavior that would be classified as "abnormal." Yet, as Peck and Scheffler (2002) point out, there is often disagreement between state governments as how to conceptualize mental illness. For instance, some states view it as biologically-based, whereas others do not. It is not just governmental bodies that have struggled to understand what it means to struggle with *severe and persistent mental illness*; many in the mental health community wrestle with these concepts as well (e.g., Parabiaghi et al., 2006). Cho's tragic case also highlights several accurate and some inaccurate points about mental illness. Soon after the shooting massacre, there were reports that many were concerned over Cho's growing erratic behavior. One of his college professors, Dr. Lucinda Roy, was quoted as saying that Cho seemed "extraordinarily lonely—the loneliest person I have ever met in my life" (Potter et al., 2007). Roy added that she became so concerned about his behavior that she not only talked with Cho but also notified authorities, who told her "that there would be too many legal hurdles to intervene" (Potter et al., 2007). In a very compelling story about his adult son's struggle with serious mental illness, Earley (2006) has written about how our legal and health care systems have failed the mentally ill by treating them as criminals rather than the sick and troubled individuals in need of

psychopathology
the study and nature of disordered thought and behavior that can significantly impede an individual's functioning

mental illness
a psychological pattern, potentially reflected in behavior, that is generally associated with distress or disability, and which is not considered part of normal development of a person's culture

abnormal behavior
unusual patterns of behavior, emotion, and thought

help that they truly are. However, the Cho case may also reinforce the largely incorrect belief that those with a mental illness pose an inherent danger to strangers in society. If anything, such individuals may pose the greatest risk to themselves (e.g., Binder, 1999).

Cho'sAmericans bore witness to another horrific act of mass murder on January 8, 2011. On that day, 22-year-old Jared Loughner allegedly attempted to assassinate Arizona Congresswoman Gabrielle Giffords while she was conducting a local community meeting outside of a supermarket with her constituents and other well-wishers. Congresswoman Giffords miraculously survived a bullet wound to her head, though six others (including a nine-year-old girl and a federal judge) were murdered and thirteen others were injured (Lacey & Williams, 2011). In the days following the shootings, it became increasingly apparent that many viewed Loughner as a very troubled, alienated young male with a fleeting grip on reality. Roughly six months before the shootings, one of Loughner's Pima Community College classmates, Lynda Sorenson, wrote an e-mail to a friend that stated:

"We have a mentally unstable person in the class that scares the living crap out of me. He is one of those whose picture you see on the news, after he has come into class with an automatic weapon. Everyone interviewed would say, Yeah, he was in my math class and he was really weird. I sit by the door with my purse handy. If you see it on the news one night, know that I got out fast … " (Fahrenthold, 2011).

Pima Community College garnered both praise and criticism for its decision to expel Loughner until and unless he offered evidence of receiving mental health treatment: While the college did take action in this case, Loughner may have viewed his expulsion as another personal rejection (Sulzberger & Gabriel, 2011). Like Cho, Loughner's profile appears to mimic the patterns of personal characteristics held by those who commit mass acts of murder: That is, they tend to be young males who often feel isolated, alienated, or rejected and use murder as a means to protest these feelings (e.g., Larkin, 2009; Muschert & Spencer, 2009; Markward, Cline, & Markward, 2001). Hentschel (2011) suggests that the Arizona shooting rampage should serve as another urgent reminder about the urgency of remedying deficiencies in America's mental health systems and laws.

The cases of Cho and Loughner are fairly glaring and tragic ones as to how mental illness can ravage the lives of so many individuals. Not all cases of mental illness are as severe and obvious as these two instances. In fact, mental illness should not be viewed as a rare or exotic occurrence: Kessler and colleagues (2005) suggest that more than one in four Americans currently possess the criteria to be diagnosed with a mental disorder. Let us begin to take a closer examination at how we can determine or assess an individual's mental health.

TO SUM UP …

- Historically, much of psychology has viewed mental health through the lens of the absence or presence of mental illness.
- Mental health has been conceptualized in many different ways, however, such as the logical organization of thoughts, showing few self-defeating behaviors and many self-promoting behaviors, successful adjustment, and conformity and competence.

- Some adjustment problems can either refer to conflicts within the self (internalizing problems) or conflicts with others and the environment (externalizing problems).
- There is a fine line between everyday life problems and a serious psychological disorder. The failure to adjust to everyday life problems may be an important harbinger of more serious psychological problems, however.
- Psychological disorders tend to be more pervasive and long-lasting than everyday problems. They also feature themes of subjective distress, dysfunction in one's relationships and work and school, and increased risk of death or disability.
- Psychopathology (or mental illness or abnormal behavior) involves the study and nature of disordered thought and behavior that may significantly impede one's functioning.

HOW WE DETERMINE A PERSON'S MENTAL HEALTH: CATEGORIES OF MENTAL DISORDERS

Trying to make a determination about what exactly constitutes *normal behavior* is likely to foment much debate and discussion. Recall our earlier discussion that *conformity* and *competence* can be viewed as possible indices of mental health (e.g., Kaplan, 1976). Such a view presumes that we are showing behavior that is consistent with the expectations of our culture and its norms. These points should give us pause to make any absolute conclusions about *normal behavior*. Imagine a white person in the pre-Civil Rights era American South who flagrantly mistreated African-Americans. Sadly, during that time period, such an individual would be showing behavior that was fairly typical and in sync with the expectations of their culture and its norms. However, by today's standards, we would certainly not condone such behavior! This hypothetical example reveals that just because one shows behavior that is consistent with societal or cultural norms, such behavior is not necessarily "normal" or healthy. Returning to our example, imagine a white person who actually helped African-Americans during this time frame. Such an individual would likely represent an unusual or atypical case. Yet again, today we would applaud such actions. This helps to illustrate why unusual or atypical behavior is not, in and of itself, a necessary predictor of normal behavior either.

While psychologists may not necessarily have an absolute definition of what is normal, most psychologists agree that **maladaptive behavior** helps to set the foundation of abnormal psychology in that those who are severely struggling to change due to environmental regulations may show great personal distress or dysfunction (Sarason & Sarason, 1999). Clearly, successful adjustment to life's events is critical to mental health. Even though psychologists realize that not everyone can attain successful adjustment all the time, sometimes we discern patterns of behavior that may raise alarm. To offer an analogy and link back to our discussion of physical illness, let us reflect on our earlier consideration of the skin disorder known as *psoriasis*. If you have a rash on your body, you may be mindful of it and treat it a bit; however, assuming it clears up in a few days, you think nothing more of that rash in all likelihood after that. However, if that rash is not clearing up, you will likely want to seek medical attention due to its prolonged existence. That rash could be psoriasis,

maladaptive behavior
actions of those who are severely struggling to change due to environmental regulations and may show great personal distress or dysfunction

or it could indicate an entirely different condition. The same reasoning can apply to a psychological disorder. If you're feeling down about a certain event, you may sulk for a few days, and after that, you'll likely feel better about the situation. However, if those negative feelings do not subside, then you will likely want to seek psychological attention due to its prolonged existence. So, it bears noting that both the **symptoms**, or a descriptive sign indicating the possible presence of illness, as well as the time lapse, or how long these symptoms have been experienced, are critical to any *clinical diagnosis*.

symptom
a descriptive sign indicating the possible presence of illness

In 1952, the American Psychiatric Association set out to offer clinicians a standard categorization of the major mental disorders recognized by the field in a text known as the **Diagnostic and Statistical Manual of Mental Disorders (DSM)**. To date, the DSM has undergone four major revisions; its most current update arrived in 2000 with the publication of the *DSM-IV-TR*. A new version of the DSM (the *DSM-V*) is scheduled for release in May 2013 (Gever, 2010). This section concentrates on the current edition of the *DSM-IV-TR*. Although much of the new *DSM-V* retains most of the general organization of its earlier edition, some notable changes are planned such as recategorizing learning disorders and eliminating "substance abuse" disorders, replacing it with a broader category of "behavioral addictions" (Gever, 2010).

Diagnostic and Statistical Manual of Mental Disorders (DSM)
a text giving a standard categorization of the major mental disorders

Like many other texts in other branches of medicine (such as *The Merck Manual* or *Mosby's Medical Dictionary*), the *DSM* is designed to offer a systematic overview of the major possible psychological disorders and their corresponding symptoms that a patient could present. The current *DSM* is organized into five distinct levels or axes that pertain to the nature of the disorder. We will primarily sample a few select disorders from Axis I and Axis II, which primarily feature common clinical disorders (such as depression and anxiety) and personality disorders, respectively. Consistent with an important theme of this chapter, Axis III and Axis IV take physical health issues and environmental stressors as contributing factors to mental illness.

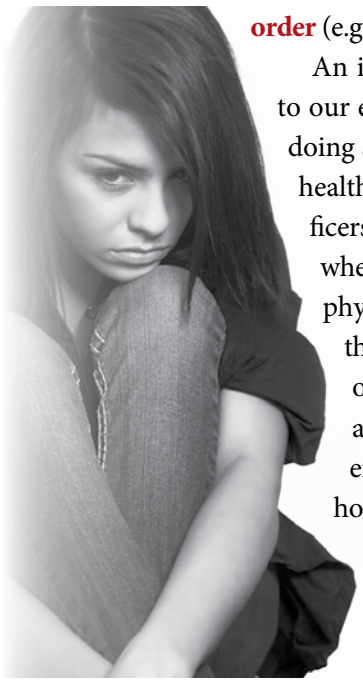
The *DSM* is far from perfect. Many suggest that continued *reliability* and *validity* of the *DSM* is needed for its next revision (e.g., Regier, Narrow, Rae, & Rubio-Stipec, 2005). There are others who claim that the DSM fails to accurately represent various perspectives within psychology (e.g, Andersson & Ghaderi, 2006), including more interdisciplinary views such as feminist critiques (e.g., Wiley, 2004). Also, there are those who suggest that the idea that a select group of individuals can decree what is abnormal behavior (even if relying on scientific research) is a questionable practice from the outset since there can be many variations in how to interpret abnormal behavior (e.g., Duffy et al., 2002). These criticisms notwithstanding, the *DSM* remains the quintessential text on what conditions are widely viewed as abnormal by the mental health field.

Accordingly, let us explore some of the major disorders currently recognized by the *DSM*. Before we do, several important caveats and cautions are critical to note. First, you should view this overview as a very cursory representation of some select mental disorders. While it is hoped that the following section will offer you a stronger grasp as to the essence of some of the more common psychological disorders, this section represents a tiny fraction of the issues and disorders that would be covered in an *abnormal psychology* textbook. You will also find that this section offers a very limited consideration of precisely how these disorders develop or ways by which to treat them. This decision was done largely to maintain brevity and a scope suitable for this text. In general though, you

should be aware that the biopsychosocial model applies to the study of mental illness, also, in that biogenetic and psychosocial factors are relevant to the development of most psychological disorders. One final caution to voice: After reading some of the descriptions of some of the major psychological disorders, you may begin to question whether you or a loved one may be suffering from a given disorder. Remember that everyone has their "bad" days or "bad" moments; and such realities do not, in and of themselves, indicate the presence of mental illness. However, if you are genuinely concerned as to whether you or a loved one may have any of the following disorders, then you should feel comfortable to discuss your concerns with a mental health care provider. Such an individual is trained to make such clinical judgments.

Mood and Affective Disorders

Much of this text considers how and whether negative life events can impact our psychological well-being. However, there is also evidence for the reverse; that is, clinical depression might actually produce self-created negative life events that help to perpetuate one's depression (Cui & Vaillant, 1997; Simons, Angell, Monroe, & Thase, 1993). Clinical depression is a form of a **mood disorder** that occurs when one shows disruptions or troublesome thoughts or feelings in relation to their mood, emotions, and feelings over a prolonged period of time (e.g., Traylor & Vonk, 2006). As we've already suggested, it is perfectly normal to have days when is feeling "down and out" or just "depressed" with themselves or their lives. However, it is quite another to have such feelings to the extent that they severely interfere with basic life functioning and enjoyment. Having such feelings over an extended period of at least a few weeks may give reason for a diagnosis of **major depressive disorder (MDD)**, see Table 4.1. This disorder is the leading cause of disability in developed countries and is projected to be the second leading cause of disability worldwide by the year 2020 (Papkostos et al., 2004). Though it is far less common than MDD, sometimes a major depressive disorder can evolve into a chronic, more long-lasting condition of depressed mood in which case an individual is likely to be diagnosed with a **dysthymic disorder** (e.g., Nobile et al., 2003).



An important theme of this text is that we need to give voice to our emotions and feelings since there is lengthy literature that doing so can be beneficial to both our physical and psychological health. For instance, Wastell (2002) reports that ambulance officers who *suppressed*, or purposefully held back their feelings, when exposed to traumatic conditions were at greater risk for physical and psychological stress symptoms. Yet, looking at the other extreme, constant reflection and expression of all of our thoughts and feelings (particularly those mired in negative affect or emotion) is not supportive of our well-being either. The **response styles theory of depression** posits that how individuals respond to their symptoms of depression impacts the trajectory of their well-being (Nolen-Hoeksema, 1991). In particular, those who **ruminate**, or excessively ponder their condition and the perceived sources and consequences of their problems, are particularly apt to

mood disorder
condition that occurs when one shows disruptions or troublesome thoughts or feelings, over a prolonged period of time, in relation to mood, emotions, and feelings

major depressive disorder (MDD)
disorder where one has feelings of depression to the extent that they severely interfere, for an extended amount of time, with basic life functioning and enjoyment

dysthymic disorder
a major depressive disorder that can evolve into a chronic, long-lasting condition of depressed mood

response styles theory of depression
theory of how an individual's response to his/her symptoms of depression impacts the trajectory of their well-being

ruminate
excessively ponder a condition and the perceived sources and consequences of the problem

Table 4.1 - *DSM-IV-TR* Criteria for Major Depressive Episode (Source: APA, 2000)

Here, you can see how the *DSM* sets its diagnostic criteria for a type of mood disorder known as major depressive disorder. As you can see from this example, the *DSM* features a very detailed array of criteria needed in order to make a clinical conclusion as to whether one has a psychological disorder or not.

Major Depressive Episode

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

   Note: Do not include symptoms that are clearly due to a general medical condition or mood-congruent delusions or hallucinations.

   (1) depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observations made by others (e.g., appears tearful). Note: In children and adolescents, this can be irritable mood.

   (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)

   (3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. Note: In children, consider failure to make expected weight gains.

   (4) insomnia or hypersomnia nearly every day

   (5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

   (6) fatigue or loss of energy nearly every day

   (7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)

   (8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

   (9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without specific plan, or a suicide attempt or a specific plan for committing suicide

B. The symptoms do not meet the criteria for a Mixed Episode.

C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The symptoms are not due to the direct physiological effect of a substance or a general medical condition.

E . The symptoms are not better accounted for by Bereavement—i.e., after the loss of a loved one, the symptoms persist for longer than two months, or the symptoms are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

increase their bout with depression. In contrast, those who *distract* themselves from their symptoms and problems by not overly focusing on their ills tend to mitigate the symptoms of depression. There is ample evidence to support the notion that rumination tends to not only pose a risk for depression but can also intensify it as well (e.g., Ciesla & Roberts, 2007).

Major depression disorder can lead to thoughts of suicide.

A diagnosis of major depressive disorder can in and of itself be illustrative of serious life problems. Perhaps of even more pressing concern with respect to this disorder is the possibility that such depression sometimes brings with it thoughts or even acts of *suicide* where one takes one's own life. Coryell and Young (2005) report that MDD patients who had the highest ratings of *hopelessness* and *global suicidality* where at greatest risk of eventually killing themselves. Welton (2007) notes that even though women are more likely than men to be diagnosed with depression by a two to one ratio, men (especially elderly males) are most likely to commit suicide; race is another important variable, in that suicide rates are higher amongst whites and Native Americans. Irrespective of one's sex, race, or other personal characteristics, the literature is clear that **suicidality**, where one fantasizes or actively plans or discusses details about killing oneself, remains perhaps the single-most important predictor of suicide (e.g., Selby, Anestis, & Joiner, 2007; Liu et al., 2006). In order to further flesh out those who might be most likely to express high endorsements of suicidality, many researchers believe that it is critical to also understand some of its correlates, such as feelings of *perfectionism* (e.g., O'Connor, 2007) and the presence of sleep disorders or nightmares (e.g., Sjostrom, Waern, & Hetta, 2007). Many researchers have noted that *suicide myths* are still common in the general population, such as a belief that suicides rarely happen without warning or even that everyone who commits suicide would necessarily be given a formal depression diagnosis (e.g., Hubbard & McIntosh, 1992). These beliefs, while not universally endorsed by all, appear to be held fairly equally by young and old (e.g., Segal, 2000)—and, even amongst populations that we might expect to have a stronger grasp on suicidal thoughts or behaviors, such as schoolteachers (MacDonald, 2004).

suicidality
where one fantasizes or actively plans or discusses details about killing oneself

One final mood disorder to briefly note is known as **bipolar disorder**, which was once more commonly termed *manic depression*. This disorder is actually quite severe and features profound shifts in moods. These moods can range from incredible states of euphoria and bursts of energy known as **mania** to deep lows of depression. Johnson (2004) notes that there is much evidence that many highly creative individuals, such as the artist Vincent van Gogh and the composer Pytor Illyich Tchaikovsky, suffered from this disorder. Lloyd-Evans, Batey, and Furnham (2006) suggest that those with a genetic predisposition towards bipolar disorder may have an advantage in terms of their ability to foster creativity. However, the gift of creativity comes with a double-edged sword in that those with bipolar disorder tend to experience particularly dark and depressive episodes (e.g., Jamison, 1996).

bipolar disorder
a disorder that is quite severe and features profound shifts in moods

mania
incredible states of euphoria and bursts of energy

Anxiety Disorders

All of us have felt anxious at times where we may have worried or felt a sense of concern about some aspect of our lives. Perhaps you were worried about an upcoming exam, a job

fear responses
reaction to fear that includes increased heart rate and blood pressure

anxiety disorder
condition where an individual shows an unreasonable or excessive reaction to current or future perceived threats

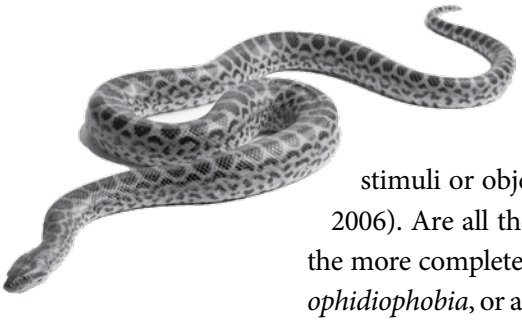
generalized anxiety disorder (GAD)
disorder where individuals show excessive worry, particularly lasting more than six months, but do not fear any one particular object or stimuli

phobia
an intense, irrational fear of a specific situation or stimuli

social phobia
fear that causes an individual to avoid social experiences, thus hindering one's quality of everyday life

interview, or whether a social function (such as a date) would be a success. Such feelings are completely normal. In fact, Rosen and Schulkin (1998) contend that **fear responses**—such as increased heart rate and blood pressure, heightened vigilance, and startling—all help us adapt to and defend against a potentially dangerous situation. We often bear witness to the more extreme forms of fear in the pandemonium that typically follows a major calamity or disaster. For many, an indelible image of the 9/11 terrorist attacks would be witnessing individuals running away from the crumbling Twin Towers in the streets of lower Manhattan. However, Rosen and Schulken (1998) note that exaggerated and perpetual fear states can lead to *pathological anxiety* where hypervigilance and hyperexcitability occurs. Accordingly, such individuals often suffer from an **anxiety disorder** where they show an unreasonable or excessive reaction to current or future perceived threats (e.g., Shelton & Hunt, 2008). At any given time, it is estimated that nearly 20% of American adults may be suffering from an anxiety disorder. That figure is roughly twice as great as the number of Americans who may be suffering from a mood disorder in a given year (Kessler, Chiu, Demler, & Walters, 2005).

Many clinicians and scholars contend that the general classification of anxiety disorders are fairly similar in that they share many basic symptoms of heightened, irrational fears; however, the specificity of the level and nature of anxiety is what differentiates these disorders (e.g., Uhmann et al., 2010). Let us highlight the two extremes of anxiety disorders: generalized anxiety disorder (GAD) and phobias. Individuals who show excessive worry, particularly for more than six months, but do not fear any one particular object or stimuli are often diagnosed with **generalized anxiety disorder (GAD)** (Ruscio et al., 2007). In contrast to GAD, **phobias** involve an intense, irrational fear of a specific situation or stimuli.



Some show a more specific *phobia*, or a marked fear of particular stimuli or object that often has been learned or acquired in some way (e.g., Field, 2006). Are all the net effects of all phobias the same? The simple answer is no—but the more complete answer is much more complicated than that. For instance, consider *ophidiophobia*, or a fear of snakes—which is a fairly common fear shared by humans (e.g., Ohman & Mineka, 2003). On one hand, the ill effects of a phobia can be avoided to the extent to which the feared stimuli can be avoided. Easy enough, right? Not necessarily. While some specific phobias can be avoided on a fairly regular basis, it is possible that one may need to encounter the feared stimuli at some point in one's life—even if it is a snake! Even more concerning is the point that some phobias, such as **social phobia**, can be especially debilitating; this phobia often causes individuals to avoid social experiences that hinder one's quality of everyday life (Lopez-Ibor & Gutierrez, 1997). It is fairly easy to imagine how a social phobia can limit the quality and quantity of the types of experiences that one has both on an individual level and as social being, such as feeling uneasy in certain venues (such as restaurants, malls, or even workplaces) and simply being amongst others in social situations. An especially polarizing and limiting phobia (that is not identical to social phobia) is known as *agoraphobia* (Onur, Alkin, & Tunal, 2007). Those who suffer from agoraphobia have a profound fear of being in a situation where one might not be able to flee in the event of self-perceived dire condition or emergency. The situational impairments of agoraphobia can range widely from situation-specific conditions, such as

airplane flying or being in a crowded theater, to the most extreme condition of refusing to leave one's home (Slade & Grisham, 2009). The aforementioned point, where one could appear to have a fear of flying that really represents a more agoraphobic fear, highlights another truth about phobias (and the nature of mental illness in general): phobias tend to have a fairly high level of **comorbidity**, or a common positive association, with other mental illnesses, such as depression (Choy, Fyer, & Goodwin, 2007). In other words, one who has been diagnosed with a particular mental illness, such as a phobia, is often likely to have other diagnoses as well.

comorbidity
a common association with other mental illnesses

Let us briefly summarize some of the other key anxiety disorders. Sometimes individuals seemingly feel intense anxiety over a certain period time (from a few minutes to a few hours); unlike generalized anxiety disorder, individuals who show evidence of **panic disorder** may show physical symptoms of panic, such as excessive sweating, trembling, or a racing heart (e.g., Barlow, Brown, & Craske, 1994). These feelings of panic that lead to an individual's physical reactions are known as *panic attacks*. While panic attacks may be generated by unwarranted feelings of anxiety, there is evidence that many of the consequences of panic truly do have a physiological basis. Those who suffer from these attacks oftentimes fail to take in enough breaths and cause an elevated rate of carbon dioxide to develop, in doing so; this, in turn, may help to fuel these attacks (e.g., Rassovsky & Kushner, 2003). To clarify, the feelings of panic and anxiety are largely irrational to the situation in which one finds oneself.

panic disorder
condition in which an individual shows physical symptoms of panic, such as excessive sweating, trembling, or a racing heart

obsessive compulsive disorder (OCD)
condition where an individual falls prey to a vicious cycle of patterned behaviors and thoughts, which reinforce each other

compulsive hoarding
behavior of accumulating materials that have seemingly little or no value to outsiders but have great emotional significance to the involved individual

Those who suffer from **obsessive compulsive disorder (OCD)** tend to fall prey to a vicious cycle of behaviors and thoughts that reinforce each other. OCD tends to feature *intrusive thoughts* that one tends to obsess over while developing *rituals* in order to avoid these unpleasant thoughts (e.g., Tolin & Steketee, 2007). Alvarenga and colleagues (2007) note that OCD might also be conceptualized as a "disease of doubt" in the sense that such individuals consistently cast doubt on their judgments and beliefs. They further add that OCD is not as rare as may have once seemed in that 1 to 3% of individuals are affected by this disorder worldwide. Though there are many possible ways one can exhibit OCD behavior, perhaps a prototypical example would be excessive *handwashing* as a way to rid one of unwanted concerns about dirt or germs (e.g., Jones & Menzies, 1997). There is growing interest in understanding the nature and possible treatment of **compulsive hoarding**. Those who are compulsive hoarders accumulate materials that have seemingly little or no value to outsiders but have great emotional significance to hoarders; this condition can take a profound physical toll not just on hoarders, but also their loved ones who often try to live amidst great clutter and even squalor (e.g., Steketee & Frost, 2007). There is considerable debate in the

This room may look like just a big mess to you, but to a compulsive hoarder and their family members, it is a very serious matter. Compulsive hoarders accumulate vast amounts of materials to the point that it can be difficult to function in one's home or surroundings.

research literature as to whether compulsive hoarding should be viewed as a subcategory or extension of OCD (e.g., Samuels et al., 2007) or its own unique category of mental illness that is distinct from OCD (e.g., Saxena, 2007).

trauma
emotional result of the more "extreme events" such as victimization due to war or rape

posttraumatic stress disorder (PTSD)
disorder in which an individual who undergoes a severe trauma can show a wide array of symptoms—such as loss of pleasure, guilt, depression, anxiety, difficulties in concentration (Perhaps its most defining feature is the presence of flashbacks where one literally feels as though one is reliving the horror of the event.)

Sometimes anxiety disorders are related to the experience of **trauma**. There is usually an assumption that traumas represent more "extreme events" (such as victimization due to war or rape) and such events are more likely to provoke especially strong emotional emotions that represent the underlying threat of the event (McFarlane & Van Der Kolk, 1996). Some individuals who undergo a severe trauma will may experience **posttraumatic stress disorder (PTSD)**. Those with PTSD can show a wide array of symptoms, such as loss of pleasure, guilt, depression, anxiety, difficulties in concentration—but perhaps its most defining feature is the presence of *flashbacks* where one literally feels as though one is reliving the horror of the event (e.g., McFarlane & Van Der Kolk, 1996). Of course, a major theme of this text is that just because one experiences a trauma does not necessarily mean one will be diagnosed with PTSD (e.g., Saxe et al., 2008). Many argue that a significant reason as to why the experience of trauma does not necessarily equate with the development of PTSD may be due to other underlying biological or psychosocial vulnerabilities to mental illness (e.g., Yehuda, 2002).

Other Major Types of Mental Illness

Let us briefly mention some other categories of mental illness that are generally far less common than the mood and anxiety disorders we have considered. Sometimes an individual has developed personal characteristics or traits that consistently cause dysfunction on both a personal and interpersonal level. We generally refer to this broad categorization as a **personality disorder** (e.g., Zweig & Hillman, 1999). There are ten major personality disorders recognized by the current edition of the DSM (e.g., Phillips, Yen, & Gunderson, 2007). **Borderline personality disorder** is one of the most researched of these disorders, perhaps in part, because it is one of the most complex to treat (Freeman, Stone, Martin, & Reinecke, 2005). A key characteristic of this disorder involves volatility and impulsiveness, particularly in the realm of interpersonal, social relationships. **Antisocial personality disorder** involves a clear insensitivity or disregard for others' feelings. This disorder tends to receive much attention in the literature due, in part, to studies that find that aggressiveness in childhood often is a strong predictor of development of this disorder in adulthood (particularly amongst men; Schaeffer et al., 2003).

personality disorder
disorder in which an individual has developed personal characteristics or traits that consistently cause dysfunction on both a personal and interpersonal level

borderline personality disorder
disorder that involves volatility and impulsiveness, particularly in the realm of interpersonal, social relationships

antisocial personality disorder
disorder that involves a clear insensitivity and disregard for, or manipulation of, the feelings and rights of others

dissociative disorders
condition where an individual seems to have disconnected aspects of his-herself or the thoughts from the larger framework of one's life

Two particularly challenging mental disorders for the psychological and psychiatric community are **dissociative disorders** and **schizophrenia**. Let us be clear that they are, indeed, distinct disorders. With a dissociative disorder, an individual seems to have disconnected aspects of their selves or their thoughts from the larger framework of one's life (e.g., Silberg, 2001). In these disorders, it is hypothesized that individuals compartmentalize aspects of their lives, particularly in the wake of trauma or abuse, as a means to cope with these events (e.g., Koh, Nishimatsu, & Endo, 2000). In contrast, schizophrenia does not suggest a piecemeal compartmentalization of reality—rather, it tends to connote a break from reality. Although schizophrenics can preserve a semblance of awareness, they often suffer from a severe range of symptoms, such as *delusions* or *hallucinations* that can be visual or auditory in nature (e.g., Ros & Arranz,

2007). Perhaps motivated by the inherent seriousness of this disorder (e.g., Conklin & Iacono, 2002), there is much attention to understanding the possible biogenetic (e.g., McClellan, Susser, & King, 2007) and social environmental causes of schizophrenia (e.g., van Os & McGuffin, 2003).

schizophrenia
mental disorder characterized by an individual's break from reality and a breakdown in thought processes and poor emotional responsiveness

While the general issue of how to promote mental health is one that is implicit throughout this text, Chapters 7 through 9 (in particular) offer some valuable insights as how to achieve this complex goal. In Chapter 9, we will stress the point that, to date, there are no known "cures" of mental illness. As we will discuss in that chapter, there surely are ways to treat mental disorders—even if there often is some debate and disagreement over the most suitable course of treatment for a given disease. Just as is the case for the many physical ailments that we considered, let us hope for a day when there truly is a cure or vaccine that can prevent these disorders as well.

TO SUM UP …

- Unusual or atypical behavior or behavior that violates societal or cultural norms does not necessarily define abnormality.
- Maladaptive behavior, where one consistently struggles to change to environmental regulations may be at greatest risk for dysfunction and distress.
- Both one's symptoms and the length of how long the symptoms have been present are critical to any clinical diagnosis.
- The *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, which is published through the American Psychiatric Association, is the leading reference book containing all of the major mental disorders currently recognized by the field.
- Mood disorders occur when an individual shows disruptions or troublesome thoughts in relation to their mood. It is not akin to feeling sad after experiencing a difficult situation. Some of the more common mood disorders include major depressive disorder (MDD), dysthymic disorder, and bipolar disorder. Of particular concern with these disorders is one's suicidality, where one actively considers or plans to take one's life.
- While some anxiety in life can be helpful (e.g., fear responses), excessive or pathological anxiety and fears can lead to an anxiety disorder. Some of the most prominent anxiety disorders include generalized anxiety disorder (GAD), phobias (specific and social), panic disorder, obsessive compulsive disorder (OCD), compulsive hoarding, and posttraumatic stress disorder (PTSD).
- Many mental illnesses show a high level of comorbidity such that having one disorder is often associated with having another disorder as well.
- Some other major types of mental illness include personality disorders, dissociative disorders, and schizophrenia.
- While there are treatments for mental illness, there are no known "cures" for it.

PUTTING IT ALL TOGETHER

Understanding Health: Physical Health as a Starting Point

- Health is a complex, multifaceted dimension that involves physical, mental, emotional, spiritual, social, vocational, and environmental aspects.
- Physical health involves assessing the body's physical systems.
- Health is not defined as the mere absence of disease. It is possible to be free of disease and yet still be unhealthy.
- Health has both subjective and objective qualities. Subjective qualities refer to your personal feelings about health and disease, whereas objective qualities refer to the outside evidence that speaks to your health or disease. Sometimes, there is a discrepancy between the two.
- Health promotion refers to the ways by which we try to maintain good health through personal and group decisions and our societal and educational systems.
- Health processes are increasingly understood through a biopsychosocial perspective where the consideration of biological, psychological, and social factors takes place.
- Individuals may understand that certain behaviors carry health risks and yet still carry out those unhealthy behaviors. The health belief model (HBM) attempts to asses the key factors that dictate whether one feels it is necessary to pursue behavioral change in order to improve their health. These factors include perceived susceptibility, perceived benefits, perceived severity, perceived barriers, and self-efficacy.
- The stages of change model helps to predict our readiness and willingness to make behavioral changes in our lives. The five stages of this model include precontemplation, contemplation, preparation, action, and maintenance.

- Individuals are overweight if they are 10–20% over their ideal body weight, whereas obese individuals are over 20% their ideal body weight. The body mass index (BMI), which is a measure of your weight and height, is a widely used measure of one's weight healthfulness.
- In order to achieve a personally healthy weight through weight maintenance, it is essential for an individual to both eat a balanced diet while watching their caloric intake and to exercise regularly.
- Dietary restraint, or limiting one's portion sizes and calories, may be critical to achieving successful weight loss.
- There is not an absolute consensus as to which diet plan is "best" or most effective at losing weight. However, many of the principles of Volumetrics have been shown to be sound both in terms of its physical and psychological components.
- Our lipid profile is another critical index of physical health. We should strive to have a low LDL cholesterol value and a high HDL

cholesterol value. Eating healthy foods seems to particularly affect the former, while exercise particularly impacts the latter.

- A chemical in red wine known as resveratrol may contain some health-promoting qualities. However, it is always wise to use alcohol in moderation.
- There is overwhelming evidence that exercise (both aerobic exercise and strength training) produces profoundly positive physical and psychological effects. Other than injury, there are very few negative effects associated with exercise.
- It is also important to stress that our weight is not merely influenced by the personal food choices we make and the level of exercise we pursue. There are several biogenetic and social-environment factors at play too.
- In order to maintain good health, it is essential to strive for at least seven to eight hours of sleep (on average) per night. Consistently sleeping fewer than that has been associated with several serious physical and mental problems.
- Crisis theory examines how individuals cope and adjust to illness and disease. This theory suggests that illness-related factors, personal characteristics of the patient, and physical or social-environmental factors—all help to predict how an individual makes a cognitive appraisal of the disease such that they have a personal understanding of how to proceed with coping.
- The three most common, broad categories of illness include acute illness, chronic illness, and terminal illness.
- Heart disease and cancer remain the first and second leading causes of death in the United States.
- It has been argued that displaying a "good patient role," where one does not ask many questions of one's health care provider, is often associated with poorer outcomes. In contrast, the "bad patient role," where one takes a more active role in one's care, tends to produce more beneficial outcomes.

Linking Physical and Mental Health: The Potentially Harmful Effects of Stress

- Chronic distress takes a toll on one's physical and mental health.
- The vulnerability-stress approach (or diathesis-stress approach) remains a very important means of understanding the origins of physical and mental disorders. In brief, some individuals may possess an increased vulnerability or diathesis towards having a given disorder. This predisposition is often biological or genetic in nature. The "stress" component refers to all possible social-environmental factors that may stress the body in some way.
- It is widely believed that the interactions between biogenetic vulnerabilities and the presence of certain social-environmental factors may offer the most complete understanding of why disease develops.
- The human body has many physical systems that work together in order to carry out the basic functions of living. All of these systems can be adversely affected by psychological stress.
- The nervous system, which facilitates communication throughout the body, can be implicated in stress related reactions through the experience of headaches or other body or muscular aches or pains.
- The circulatory system, which helps to transport blood throughout the body, has been shown to come under threat particularly with respect to individuals who often respond to hostility and other negative emotions.
- The digestive system is responsible for converting the food and drink we consume into energy and removing unneeded waste. Stress is believed to perhaps play a role in a number of

(continues)

(continued)

digestive disorders such as GERD, peptic ulcers, and irritable bowel syndrome.

- The respiratory, reproductive, and integumentary systems—all feature certain conditions that many believe are at least worsened by stress.
- Much research has focused on how the immune system, which works to keep the body healthy and fight off disease, is influenced by stress. In particular, the field of psychoneuroimmunology examines the interplay of the mind and the immune system. Indeed, there is evidence to suggest that stress may prolong the healing of wounds and may make one more susceptible to catching a cold.

Mental Health

- Historically, much of psychology has viewed mental health through the lens of the absence or presence of mental illness.
- Mental health has been conceptualized in many different ways, however, such as the logical organization of thoughts, showing few self-defeating behaviors and many self-promoting behaviors, successful adjustment, and conformity and competence.
- Some adjustment problems can either refer to conflicts within the self (internalizing problems) or conflicts with others and the environment (externalizing problems).
- There is a fine line between everyday life problems and a serious psychological disorder. The failure to adjust to everyday life problems may be an important harbinger of more serious psychological problems, however.
- Psychological disorders tend to be more pervasive and long-lasting than everyday problems. They also feature themes of subjective distress, dysfunction in one's relationships and work and school, and increased risk of death or disability.
- Psychopathology (or mental illness or abnormal behavior) involves the study and nature of disordered thought and behavior that may significantly impede one's functioning.
- Unusual or atypical behavior or behavior that violates societal or cultural norms does not necessarily define abnormality.
- Maladaptive behavior, where one consistently struggles to change to environmental regulations, may be at greatest risk for dysfunction and distress.
- Both one's symptoms and the length of how long the symptoms have been present are critical to any clinical diagnosis.
- The *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, which is published through the American Psychiatric Association, is the leading reference book containing all of the major mental disorders currently recognized by the field.
- Mood disorders occur when an individual shows disruptions or troublesome thoughts in relation to their mood. It is not akin to feeling sad after experiencing a difficult situation. Some of the more common mood disorders include major depressive disorder (MDD), dysthymic disorder, and bipolar disorder. Of particular concern with these disorders is one's suicidality, where one actively considers or plans to take one's life.
- While some anxiety in life can be helpful (e.g., fear responses), excessive or pathological anxiety and fears can lead to an anxiety disorder. Some of the most prominent anxiety disorders include generalized anxiety disorder (GAD), phobias (specific and social), panic disorder, obsessive compulsive disorder (OCD), compulsive hoarding, and posttraumatic stress disorder (PTSD).
- Many mental illnesses show a high level of comorbidity such that having one disorder is often associated with having another disorder as well.
- Some other major types of mental illness include personality disorders, dissociative disorders, and schizophrenia.
- While there are treatments for mental illness, there are no known "cures" for it.

Key Terms

(continues)

(continued)

Key Terms

TEST YOURSELF

Take these short quizzes to see how well you understand the material from this chapter. The answers will be found in Appendix B.

Part I: *Multiple Choice*

Ahh, multiple choice! … You know what to do!

1. ___ health, in particular, involves a consideration of how we relate to others.
   A. Environmental
   B. Mental
   C. Social
   D. Emotional
2. Health is _____.
   A. the opposite of disease
   B. equivalent to the absence of disease
   C. unrelated to the presence of disease
   D. somewhat related to the absence of disease
3. All of the following are components of the health belief model EXCEPT _____.
   A. hard-wired behaviors
   B. self-efficacy
   C. perceived severity
   D. perceived benefits

4. Sam has begun to take some basic steps on the path to quit smoking. As such, he is likely in the ___ stage of readiness to change.
   A. contemplation
   B. preparation
   C. action
   D. maintenance

Part II: *True-False*

Determine whether the statement below is TRUE or FALSE.

1. Your BMI is calculated based on your age and weight.
2. The saying *hara hachi bui* suggests that we should eat until we feel full.
3. Lower total cholesterol values necessarily imply good health.
4. Exercise can be very helpful to us since it helps our bodies produce resveratrol.
5. Fast-food restaurants are often concentrated in poor, minority neighborhoods.
6. Sleep apnea is often associated with obesity.
7. Regularly sleeping fewer than seven to eight hours per night tends to produce ill health effects.

Part III: *Match That System!*

Determine the term/concept from the second column that is MOST closely associated with the term/concept in the first column.

1. Angioplasty	A. Reproductive System
2. Irritable bowel syndrome	B. Nervous System
3. Psoriasis	C. Immune System
4. Cytokines	D. Circulatory System
5. Premenstrual syndrome	E. Digestive System
6. Headaches	F. Integumentary System

Part IV: *Short Answer Questions*

Answer the following questions. You should be able to do so in no more than a couple of sentences.

1. How has the field of psychology conceptualized mental health?
2. Which is the difference between internalizing and externalizing problems?
3. Name the three key factors that are likely to signal psychological distress.
4. What is psychopathology?
5. Does atypical or unusual behavior signify abnormal behavior?
6. How does time lapse influence whether one is showing a maladaptive behavior?
7. Name the chief text that mental health professionals refer to in order to ascertain the major psychological disorders recognized as such by the field.

Part V: *What's Wrong with Me?*

Listed below are summaries of descriptions from hypothetical individuals about the psychological problems that they are experiencing. Based on the information provided, determine the MOST LIKELY psychological disorder that each hypothetical individual is experiencing.

1. Sometimes I feel full of life and energy, but other times I feel incredibly depressed.
2. I worry a lot to make sure that I have properly cleaned my office every hour or so in order to maintain a feeling of order and cleanliness.
3. I have regular conversations with people in photographs who tell me what to do.
4. I have felt depressed to some degree throughout most of my adult life.
5. Ever since coming back from the war, I swear that sometimes I feel like I am actually reliving battles that I once fought.

Some Final Thoughts …

- Identify some aspect of your health that you would like to improve and change. Once you do that, monitor your progress on a daily basis for at least a month. Try to keep a diary or journal that logs your progress (or lack thereof) in meeting this goal. Were you successful or not in promoting change? Why or why not? Once the month passes, reassess your progress in order to determine what is working and what is not; and then try again!
- Imagine that you are moderating a debate on the topic of what factors most influence or determine mental and physical health. On one side is a proponent who contends that health is just a matter of your genes and biological make-up. On the other side, suppose you have someone arguing that health is simply a function of "mind over matter." How would you moderate such a debate where there are such stark differences represented?
- Let us reflect on the concluding statement made at the end of this chapter about how much improved life would be if there were cures or vaccines for all physical and mental illnesses. Imagine a world free of disease. What would that world look like? Most of us (myself included) would tend to view such a development as a wonderful event. However, are there any possible drawbacks to such a disease-free world (e.g., overcrowding, a lack of understanding of what it means to cope with adverse health conditions)?