Chapter 6

Stress, Health, and Well-Being

Learning Objectives

1. Identify examples of stressors, stress processes, and stress reactions.
2. Describe different coping styles and their impacts on the adjustment process.
3. Identify strategies that are found to be effective in reducing stress.
4. Differentiate between good stress and bad stress.
Lance is a White male who comes from a working-class family. Lance has not always been interested in school, and his grades have fluctuated throughout the years. Now that he is about to graduate from high school, Lance has been thinking about what is next for him. Lance’s father suffered a stroke a month ago, which has left him unable to work and in need of extensive rehabilitation and 24-hour care. Lance’s mother works as a waitress and has been struggling to keep her job while tending to her husband’s needs. While extended family has been helping out financially and also providing care for Lance’s father, Lance realizes that he must find a way to contribute to the needs of his family, particularly because his father’s recovery will be a long one. As he thinks about his current and future life, he is stressed, is constantly worried, and sleeps poorly.

*

Diana is an African American female who comes from a middle-class family. Diana graduated near the top of her high school class and was accepted into every college she applied to. She has chosen to attend a prestigious university three hours away from home. She is not the first to attend college in her family; her parents are college graduates and her sister is in her junior year of college, but she is still nervous about the upcoming experience. She has always done well in school, but she is about to start a pre-med program that will be very challenging. She is also nervous about living away from home and not having the day-to-day support of her family. She worries if she will find friends and if she will meet her parents’ and her own academic expectations. As she shops with her mom to purchase things she will need for her dorm, she feels stressed, finds herself worrying a lot more, and is sleeping poorly.

Lance and Diana are at important transitions in their lives. While reading the details of their stories, the reasons that they both are experiencing stress are apparent. But are their experiences of stress the same? Will they cope with their stressors in similar ways? What short- and long-term outcomes will each person experience?

An important aspect of adjustment is coping with stress. Lance’s and Diana’s stories illustrate important details about how we conceptualize stress in the field of psychology. Not all stress is equal. The circumstances that bring about stress are important, as well as their predictability and regularity. Furthermore, in understanding the toll that stress takes on people, it is important to understand the concept of coping. No two people have the same response to a stressful situation largely because circumstances often dictate how they tend to react in such situations. In the course of this chapter, we will review definitions of stress, explain the stress reaction, explore different types of stressors, and unpack the concept of coping. Furthermore, we will explore different types of coping styles, along with their advantages and disadvantages, and try to answer the question of whether stress is ever a good thing. Finally, we will tie together the relationships among stress, coping, health, and well-being with the aim of identifying how we can best promote optimal growth.

Stress

Most of us utter the phrase “I am so stressed out” multiple times a week, especially when working on assignments or preparing for final exams. Technically, however,
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the term stress refers to the occurrence of three separate things: a stimulus event (e.g., Lance's father having a stroke), a process (e.g., the aftermath of realizing what the consequences of the stroke are), and a reaction (e.g., attempts to cope, actions taken to help the family recover). Each component of this chain is important in understanding what stress is and what it means in the lives of people. We will begin exploring these components one at a time, starting with the stimulus event, also known as a stressor.

Stressors

As a personal exercise, take 60 seconds and write down everything you can remember that caused stress in your life this week. Now look at that list. You will notice that some of the items might be big deals (e.g., midterm exams week), while others may be smaller deals (e.g., your roommate snored last night, and you woke up multiple times). You also might note that some of the things on your list are regularly occurring events (e.g., your roommate left her wet towel on your bed again), while others are atypical (e.g., you lost your cell phone).

Psychologists have studied how the magnitude of a stressor or its predictability in our lives impact our reaction to these events as well as the ease with which we can adjust to such an event. While early studies of stress focused on the “life events” that caused stress for all people, such as the death of a parent or getting fired from a job (Rahe, Meyer, Smith, Kjaer, & Holmes, 1964), as the field has evolved, psychologists also began studying what we might consider to be more everyday stressors or hassles.

In the 1980s, researchers began studying daily hassles (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner, Coyne, Shaefer, & Lazarus, 1981). Hassles are more minor in scope but more frequent in how often they occur, like a roommate who constantly leaves dirty dishes in the sink, a friend who always texts in the middle of the night, or all your professors giving homework on a given day. Interestingly, when researchers started looking at which types of stressors—major life events versus hassles—caused more distress, they found that hassles were more problematic because of their cumulative effect.

Psychologists have categorized some stressors as acute, time-limited problems that can arise irregularly, or chronic, persistent situations that tax people’s reserves (Gottlieb, 1997; Wheaton, 1997). Wheaton (1997) defined the acute stressor as a “discrete, observable event . . . possessing a clear onset and offset” (pp. 52–53). He defined chronic stressors as “less self-limiting in nature . . . typically open ended, using up our resources in coping but not promising resolution” (p. 53). Different types of stressors can lead to different stress processes and reactions (Gottlieb, 1997) as well as differing physiological consequences. For example, an acute stressor (e.g., having your cell phone stolen) causes heightened levels of adrenaline and cortisol to be released in our bodies. These changes arm the individual’s physical system to be ready for fight or flight.

However, chronic stress, like living in poverty, from which a person does not find relief and cannot necessarily adjust, can result in more catastrophic neurological breakdowns (Compas, 2006; Romeo & McEwan, 2006). Chronic stress has even been demonstrated to have destructive effects on DNA and contribute to premature aging (Epel et al., 2004). In fact, in examining exposure to chronic racism in African Americans, researchers found that the presence of this stressor could be a significant contributor to heightened levels of physical disorders like heart disease (Clark, Anderson, Clark, & Williams, 1999). We will revisit the topic of culturally related stressors later in this chapter, but they are a powerful example of how chronic stressors can really be more damaging than acute stressors. See Researching Adjustment: Measuring Stress.
Psychologists interested in studying stress and its impact needed to develop ways to measure people’s perceptions of stress in the research they have conducted. Two major ways of assessing stress exist: objective and subjective. Objective stress measures such as the Schedule of Recent Experience (Holmes & Rahe, 1967) or the Social Readjustment Rating Scale (Scully, Tosi, & Banning, 2000; see Table 6.1) often list presumably stressful events and then add up the number of times people have experienced such circumstances. The higher the score on these measures, the more stressful events an individual has encountered in an objective way.

Table 6.1 Social Readjustment Rating Scale

<table>
<thead>
<tr>
<th>Life Event</th>
<th>Weight</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death of a spouse</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>Divorce</td>
<td>73</td>
<td>2</td>
</tr>
<tr>
<td>Marital separation</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td>Jail term</td>
<td>63</td>
<td>5</td>
</tr>
<tr>
<td>Death of close family member</td>
<td>63</td>
<td>8</td>
</tr>
<tr>
<td>Personal injury or illness</td>
<td>53</td>
<td>3</td>
</tr>
<tr>
<td>Marriage</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>Fired at work</td>
<td>47</td>
<td>13</td>
</tr>
<tr>
<td>Marital reconciliation</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>Retirement</td>
<td>45</td>
<td>29</td>
</tr>
<tr>
<td>Change in health of family member</td>
<td>44</td>
<td>7</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>40</td>
<td>16</td>
</tr>
<tr>
<td>Sex difficulties</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Gain of new family member</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>Business readjustment</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Change in financial state</td>
<td>38</td>
<td>9</td>
</tr>
<tr>
<td>Death of close friend</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>Change to different line of work</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>Change in number of arguments with spouse</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>Mortgage more than $51,000</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Foreclosure of mortgage or loan</td>
<td>30</td>
<td>11</td>
</tr>
<tr>
<td>Change in responsibilities at work</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Son or daughter leaving home</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>Trouble with in-laws</td>
<td>29</td>
<td>42</td>
</tr>
</tbody>
</table>
Subjective measures of stress such as the Global Measure of Perceived Stress (Cohen, Kamarck, & Mermelstein, 1983; see below), however, do not assume that individual stressors have a cumulative effect (i.e., the greater the number of individual stressors, the more stressed out we feel). Rather, subjective measures often focus on how a person perceives the severity of any particular stress as opposed to what specifically the event is. For example, two people may face a similar stressor, such as a serious illness, and have very different perceptions of how severe a stressor illness will be for them.

**Global Measure of Perceived Stress**

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times...
Reflection Questions

1. Which approach do you think is better?
2. Can you think of any situations where one approach might be more accurate than the other?

(Continued)

you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. For each question choose from the following alternatives:

0. never
1. almost never
2. sometimes
3. fairly often
4. very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you dealt successfully with irritating life hassles?
5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?
6. In the last month, how often have you felt confident about your ability to handle your personal problems?
7. In the last month, how often have you felt that things were going your way?
8. In the last month, how often have you found that you could not cope with all the things that you had to do?
9. In the last month, how often have you been able to control irritations in your life?
10. In the last month, how often have you felt that you were on top of things?
11. In the last month, how often have you been angered because of things that happened that were outside of your control?
12. In the last month, how often have you found yourself thinking about things that you have to accomplish?
13. In the last month, how often have you been able to control the way you spend your time?
14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
Stress Processes

Lazarus and Folkman (1984) described stress as a process that is influenced by multiple steps and emphasized that the appraisal of any given situation (i.e., stressor) was the first step in this process. Appraisal is an assessment of the situation, which has two parts. The first part, primary appraisal, determines whether the event represents a threatening situation. For example, a computer malfunction could be very threatening in the middle of an assignment but less so if it occurs over the semester break. The second step is called secondary appraisal, which factors in the person's expectations of handling the situation.

In this secondary appraisal stage, the individual's coping skills and other resources are taken into account and viewed as being either sufficient or insufficient in responding to the situation. For example, if the computer is fixable and the student has the money to fix it, the threat may be less severe than if it is a catastrophic meltdown requiring a new computer. Thus, the stress process is influenced by a person's ability to deal with the environmental demands of the situation. The resulting level of distress experienced would be influenced by how successful we are in using our available resources. In this model, it is possible for one person to experience extreme levels of stress in response to an event and another person to be relatively unaffected by the same event, depending on their appraisal of the situation and their resourcefulness in responding to the event. Figure 6.1 depicts the relationship between stressors as well as primary and secondary appraisal strategies.

Stress Reactions

Reactions to stress often influence the adjustment process. Psychologists have examined the ways that people respond in the face of stressful events for many decades. Hans Selye (1956) was the first to note a particular set of physiological reactions to a variety of harmful or noxious stimuli that he called the general adaptation syndrome (GAS). Since then, stress reaction has been measured more precisely in both physiological terms, such as illness or changes in cortisol levels, or in psychological terms, such as symptoms of depression or anxiety (Derogatis & Coons, 1993).

While there are some patterns of reactions that have been observed between certain stressors and certain reactions in people, many individual differences exist that make stress reactions less predictable. For example, Gaylord-Harden, Elmore, Campbell, and Wethington (2011) studied the relationship between stressors, anxiety, and depression symptoms in African American youths. The authors found that peer relationship stressors (e.g., not getting along with friends) were positively associated with depression in African American girls, but the same stressor was associated with anxiety in African American boys. This study suggests that gender may be an important factor that determines how stress affects an individual. Gender is also a determinant of what kind of stressors a person most frequently experiences, a topic that we will revisit shortly.

In reality, perceived stress tends to have a stronger correlation with mental health outcomes than does objective measures of stress (Cohen et al., 1983). However, it is arguable that both types of measures have value. For example, it might be relevant to know that a person who experiences the death of a parent perceived that event as minimally stressful. Likewise, it might be relevant, especially to a counselor, if a person perceives an event like an argument with a friend as critically stressful. Hence, studies have utilized both types of assessment of stress, objective and subjective, depending on the focus of the study. In Table 6.2, you will find an illustration of objective versus subjective ways of measuring stress. With the objective approach, you will note that specific types of stressors have predetermined values, and regardless of how an individual experiences the stressor, it is assumed to have an inherent magnitude of impact. For example, in Table 6.2,
Figure 6.1 Stress Processes

1. Stressor Stimuli
   - Person factors
   - Situational factors

2. Primary Appraisal
   - 3a. Challenge
   - 3b. Threat
   - 3c. Harm

3. Secondary Appraisal
   - 4a. Physiological activation
   - 4b. Psychosocial distress

4. Evaluate
   - 5. Secondary Appraisal
   - 5a. Resources: Individual Familial Communal
   - 6a. Coping Options
   - 6b. Cannot Resolve Stressor
   - 8a. Can Resolve Stressor
   - 7. Evaluate
   - 8b. Cannot Resolve Stressor

5. Emotion-focused coping
   - Positive outcome
   - 9a. Catastrophizing
   - 9b. Learned helplessness
   - 10. Avoidant coping

6. Mindfulness
   - 12. Mindfulness
   - 13. Mindfulness
   - 14. Mindfulness

7. Demand of the Stressor
   - 15. Mindfulness

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Subjective approach to assessing stress allows the respondent to decide and rate accordingly how serious an impact any given stressor might have.

**Coping**

Compas (2006) described *coping* as a voluntary response to stressors that involves "regulation of emotion, cognition, behavior, physiology and the environment in response to stressful events or circumstances" (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001, p. 89). As such, coping is a part of a self-regulatory process that individuals use in dealing with environmental demands or the adjustment process. Studies of coping have found a variety of ways that people frequently attempt to deal with stress. It is important to note that although people typically have more than one way to cope with any given stressful situation, it is often the case that not all coping strategies will work the same in every situation.

It is also important to remember that not all coping strategies are helpful or healthy to use. For example, some people might cope with stress by ignoring what is happening, while others will want to problem solve as a coping mechanism. Drugs and alcohol are also commonly used to cope with stressors but often hurt the person and make problems even worse. On the other hand, some people may reach out to others for support in the midst of a stressor, which is likely to be a good strategy in most cases. There are a number of effective and ineffective coping strategies, which we will examine in greater detail.

**Emotion-Focused and Problem Solving–Focused Coping**

Lazarus and Folkman (1984) identified two categories of coping styles that are helpful in understanding how coping works for people. *Emotion-focused coping* styles

### Table 6.2 Objective Versus Subjective Ways to Assess Stressful Events

<table>
<thead>
<tr>
<th>Objective Evaluation of Stressful Events</th>
<th>Points Assigned to the Stressor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Car breaks down</td>
<td>10 points</td>
</tr>
<tr>
<td>2. Parents fight</td>
<td>30 points</td>
</tr>
<tr>
<td>3. Computer stops working</td>
<td>50 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjective Evaluation of Stressful Events</th>
<th>Range of Stress to Be Determined by Rater</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parents are coming for a visit</td>
<td>Stressful 10 Neutral 5 Not at all 1</td>
</tr>
<tr>
<td>2. Argument with best friend</td>
<td>Stressful 10 Neutral 5 Not at all 1</td>
</tr>
<tr>
<td>3. Car breaks down</td>
<td>Stressful 10 Neutral 5 Not at all 1</td>
</tr>
</tbody>
</table>

*Note that events have a range of values depending on how much stress the individual attributes to the event.

usually work by modifying the emotional impact of an event. For example, if a person experiences the breakup of a romantic relationship, the emotional response is typically quite intense.

A person might not feel like it is healthy to be constantly immersed in this intense emotion and as a result chooses to do things to relieve the intensity. A common emotion-focused coping style is called self-distraction, or doing something else to avoid feeling the intense emotion or minimizing negative feelings. The “something else” could include watching television, going to the gym, going out with friends, or doing any other activity that takes a person's mind off the breakup. Another emotion-focused coping style is called venting. Venting is exactly like it sounds: letting off steam and giving the intense emotions an outlet. A person who is venting might journal about his or her feelings or talk to friends about sadness and loss.

While venting may feel good in the short run, it is not necessarily a good strategy to use repeatedly because it often makes people feel worse over time (Vera et al., 2012).

Problem solving–focused coping is not intended to modify emotions per se, but rather it is intended to make changes to a person's environment in response to the stressor. Individuals try to deal with what is bothering them by examining the situation, weighing options as to possible changes to make (e.g., finding a new boyfriend or girlfriend; joining a club to meet new people), and then acting on those plans. Problem-solving coping is considered to be more strategic, requires more planning, and often appeals to people who like to “do something” in response to problems and stressors, rather than merely process how they are feeling. However, there are certain stressful situations that problem-solving coping is more appropriate for and others where it would be less appropriate.

Lazarus and Folkman (1984) reported that problem-solving coping is more attractive in situations where a person thinks that his or her environment can be changed, whereas emotion-focused coping styles typically might be more attractive when there is a feeling that nothing can be done to modify the environment.

Active Coping and Avoidant Coping

Carver, Scheier, and Weintraub (1989) presented a second way to differentiate coping styles. They divided coping strategies into two categories: active coping, where the individual does something to try to solve the stressful situation, and avoidant coping, “where responses potentially impede or interfere with active coping” (Carver et al., 1989, p. 280). Examples of active coping include planning, seeking social support, turning to religion, or making changes in one's life. Avoidant coping is typified by using self-distraction, being in denial, using alcohol, and withdrawing from the situation. The emphasis on this manner of categorizing coping styles is slightly different than what Lazarus and Folkman (1984) originally presented. In this system, coping styles are defined by whether they are more likely to help people resolve stressful situations (i.e., taking action of some sort) versus delay or impede a resolution (i.e., not dealing with the situation).

Research has examined whether or not there is a practical difference in active versus avoidant coping or whether one is better than the other. The majority of findings suggest that active coping leads to better results than avoidant coping (Compas et al., 2001). However, active coping may not always be the best coping strategy. For example, Rasmussen, Aber, and Bhana (2004) investigated how African American and Latina/o adolescents coped with stressors related to living in a low-income urban environment.
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and whether any particular coping styles were associated with more positive mental health outcomes. Results showed that active coping styles were associated with increased perceptions of safety but also increased exposure to further violence in neighborhoods in some circumstances. In other words, active coping (e.g., carrying a weapon) as a response to violence in one’s neighborhood, for example, could make people feel safer but may actually lead to them becoming involved in potentially violent situations. Thus, it is not always obvious which type of coping is “best.” Discussions of this distinction have argued that the situation or context is an important factor that should be considered in determining what is best. See Table 6.3.

### Coping With Controllable Versus Uncontrollable Stressors

The type of stressor that one needs to cope with can be an important consideration in choosing effective coping strategies. Clarke (2006) argued that it is important to take into account whether or not a stressor is controllable before determining which coping style might be more advantageous. At times where there is a controllable situation, active coping may make sense. However, in cases where stressors are uncontrollable, avoidance strategies may be more appropriate.

What determines whether a stressor is controllable versus uncontrollable? There are certainly some, if not many, realities of life that are out of our control and unavoidable, like having to complete final exams at the end of every semester. However, those types of stressors—exams—are also predictable. There are other uncontrollable stressors that are more unpredictable and, in the absence of healthy coping, could take a serious toll on an individual. As mentioned in the previous example, stressors that come from living in an urban environment (e.g., more crime, more noise, fewer safe recreation spots) can be examples of uncontrollable stressors that vary in their predictability. The type of coping that people use to deal with these stressors may determine how big of an impact they have on individuals’ mental health.

### Table 6.3 Examples of Different Coping Styles

<table>
<thead>
<tr>
<th>Coping Style</th>
<th>Stressor</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion-focused</td>
<td>Failing a class</td>
<td>Talking to your friends about being overwhelmed with the workload</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Going to see a movie to lift your spirits</td>
</tr>
<tr>
<td>Problem-focused</td>
<td>Failing a test</td>
<td>Speaking with the teacher about changing the grade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Working with a tutor to improve your understanding of the content</td>
</tr>
<tr>
<td>Active</td>
<td>Romantic breakup</td>
<td>Talking with your ex to try and work things out</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seeing other people in an attempt to find a new relationship</td>
</tr>
<tr>
<td>Avoidant</td>
<td>Incompatible dates</td>
<td>Starting up a new hobby to avoid dating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Going to a bar and drinking away your sorrows</td>
</tr>
</tbody>
</table>

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To illustrate this point, consider the following study. Vera et al. (2011) found that self-distraction (i.e., an avoidant coping strategy) was a significant buffer on the impact of exposure to urban stressors and negative emotion in a sample of urban adolescents of color. In other words, the more that adolescents used self-distraction as a coping style, the less likely it was that their exposure to urban stressors would lead to negative emotional consequences. The lesson to be learned from these studies is that different problems require different solutions and that both the stressor and the context in which one experiences the stressor can be important in determining what coping style is needed.

**Coping With Culturally Related Stressors**

Another example of uncontrollable and unpredictable stressors is found in the study of racism, sexism, and homophobia. Psychologists have studied the link between experiences with perceived racism and lower mental health among Asians and Asian Americans (Lee & Ahn, 2011), Latina/o/s (Lopez, 2005), and African Americans (Pieterse, Todd, Neville, & Carter, 2012). From academic achievement to physical health problems, people from these ethnic groups are at greater risk for poorer health outcomes due to chronic exposure to the stressor of racism. Mays, Cochran, and Barnes (2007) reported data from physiological measures of stress, which supported the contention that perception of racism serves as a chronic social stressor for ethnic minorities. Studies of racism, however, have revealed that culturally related stressors come in many different forms.

**Microaggressions**

Dovidio and his colleagues (i.e., Gómez, Dovidio, Huici, Gaertner, & Cuadrado, 2008) have found that while overtly racist events still plague our communities, there is also a subtler, more covert form of racism that may be just as harmful. Sue, Bucceri, Lin, Nadal, and Torino (2007) are among scholars that have described these more subtle forms of racism known as microaggressions. Microaggressions are “brief, commonplace, daily . . . indignities . . . that communicate negative or derogatory slights” (p. 271). Examples of microaggressions include telling Asian Americans that they speak English well or crossing the street when a Black man is walking in a person’s direction. These events can be stressful, even if they are less overt forms of racism because they are perceived as offensive and bigoted. Microaggressions may also be unconscious and unintentional, which means that confronting a person about their remark or actions may be met with surprise or denial. See Adjustment in Practice: Examples of Microaggressions.

Microaggressions are not limited to expressions of racism. Recent research has documented the existence of gender and sexual orientation microaggressions (Sue, 2010). Gender microaggressions could come in the form of insulting comments (“You throw like a girl”) or stereotypes (“Women in college are really looking for their Mrs. degree”). Homophobic microaggressions often come in the form of assumptions people make (e.g., asking a girl if she has a boyfriend) or the derogatory slurs that people use (e.g., “That’s so gay”). While people who make these remarks often defend themselves by saying they are joking, it is the cumulative effects of these incidents that eventually takes a negative toll on individuals.

Researchers have categorized microaggressions into three types. Microassaults are explicit belittling remarks or actions (e.g., displaying a swastika or telling a racist joke). Microinsults are insulting assumptions or remarks (e.g., saying that a person of color or woman got a job because of affirmative action). Finally, microinvalidations occur when the offended person’s experiences are denied (e.g., “I do not believe racism exists today”—saying that someone’s report of racism is not true).
Psychologists and other social scientists are studying how people cope with microaggressions to see if specific styles are more effective than others. As an example of the variety of ways that people might respond to a microaggression such as a sexist comment, some people may ignore the remark, chalk it up to someone being a jerk, and move on, while others may feel compelled to confront the offender. Further research is needed to determine what coping style will work best.

Culturally Relevant Coping
Hobifoil and Vaux (1993) argued the importance of cultural and community or social contributions to coping in the research literature on active versus avoidant and problem-solving versus emotional styles. Gaylord-Harden and Cunningham’s (2009) research on culturally relevant coping has found that African American adolescents benefit from utilizing culturally sanctioned coping mechanisms such as religiosity in the face of race-related stress. Other researchers have examined culturally relevant coping strategies outside of the United States. Based on research conducted in Taiwan, Heppner et al. (2006) described culturally relevant coping that reflects Eastern philosophy and Asian cultural influences that they called collectivist coping styles. Examples of these collectivist coping styles include the following: “I tried to accept the trauma for what it offered me.” “I believed that I would grow from surviving.” “I shared my feelings with my family.” “I saved face by not telling anyone.”
Similarly, in the study of Chinese adolescents, Hamid, Yue, and Leung (2003) identified coping styles that reflect Chinese values. Examples of these styles are *shui-chi tzu-an* (let nature take its course) and *k'an-k'ai* (to see a thing through), each of which are derivatives of a Taoist philosophy where nonaction is not seen as avoidance but rather the understanding and acknowledgment of the nature of things. These studies illustrate that how we see the world (under our control, predictable, determined by fate) can often impact how we cope with stressful events. Thus, adjustment can have strong cultural influences.

**Healthy Stress Management**

There are several strategies that scientists have discovered that have a positive effect on adjustment, hence reducing the negative impact of stress. Ironically, these magic bullets are things that are usually available to us in our daily lives and are often free of charge. Let's examine them in greater detail.

**Social Support**

With respect to stress, reaching out to others is known as the “tend and befriend” stress reaction that yields positive results (Azar, 2011; Hays, 2014). Social connection has the effect of releasing oxytocin, a hormone that ultimately reduces stress and makes us feel good. The benefits of social support have been documented for decades in the psychology field, explained by the “buffering” theory (Barrera, 2000; Dean & Lin, 1977; Wilcox, 1981).

According to this theory, the potential damage of stress is minimized when social support is in place, and when it is absent, people are much more vulnerable to the toxic effect that stress can have.

One study that illustrates this effect is by Brissette, Scheier, and Carver (2002), who explored the reasons social support and optimism were associated with good psychological adjustment in college freshmen. The researchers found that social support was directly related to lower stress levels and fewer symptoms of depression. Furthermore, the number of friends a person had was also related to optimism and the ability to use problem-focused coping. Therefore, it appears that having others in one's life for support when things are difficult is critical to the use of effective coping measures, the likelihood of experiencing depression, and the reduction of one's stress levels.

It is also important to note that social support is a strong predictor of good health regardless of one's level of stressors. Richmond, Ross, and Egeland (2007), for example, found that for Canadian First Nation (indigenous) people, women reporting high levels of positive interaction, emotional support, and tangible support from others were more likely to report thriving health. For men, emotional support was also related to thriving health. In Chapter 12, we will revisit the issue of social support since it is a predictor of longevity and good health for the elderly. It is clear that having close family, friends, and confidants in your life is one way to help immunize yourself to the potentially toxic effects of stress. Even when those people cannot eliminate the presence of a stressor, their presence and the knowledge that we are not alone and that people care and want to help can be enough to restore our health and well-being when times are tough.

**Physical Touch**

Scientists like Dacher Keltner and his colleagues have been behind the “science of touch” movement (Hertenstein, Keltner, App, Bulleit, & Jaskolka, 2006), which posits that touch is one of the simplest and most effective ways to manage our stress levels. Proponents of this idea note that touch soothes us; it calms our cardiovascular stress response by activating
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the vagus nerve, which triggers a release of oxytocin. In a study by Coan, Schaefer, and Davidson (2006), participants obtain a functional magnetic resonance imaging (fMRI) brain scan. Those participants anticipating a painful blast of white noise showed heightened brain activity in regions associated with threat and stress. However, participants whose romantic partner stroked their arm while they waited didn’t show this reaction at all. They concluded that touch had “turned off” the threat switch, which prevented the hardwired stress response from occurring.

Similarly, research by Francis, Diorio, Liu, and Meaney (1999) has found that rats whose mothers licked and groomed them a lot when they were infants grew up to be calmer and more resilient to stress, with stronger immune systems. This research sheds light on why, historically, an overwhelming percentage of human babies in orphanages where caretakers starved them of touch failed to grow to their expected height or weight and also showed behavioral problems. In turn, research is finding that prematurely born infants seem to better thrive if they have regular schedules of soft stroking following birth (Feldman, Weller, Sirota, & Eidelman, 2002).

In response to research such as these studies, a new form of touch therapy has arisen to provide people with hugs that work as “stress busters.” Touch therapy, or “professional hugging” (see http://www.professionalhugger.com), notes that hugs and hand-holding, even as little as 10 minutes, can greatly reduce cortisol levels, lower blood pressure, and create surges of feel-good brain chemicals. While not everyone may be in the market for a touch therapist or a professional hugger, this ideal is certainly replicable in romantic and familial relationships. In the absence of such relationships, massage therapy is another form of touch therapy (perhaps more conventional) that boasts similar effects. Not only does a massage help us if we are experiencing aches and pains but it releases hormones that combat stress, lowers our blood pressure, reenergizes our immune systems, and essentially is a good way to manage our stress and stay healthy (Field, 1998; Field, Hernandez-Reif, Diego, Schanberg, & Kuhn, 2005).

Meditation

Meditation has been a commonly practiced form of self-care and reflection for hundreds and hundreds of years throughout the world. While it may be a relatively more recent practice within the United States, science is revealing the health benefits, both physical and mental, of regular use of meditation as a stress management tool (Grossman, Niemann, Schmidt, & Walach, 2004). In fact, research has found meditation to be so effective in improving well-being that some have argued it is superior to other formal types of stress reduction such as psychotherapy (Simon, 2011). Hays (2014) argued that both meditation and talk therapy have their benefits and recommended their integration as part of an overall stress management and wellness life plan.

Meditation has been discussed in Chapter 5, so for the purposes of this chapter, we will summarize its function as a stress management technique. Meditation involves focusing on breathing in an intentional way that allows us to observe our thoughts and feelings in a calm, nonjudgmental way (Kabat-Zinn, 1994). Most meditation starts with deep breathing exercises that force the body into a relaxed state, preventing tension and strain in the muscles, which are often associated with stress. Additionally, when we focus in on our breathing, the brain is quieted from its vigilant scanning for threats or its prolonged stress reaction that we discussed earlier in this chapter. When we meditate, we allow ourselves to become outside observers of our experience rather than being immersed within the experience, and it changes our relationship to stressors and stress (Hays, 2014).

The regular practice of meditation can also make us more in tune with our body’s signals of stress and tension. These signals often include pain and tension in our head,
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neck, shoulders, or stomach and indicate that we are holding on to toxic stress that is taking its toll on us physically, if not also psychologically. As little as 15 minutes of meditation per day can make a significant difference in our ability to manage stress. In fact, celebrities such as Russell Simmons and Dan Harris have written books about how regular meditation has not only significantly reduced stress for them but also has allowed them to eliminate substance abuse problems and panic attacks, respectively.

**Exercise**

Many of us have been raised to understand that exercise is good for our bodies. But not everyone knows that exercise is equally good for our minds, particularly when it comes to stress management. With respect to the stress-reducing physical benefits of exercise, research has found that exercise relieves chronic muscle tension that forms as a result of the prolonged stress reaction. It also releases endorphins in the body that reduce pain, decrease depression and anxiety, make us more alert, and help us to feel better (Walsh, 2011).

In studies that have specifically looked at the ability that exercise has to decrease stress, anxiety, and depression (Blumenthal et al., 2007; Smits & Otto, 2011; Weir, 2011), in comparison to medication, for example, exercise consistently outperforms psychopharmaceuticals. What is most impressive about these studies is not only does exercise have an immediate effect but it appears to be able to immunize us against the effects of future stress (Hays, 2014). For example, 20 minutes of running or 45 minutes of walking can provide a stress “inoculation” that lasts up to 2 hours (Jayson, 2012). Thus, exercise, when done regularly, has the ability to not only help us manage current stress reactions but also may allow us to be less vulnerable physiologically to the effects of future stress exposure.

**Self-Help**

Ironically, many of us tend to give up activities like exercise when we have too much to do or during a particularly busy time period. Thus, our experience of stress sometimes results in us eliminating an activity that would have enormous benefits on our ability to manage stress. The lesson here is simple. Even when we feel too busy and stressed to be able to fit in exercise, it is precisely the best time to make a point to exercise.

What is true about the stress management activities that we have reviewed is that all are free (or relatively low cost), and each is effective even with a small time commitment: 20 minutes of running, 10 minutes of hand-holding, 15 minutes of meditation, or 1 hour spent having coffee with a good friend. The key to implementing these effective stress management techniques is that we make an effort to practice them consistently not only when we have free time or when our to-do lists are smaller. It may help to schedule these stress management activities into your daily planner, as the cost of not doing so may be a very high price to pay.

**Good Stress Versus Bad Stress**

So far in this chapter we have defined what stress is, defined different types of coping, explored some of the subtleties of understanding how people interpret stressful events,
and discussed healthy ways to manage stress. Yet at a practical level, it is valid to wonder if stress is something that we should avoid altogether or if some experience of stress (or some stressors) can be good for us.

The short answer to this question is, in fact, that some stress is good for us, and some stressors can be beneficial and represent opportunities for growth. However, distinguishing bad stress from good stress is largely a function of how we think about a situation and the actions we take as a result of those thoughts.

**Bad Stress**

As has been mentioned previously in this chapter, human beings are physiologically hardwired to be alert to stressors in our world as a survival mechanism (Selye, 1956). Evolutionarily speaking, if we didn’t have the fight-or-flight instinct, we would probably be eaten by lions (if we lived near lions). A big part of our physiological reaction to stress is what makes stress such a significant factor to our health and well-being. Specifically, our hardwired stress response involves the release of cortisol from our adrenal glands, which sets off reactions that allow us to make quick reactions (e.g., our heart rate accelerates, blood vessels dilate to increase blood flow to our muscles) that are necessary in fight-or-flight moments. However, the physiological reactions to a stressor are intended to be temporary, and our bodies should return to normal as soon as the stressful event is over. This is where things can become complicated.

Unlike animals, whose physiological stress response quickly returns to normal after a threat is gone, people have the ability to recall memories of past stressors and to worry about the potential for future stressors (Hays, 2014). Unfortunately, such thinking can trick our bodies into staying in a prolonged, heightened physiological stress state, even if the immediate and real threat is no longer there.

If our bodies remain in an aroused state with heightened cortisol levels, our immune system begins to pay a price. Among the many things that prolonged cortisol levels can do to us are a decreased resistance to infections and illness, high blood pressure, heart disease, insomnia, and exaggerated pain to existing medical conditions (MedlinePlus, 2016). This is why stress is identified as a risk factor for practically every illness—mental or physical—that we know of.

In addition to these physical and illness-related costs of stress, Hays (2014) identified three other areas that stress can impact in a negative way. Stress can manifest itself mentally in the form of obsessive, intrusive, and ruminating thoughts. It can show up emotionally in the form of anxiety, depression, anger, or irritability. It can also influence our behaviors, in particular the self-defeating ones like substance abuse, as we attempt to numb our feelings and make the negative thoughts and feelings stop. While all of this information may lead us to conclude that stress is a very bad thing, it is important to note that while stressors and stress reactions may represent a real danger, the ultimate toll they take on us is determined by how we attempt to lower stress levels once they are elevated. Scientists have unlocked many of the secrets to effectively reducing the negative effects of stress, which is good news, and this information is enormously helpful to managing our mental health. It is also helpful to counselors and therapists and other health professionals who work with people to recover from stressful, traumatic events.

**Good Stress**

As we have seen throughout the chapter discussion, not all stress is bad stress. In fact, some stress is good because of what it represents, like getting accepted into college and moving away from home (think about the example of Diana at the beginning of
this chapter). It is also the case that while prolonged stress reactions that expose our bodies to too much cortisol are not good for us, small activations of our adrenal gland's release of cortisol can actually enhance our performance. What is it that defines good stress?

**Eustress** refers to the positive responses we have to stress (Simmons, 2000), which is often a result of stressors that are good for us or are things we want, like having a baby or getting married. A good way to think of eustress is the experience we have when confronted with a positive event, yet an event that represents enormous upheaval in our lives and thus elicits a response from us. When we respond in an adaptive way, the outcome can be very positive (O’Sullivan, 2011).

One of the first scientists to introduce the idea of eustress was Selye (1974), who described the notion that some stress can result in good changes for people, bringing them outcomes that would not happen without the presence of the stress. Having a child is a commonly used example. Most new parents will say that having a baby was the most stressful thing that they have had to deal with, yet it is the best thing that has ever happened to them. If we consider the life satisfaction and fulfillment that comes from having a child, a parent might say that life is dramatically better *because* of having the child than it could have been without having become a parent.

What is critical about understanding eustress is that it is not a function of the event itself but rather how the event is perceived and the reactions that follow. For example, for most people, getting married is a positive stressor. But if a person gets cold feet and decides to abandon his or her partner as a response, it would hardly be considered a positive outcome. When we see the event as an opportunity for positive change, in which we work through the necessary adjustments, it can result in overall well-being. O’Sullivan (2011) demonstrated the relationship of eustress to life satisfaction in a study of college students. Those who reported greater eustress experiences also reported higher life satisfaction and hope. Thus, not all stress is bad for us, and when we can tailor our response in ways that are healthy, we can actually benefit from some stress experiences.

**Growth Through Adversity**

What doesn’t kill you makes you stronger. When one door closes, another opens. These adages illustrate that it is our perspective that often determines whether adversities—or for our purposes, negative stressors—are viewed as misfortunes or as opportunities for change and growth. While eustress is often viewed as an opportunity for growth, it is also possible to grow in the face of negative events, like the breakup of a romantic relationship or getting fired from a job. The key to coming away from these events as a stronger person is the way in which we think about and explain these events.

**Reframing**

Reframing is a tool that we can use to modify our thinking about a stressful event or stressor. Reframing provides a new way of seeing a situation by suggesting alternative perspectives on a given event. It is based on the work of Gregory Bateson (2000) and Virginia Satir (1983), who believed our understanding of events was influenced by these different perspectives. Hence, the context or frame for our experiences is extremely important. In general, reframing allows us to see potential benefits that could arise in the aftermath of adversity.
For example, imagine that you are a competitive runner and you receive an injury that will take you out of competition for at least 6 months. For many athletes, this could be a crushing event that overwhelms the system with anxiety and stress. Rather than focusing on the diagnosis as a loss and feeling angry (e.g., “Why did this happen to me? I am in great shape. Life is so unfair”), it might be possible to see a variety of “upsides” of having this situation occur. Consider the following ways that this event could be reframed more positively:

1. “I am disappointed that this happened, but maybe it is sign that I need to take a break from the hectic schedule of training and competition and focus on my studies.”
2. “I am shocked that this injury happened to me, but perhaps it gives me an opportunity to slow down and think about how much I want competitive running to be a part of my future, especially now that I am out of school and starting my career.”
3. “I wish this hadn't happened, but it will allow me to spend more time at home with my family—something I had been missing when I was so busy with training.”

These ways of reframing the situation acknowledge the emotion that is connected to the injury, but they also shift the person's thinking away from the negative consequences that could result in a prolonged stress response and toward a more adaptive, optimistic viewpoint that could result in growth. Having a more positive viewpoint may not only help a person feel less stress about the event but it may also facilitate the physical recovery process since high levels of cortisol would interfere with a person's immune system.

Importantly, reframing is not just a matter of looking at the glass half full versus half empty, but rather, it is a reflective process that allows us to take stock of our life experiences, ask ourselves what we can learn from them, explore how we can grow as a result of unexpected events, and deepen our understanding of ourselves and what we want from life (Hays, 2014). Reframing also acknowledges that obstacles are a normal part of life, so we expect them to happen from time to time, and when they do, we try to handle the adversity with compassion and optimism. People who consistently use reframing give themselves a gift that can protect them from the potentially negative effects of stress, which can facilitate the kind of ongoing development that makes them stronger, happier people over the course of their lives.

Finally, it should be noted that reframing is a restructuring of our cognitions, which is one of the tenets of cognitive behavioral therapy (Beck, 1997). Often times when people are depressed or have diagnosable emotional disorders, their brains become stuck in unhealthy patterns of thinking that can prolong their depressive moods. Therapists often use reframing as a way to help their clients view their life in a more adaptive way that facilitates recovery. Eventually, therapists want clients to implement this type of thinking on their own so that in the face of future stressors, they are less debilitated and will be more resistant to the prolonged stress reaction that exacerbates their depressive symptoms.

Finally, with respect to understanding the connection between health and stress as it appears in our world today, it is worth considering to what extent our reliance on technology has made us vulnerable to problems such as poorer sleep or anxiety from trying to keep up with social media demands. Researching Adjustment: Stress and Technology explores this issue.
How much time per day do you spend on your phone or in front of a computer? For most of us, today’s technology allows us to stay in almost constant contact with friends and family via Facebook and Instagram as well as texting, facilitating multitasking. Overall, media use among youth has increased by 20% during the past decade, but multitasking—simultaneously accessing two or more forms of media—has increased by more than 119% (Rideout, Foehr, & Roberts, 2010) in the same period. While this may be the new normal, is it healthy?

A study conducted by psychologist Mark Becker, Reem Alzahabi, and Christopher Hopwood (2013) found a 70% increase in self-reported depressive symptoms in people who spent the most time multitasking in comparison to those who spent the least time multitasking. When it came to social anxiety, there was a 42% increase between the groups. What is the reason for these differences? Some have speculated that there is an inherent stress associated with several aspects of social media multitasking. First, we spend the majority of our waking hours listening for and being interrupted by texts, tweets, and other communications that come to us instantaneously. Second, we feel compelled to respond to those communications instantly, which distracts us from other things we might be doing (e.g., sleeping, studying). Third, anxiety is produced by worrying about the feedback we receive about ourselves via social media (e.g., how many likes you receive on a post). The constant stress from trying to project an image of perfection—a perfect career, perfect relationship, or perfect everything—leads to the constant release of the stress hormone, cortisol, and ultimately can lead to depression and anxiety.

What can be done to manage the stress associated with living life online? Permanently unplugging oneself is not realistic. However, it may be wise to consider setting limits on social media use. Consider a social media detox, eliminating social media usage completely for a week or two, to determine if social media is causing depression anxiety. If it is, it may be advisable to turn off your devices completely for blocks of time during the day when you are engaged in important activities like sleeping, studying, and spending time with loved ones. Not only will it allow for more concentrated attention in these activities but it gives your body a rest from the constant vigilance needed to be accessible to others via technology. We will explore other implications of our technological advances in our last chapter on future issues.

Reflection Questions

1. Have you found that your use of technology and social media decreases or increases your stress level? How easy do you find it to unplug from technology?

2. Find a peer-reviewed research article about technology and stress. What were the results of the study? Do you agree with the results? Explain your reasoning.
Health and Well-Being

While much of this chapter's coverage concerns the impact of stress on our well-being, it is also important to discuss how individuals can live lifestyles that are compatible with optimal growth and development, regardless of what types of stressors they encounter along the road of life. In this section of the chapter, we will explore issues related to health promotion. Namely, we will discuss issues related to diet and nutrition, exercise, and avoiding substance use.

Diet and Nutrition

Most of us have heard the saying “you are what you eat.” This saying refers to the fact that nutrition is a building block of our health: If you eat healthy foods, you increase the odds of having a healthy body. The U.S. government has historically developed guidelines for what is believed to be healthy eating. The 2015–2020 Dietary Guidelines for Americans (U.S. Department of Health and Human Services & U.S. Department of Agriculture, 2015; see Figure 6.2) emphasized three major goals for Americans:

1. Balance calories with physical activity to manage weight.
2. Consume more of certain foods and nutrients such as fruits, vegetables, whole grains, fat-free and low-fat dairy products, and seafood.
3. Consume fewer foods with sodium (salt), saturated fats, trans fats, cholesterol, added sugars, and refined grains.

What we eat is oftentimes determined by factors such as what we can afford, what food has been a part of our cultural and familial rituals, and what is most readily available. Beginning in early childhood, all human beings need a well-balanced diet to fuel healthy physical development. Children’s diets are dependent on what parents provide and what schools offer them. That being said, in the United States, there are some large disparities in terms of who eats healthy food and what the consequences of those inequities are. For example, according to a national health and nutrition survey (Foltz et al., 2011), fewer than 10% of our nation’s adolescents meet the federal guideline of eating five or more servings of fruit and vegetables per day. Instead, the majority (56%) have only one serving of fruit or vegetables every day. Since our nutritional habits as children often are strong predictors of our habits as adults (Mazzeo, Gow, & Bulik, 2012), it is important to understand the current state of affairs with respect to childhood nutrition and health outcomes.

Many children in the United States are eating low-cost, high-calorie snacks and meals; as a result, obesity rates are increasing astronomically. For example, 21% of U.S. preschoolers are overweight, and that figure increases to 33% for school-aged children between the ages of 6 and 19 (Ogden, Carroll, Kit, & Flegal, 2014). This is not a problem restricted to the United States. The trend is being observed in many industrialized nations (World Health Organization [WHO], 2013b). For example, with the past 25 years alone, China has observed a fivefold increase in the percentage of its children who are overweight and obese (Ji, Chen, & Working Group on Obesity in China, 2013). Establishing a poor diet in early childhood increases the likelihood for a person’s diet to remain poor based on the percentage of children, adolescents, and adults who meet the criteria for being overweight (Berk, 2014b).

Across all racial and ethnic groups, the prevalence of children ages 6 to 19 being overweight appears roughly equivalent in boys and girls. However, some noteworthy gender disparities exist within specific racial groups. Forty-three percent of African
American girls were overweight, compared with 34.4% of African American boys (Mazzeo et al., 2012). As is the case with other health problems, socioeconomic status (SES) is negatively associated with childhood obesity (Shrewsbury & Wardle, 2008). This finding is explained by the fact that oftentimes foods that are part of a well-balanced diet (e.g., fruits, vegetables, proteins, whole grains) cost families more to purchase. Additionally, some of the chain grocery stores that are most well-known for their healthy food choices can be some of the most expensive places to buy groceries.

Being overweight is a big problem in terms of health consequences. High blood pressure, insulin resistance, type 2 diabetes, sleep, and digestive disorders are all highly related to being overweight (Krishnamoorthy, Hart, & Jelalian, 2006) in children and adults. Since overweight children ages 10 to 17 are over 20 times more likely to be obese in adulthood compared to their nonoverweight peers (U.S. Department of Health and Human Services, 2011b), it is important to examine what can help children to access well-balanced diets. In an effort to show that access to good food is a critical component of decreasing childhood weight problems, researchers have begun to evaluate the efforts of programs that limit access to the traditional foods that kids most readily crave.

For example, Foster et al. (2008) investigated the effects of a school nutrition policy intervention (School Nutrition Policy Initiative, or SNPI) on fourth- to sixth-grade children from 10 schools with a high proportion of low-income students. As part of the SNPI, intervention program schools removed sodas, other sugar-sweetened beverages, and snacks of low nutritional value from vending machines and cafeteria service.

Water, low-fat milk, and non–artificially sweetened juice were the only beverages available in intervention program schools during the course of the project. In addition, school staff in the intervention program schools participated in nutrition education, and students were provided with 50 hours of nutrition education each school year. Students in intervention program schools were offered incentives (e.g., raffle tickets for prizes) for purchasing healthy foods.

Two years after the initiation of the SNPI, significantly fewer children in the intervention group had become overweight or obese compared with the control group (Foster et al., 2008). Specifically, 15% of children in control schools became overweight during the study period compared with 7.5% of children in the intervention schools. Moreover, the intervention was particularly effective for African American children, who were 41% less likely to be overweight at a 2-year follow-up than their African American peers in control schools. One of the other factors found to be involved in controlling weight issues is physical activity, which we will examine next.
Physical Activity and Exercise

In a similar trend to diet and nutrition, children and adolescents’ physical activity levels have been shown to be decreasing, which has resulted in very few children meeting the national recommended levels of physical activity. Furthermore, children appear to become less physically active as they move from childhood to adolescence (Gortmaker et al., 2012). One study by Troiano et al. (2008) found that only 8% of adolescents engage in 60 minutes of moderate to vigorous exercise per day. As was true for diet, children need opportunities for regular physical activity whether it is in school, a part of recreational time, or as part of sports involvement.

Among adults, it would appear that the picture is grim as well. Over half of U.S. adults are inactive, with no regular or even light activity in their lives (U.S. Department of Health and Human Services, 2011b). More women than men are inactive, and inactivity rates are inversely related to SES (Berk, 2014b). In adults, physical activity fosters resistance to diseases that tend to become more frequent in young adulthood. For example, physically active adults are less likely to develop diabetes and cardiovascular disease (Bassuk & Manson, 1985). Regular exercise promotes cardiovascular functioning and decreases problems with being overweight and obese, which creates risk for a host of medical conditions. While the recommendation is for children and adolescents, who require more time devoted to exercise and recreation because they are still growing physically, adults can meet national recommendations by being active at a moderate to intense level for as little as 30 minutes per day (Garber et al., 2011).

What might compromise adults’ ability to be physically active? It is not a lack of awareness. According to the U.S. Department of Health and Human Services (2011b), almost all adults are aware of the benefits of physical activity. Rather, it is likely to be competing demands for their time and energy. Think about the daily life of most adults who are no longer in school and have full-time jobs. If those same adults have families, much of their waking time is devoted to their jobs and spouses or children as well as maintaining households. Oftentimes there may not be enough hours in the day for a trip to the gym on top of those other obligations. This problem is further compounded for adults who live in low-income neighborhoods where there may not be community gyms or facilities and exercising in parks or going for a run outside may not be safe (Berk, 2014b).

How can people learn to become healthier in terms of physical activity? There is no shortage of businesses that have attempted to answer this question. Diet businesses, gyms, and home exercise equipment companies make many promises of a “new you.” But are there any types of programs that appear to be effective at changing the behaviors of people who have poor diets and low levels of physical activity? Researchers are trying to identify successful programs that involve families as a system to change the tide of overall health of our nation’s communities.

For example, PACE (Patient Centered Assessment and Counseling for Exercise and Nutrition) is a family-based program that uses computerized assessments of diet and both physical and sedentary behavior in participants (Patrick et al., 2006). The program starts out by using these assessments to help participants set goals and offer tools to help monitor goals. Parents also have goals and try to be good role models for their children by being actively supportive and involved in making changes for themselves. Program staff (such as physicians and nurses) provide support by making regular phone calls to help adjust the plans and to monitor progress.

Compared to families who were not involved in programs to help them change their diet and exercise routines, participants in PACE reduced sedentary behaviors by an average of 1 hour per day, and boys in the program increased the number of days that they were active every week. Girls experienced dietary gains by reducing the amount of unhealthy saturated fats that they ate. Programs such as PACE, which attempt to change the dietary and exercise norms of families, help participants to set and monitor goals, and provide active support from experts, may be successful due to their comprehensive
nature. Since most overweight and inactive kids have overweight and inactive parents, it is important to address families as systems when trying to make changes to the lifestyles of individual members.

**Avoiding Substance Use**

A major challenge to the health and well-being of adolescents and young adults in particular is substance use. Whether the substance is tobacco, alcohol, or other drugs, there is unequivocal evidence that putting any toxins into the body is not compatible with health promotion and optimal growth. Not only are substances such as the ones listed here damaging to human bodies but many of them have addictive potentials that transform use into abuse.

Researchers have determined that substance use is influenced by a powerful mix of factors that include the drug-related attitudes and behaviors of those around us (e.g., friends, significant others, family members), popular culture and media portrayals of substance use, and individuals’ own genetic makeup and self-regulation abilities (Berk, 2014b). In other words, while evidence suggests that some people have a family history that predisposes them to substance use and abuse, it is equally important to understand that glorifying substance use (e.g., most beer and alcohol commercials), being around friends that encourage substance use, and potentially using substances to regulate emotions are involved in explaining why substance use is so popular.

In terms of current use patterns, there are some promising findings emerging from a recent longitudinal examination (Lanza, Valisenko, Dziak, & Butera, 2015). For example, teenagers’ use of alcohol has decreased since the 1970s. Likewise, fewer adolescents are taking up smoking cigarettes. However, trends do not necessarily tell the entire story of where substance use rates are with adolescents and young adults. For example, even though cigarette rates are down compared to previous years, in 2013, approximately 10% of African American teens smoked cigarettes and 19% of White teens did as well. Perhaps even more disturbing is that smoking rates for marijuana have now outpaced those of cigarettes for both groups (25% of African American teens and 22% of White teens). Similarly, while rates of alcohol use may be lower than they were in previous generations, there is still a concern about how many adolescents drink alcohol and how many use it in heavy amounts.

The dangers of using alcohol are not merely restricted to its immediate effects as a drug, but it is often involved in other health-compromising behaviors such as unprotected sexual activity. Alcohol use before or during sex is a major risk for unprotected sex (Cooper, 2002), which might result in unwanted pregnancy and acquisition of sexually transmitted diseases (STDs; including HIV). According to the 2009 Youth Risk Behavior Surveillance Data (Centers for Disease Control and Prevention [CDC], 2010b), nearly one fifth (21.6%) of all students had used alcohol or drugs before their most recent sexual intercourse. Given that having most substances in our bodies can impair our ability to make good decisions and to consent to activities like sex, it is important to think about the short-term and long-term consequences of uncontrolled substance use.

Finally, while trends indicate that traditional substance use in many instances is improving generation by generation, there are new substances that are becoming popular in terms of their potential for abuse. For example, data have documented that 10 million individuals, or 7% of the U.S. population, reported nonmedical use of prescription drugs (Substance Abuse and Mental Health Services Administration, 2007), and this trend seems to be increasing over time. Given that prescription drugs can range in their effects, many abusers of these drugs are risking their lives by using these substances recreationally. Many public awareness campaigns have been implemented to educate parents about the dangers of drug abuse from the medication that they have in their medicine cabinets.
Is there any healthy amount of substance use? According to the 2015–2020 Dietary Guidelines for Americans (U.S. Department of Health and Human Services & U.S. Department of Agriculture, 2015), the only drug addressed is alcohol and the recommendations are clear. When alcohol is consumed (by adults of legal age), no more than one beverage per day for women and no more than two drinks per day for men are recommended. That provision does not encourage the use of alcohol but rather provides limits for its use when it is consumed. However, no studies exist that have found any health benefits of smoking (cigarettes or marijuana), using illegal drugs, or consuming prescription drugs that are not prescribed by a physician. Thus, in terms of optimizing health and well-being, substance use is not part of the plan.

Conclusion

In this chapter, we examined the relationship between stress and adjustment. Stress refers to the occurrence of a stimulus event (stressor), a process, and a reaction. A person’s reaction to stress often influences the adjustment process. Coping with stress is a voluntary response to stressors, which can be defined in various ways, such as being emotion-focused versus problem-focused or active versus avoidant. It is not possible to conclusively determine which types of coping, if any, are the best or most effective because the effectiveness of coping is dependent on the context. In other words, depending on the type of stressor and the circumstances in which it occurs, some types of coping may be beneficial some of the time while other types of coping can be helpful in other situations. It is most helpful to have an arsenal of coping styles at one's disposal so that one has different tools to cope with the situation depending on the kind of a stressor that is being faced.

This chapter also explored the physiological and psychological costs of stress, as well as some of the most effective ways of managing stress. While not all stress is negative (e.g., eustress), we make choices about how we view and respond in the face of stressors that will determine whether we suffer from the experience or whether we grow from it and become better off or stronger for having gone through it.

Finally, we are coming to understand more clearly the linkages between mind and body. “A healthy mind in a healthy body” might be a maxim for a more holistic approach to well being. Toward that end, we explored our understanding of diet, exercise, and substance use on our health. This follows an increasing emphasis on integrated health that has grown in medicine and in psychology (DeGruy & Etz, 2010; Levey, Miller, & deGruy, 2012).

Review Questions

1. What is the difference between an acute stressor and a chronic stressor? What strategies can people use to avoid becoming overwhelmed by these stressors?
2. Think of a stressful situation that you have experienced. Describe this situation in terms of primary and secondary appraisal.
3. Define coping, and provide examples of two coping strategies that people may use.
4. Explain what microaggression is, and discuss its three types of categories.
5. Identify two strategies that you would use to manage stress, and discuss their benefits.
6. Analyze why physical touch is an effective way to manage stress levels. Have you experienced this in the past? Explain.
7. Compare and contrast good and bad stress. Do you feel that stress is positive or negative? Explain your reasoning.

8. Provide a personal example of eustress that was not used in the chapter.

9. Describe a negative stress event, and reframe it in a positive way.

10. Choose one aspect of health and well-being, and analyze how it can help decrease stress in people's lives.

**Key Terms**

- active coping 120
- acute stressor 113
- avoidant coping 120
- chronic stressors 113
- coping 112
- emotion-focused coping 119
- eustress 128
- hassles 113
- microaggressions 122
- primary appraisal 117
- problem solving–focused coping 120
- reframing 128
- secondary appraisal 117
- stress 112

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