

# 2/Self- Assessment

I know I feel stressed, but how can I measure my stress?

How do I rate my stress level compared to the stress level of others?

I often have headaches and tight shoulders, but I am not sure why. Could this be due to stress?

When I feel stressed, is it more because of what is happening in my life or because of how I react or think about what is happening?

## REAL PEOPLE, REAL STORIES

**Stress Happens** The Stress Management 101 class was about to begin. Today's topic was to be "Assessing Your Stress." Angie sat quietly in the back of the classroom.

"Okay class, let's start by checking our resting heart rate," the teacher announced. Angie's pulse was 105 beats per minute.

"Next, check the number of breaths you take per minute." Angie counted 30 breaths.

"How long does it usually take you to fall asleep once you lie down at night?" Angie said she usually takes at least an hour.

"How much of the time do you feel high levels of stress?" Angie said she feels that way almost all the time.

"Doesn't it feel unpleasant to always feel so stressed?" the teacher questioned. Angie's reply, common among college students, was, "I didn't know there was another way to feel. I assumed that this was the way college life was supposed to be and that everyone feels this way."

Normally we do not so much  
look at things as overlook them.

—ALAN WATTS

CHAPTER TWO

## Student Objectives

Study of this chapter will enable you to:

1. Assess your current level of stress from a variety of perspectives.
2. Explain the physiological and psychological indicators of stress.
3. Evaluate the impact of stress on the quality of your life.

## Self-Assessment

Several years ago author Richard Carlson created a catchy title for his best-selling book, *Don't Sweat the Small Stuff . . . and It's All Small Stuff*. He offered some important advice for our over-stressed society: We need to step back and relax. The problem is that not all stuff is small stuff. Some things are worth sweating over. The tricky part is to determine what is really important and worthy of your energy and what constitutes the small stuff that causes needless worry and diminishes the quality of your life.

One of the looming challenges for successful stress management is to determine what causes you stress. A certain level of stress can energize and motivate you to deal with the important issues in your life. You will want to focus your energy on the things in your life that are truly important. How do you determine what factors cause you unnecessary stress? How does your stress level compare to others? We will help you answer these questions in this chapter.

## Where Are You Now Stress-Wise?

How is stress measured? This chapter presents a variety of tools to help assess your stress. Some of these tools are simple and fun, and others are more scientific and complex. Each was selected to help you understand the stress in your life and to provide information you can use to develop a stress management plan that works for you.

The first step in developing a plan is assessment. As Alan Watts stated in the beginning quote, "Normally we do not so much look at things as overlook them." You may be so busy living your life that you don't take time to stop and evaluate. You just keep doing what you are doing.

To assess stress, no one best tool will suffice, in part because reactions to events vary from person to person. What distresses one person excites and challenges another. Research increasingly supports the idea that the amount of stress is not what matters but, instead, the individual's ability to control the stressful situation. Often, external events are not what cause stress. How we perceive and cope with stressful events is the determining factor.

Therefore, you should use the information in this chapter in a way that seems relevant to you and your life. These assessments and surveys are not intended to be diagnostic but only to guide you in better understanding yourself. This chapter is devoted to providing you with a variety of stress assessment tools including:

- Assess Your Stress
- Symptoms of Stress
- Perceived Stress Scale
- Inventory of College Students' Recent Life Experiences
- Ardell Wellness Stress Test
- Student Stress Scale
- Stress Vulnerability Factors
- Tombstone Test
- Daily Stress Diary

Taken together, the results of these assessments will produce an overall picture of your current stress status and help you decide where you want to go and how you can get there. Starting with a comprehensive assessment is so important that we have devoted this entire chapter to helping you get the picture of your current stress status.

## Assess Your Stress

The first assessment tool you will use is called Assess Your Stress. The focus of this tool is on physiological indicators of stress, along with your subjective rating of stress. Using Figure 2.1, fill in your personal results based on the instructions.

**Resting Heart Rate** Check your resting heart rate (pulse) after you have been sitting or relaxing for at least 30 minutes. You will need a watch or clock with a second hand (or digital seconds). First, find your pulse. You can find your **radial pulse** on the thumb side of your wrist, or your **carotid pulse** on your neck just under the jaw. For 60 seconds count the number of beats you feel. Place this number in the first line of Figure 2.1.

**Breathing Pattern** Now find a chair with a back. Sit in the chair so your back is primarily straight up and down against the back of the chair. Place one hand on your abdomen with your palm covering your navel. Place your other hand on the upper part of your chest with the palm of that hand just above your heart. For a minute or two, become aware of your breathing. While sitting straight up, notice your breath as it goes in and comes back out. Become aware of your hands as you breathe in and out. Which hand seems to move more—the hand on your abdomen or the one on your chest? Or do both hands seem to move equally?

Try this second technique to see if you get the same results: First breathe out and empty your lungs. Count to three as you inhale deeply. Now hold it. Did your shoulders go up? Did you feel like the air filled the upper part of your lungs? If so, you probably lean toward what we call chest breathing. By contrast, if you are a diaphragmatic breather, you will feel your abdominal area expand, your belt tighten, and fullness in the lower part of your lungs and chest. Record your results on Figure 2.1 by putting an X by the mode that best describes how you breathe.

**Respiration Rate** For about a minute, become aware of your breathing again. This time, count how many natural, effortless breaths you take in a minute. Be sure to breathe as normally and naturally as possible. Each inhalation and exhalation cycle is considered one breath. The number of breaths you take in one minute is called your **respiration rate**. On Figure 2.1, record the number of breaths you take per minute.

**Stress-o-Meter** Think back over the last month of your life, including all of your waking moments. Give yourself a rating on the “Stress-o-Meter” along a continuum in which:

“1” means that you feel your life has been relatively stress-free during that period. You have felt blissful and calm most of the time. Everything seemed to go your way.

“10” means that you felt very high anxiety most of the time and that this was a month packed with high levels of stress. You felt totally overwhelmed, like your life was out of control, and like you were unable to cope.

Considering the last month as a single period of time, you most likely would rank yourself somewhere between these two extremes. To average out the month (we all have highs and lows), what number between 1 and 10 would you give yourself? Note this number on Figure 2.1.

FIGURE 2.1 “Assess Your Stress” Form

|                    |                                |                    |
|--------------------|--------------------------------|--------------------|
| Resting Heart Rate | ___                            | Beats per minute   |
| Breathing Pattern  | ___ Abdomen ___ Chest ___ Both |                    |
| Respiration Rate   | ___                            | Breaths per minute |
| Stress-o-Meter     | 1 2 3 4 5 6 7 8 9 10           |                    |

**Assess Your Stress Results** Physiological measures associated with increased stress include, among others, increased heart rate and increased respiration rate. Although many factors affect these rates, such as physical conditioning and recent physical exertion, you will learn in Chapter 3 why the stress response can increase your pulse and respiration rates. The normal pulse rate for adults ranges between 50 and 100 beats per minute with the average heart

FYI

### Meditation Slows Breathing

Did you know that meditating can affect the way you breathe and the amount of oxygen your body needs? People who regularly practice meditation tend to have slower breathing rates and naturally breathe more efficiently, that is, their bodies use the oxygen they breathe in more effectively. Various studies have shown that oxygen consumption is reduced during meditation, in some cases by up to 55%, and that respiration rate is lessened, in some cases to one breath per minute, when twelve to sixteen breaths per minute are normal. This is a natural physiological change due to a lowered requirement for oxygen by the cells and a slower metabolism. This happens naturally during meditation.



An elevated heart rate is an indication of stress. One site for counting your heart rate is the carotid artery.

rate approximately 70–80 beats per minute. The average respiration rate is 12–16 breaths per minute. A faster heartbeat or breathing rate might be an indicator of higher-than-desired stress levels. It could also be a sign of a medical condition or recent physical activity such as running up the stairs to get to class.

Were you primarily a chest breather or an abdominal breather? Many of us are primarily chest, or thoracic, breathers. Chest breathing happens due to chronic activation of the stress response. Chest breathers tend to take shallower breaths with the unconscious intention of getting more air into the lungs more quickly in preparation for fighting or running.

Diaphragmatic, or abdominal, breathing uses the abdominal muscles to facilitate deeper breathing. This allows you to take in more oxygen with each breath. Deep breathing slows your nervous system in direct opposition to the stress response, which speeds it up. Later you will learn more about deep breathing as a relaxation technique.

Your perception of stress is instrumental in how your body responds. Results from the Stress-o-Meter increase your awareness of the level of stress you perceive in your life. When we do physical exercise, we can follow a perceived exertion scale that gives us some idea of how hard we are exercising, to determine our intensity level. Similarly, we can use the Stress-o-Meter to assess our general levels of perceived stress over the past month. You will learn later in the book how your perception of stress relates to your health and your physiological response. Whether the stress is real or imagined, your body responds the same: Your perception becomes your reality.

Look back over the results you recorded in Figure 2.1. What does this information tell you about your stress level?

## Symptoms of Stress: Assessment

How frequently do you find yourself experiencing problems such as headaches, difficulty going to sleep or staying asleep, unexplained muscle pain, jaw pain, uncontrolled anger, or frustration? Using Figure 2.2, assess how often you experience the symptoms of stress, by placing an X in the appropriate box.

**FIGURE 2.2** Symptoms of Stress Form

| Symptoms   | Frequency of Symptoms        |                    |                       |                       |                |                 |       |
|--|------------------------------|--------------------|-----------------------|-----------------------|----------------|-----------------|-------|
|  | Almost all day,<br>every day | 2–3 times<br>a day | Every night<br>or day | 2–3 times<br>per week | Once a<br>week | Once a<br>month | Never |
| Headaches  |                              |                    |                       |                       |                |                 |       |
| Tense muscles;<br>sore neck and back             |                              |                    |                       |                       |                |                 |       |
| Fatigue  |                              |                    |                       |                       |                |                 |       |
| Anxiety, worry,<br>phobias                       |                              |                    |                       |                       |                |                 |       |
| Difficulty falling<br>asleep                     |                              |                    |                       |                       |                |                 |       |
| Irritability                                     |                              |                    |                       |                       |                |                 |       |
| Insomnia   |                              |                    |                       |                       |                |                 |       |
| Bouts of anger/<br>hostility                     |                              |                    |                       |                       |                |                 |       |
| Boredom,<br>depression                           |                              |                    |                       |                       |                |                 |       |
| Eating too much or<br>too little                 |                              |                    |                       |                       |                |                 |       |
| Diarrhea, cramps,<br>gas, constipation           |                              |                    |                       |                       |                |                 |       |
| Restlessness,<br>itching, tics                   |                              |                    |                       |                       |                |                 |       |
| Grinding teeth,<br>clenching jaw<br>during sleep |                              |                    |                       |                       |                |                 |       |
| Difficulty<br>concentrating                      |                              |                    |                       |                       |                |                 |       |

## Stress and Deep Sleep

In a University of Pittsburgh study reported in the journal *Psychosomatic Medicine*, researchers monitored the heart rates of 59 healthy undergraduate students while they slept. Variations in heart rate can provide clues about activity of the involuntary nervous system, which directs the function of organs such as the heart and the lungs. To trigger stress during sleep, the researchers told half of the students they would have to deliver a 15-minute speech when they woke up. The topics would be chosen for them upon their awakening.

The researchers detected significant heart rate variations between the stressed and non-stressed students as they slept.

The stressed group had changes in heart rate patterns during **rapid eye movement (REM) sleep**—the sleep phase when dreaming occurs—and non-REM sleep. The heart rate variability patterns detected in the stressed students were similar to those seen in people with insomnia, suggesting similar pathways of disruption in the nervous system. This study found that stressed sleepers wake up more often and have fewer episodes of deep sleep. The link between daytime stress and restless sleep is well established, but scientists are still investigating the exact ways that stress affects sleep.

**Source:** Acute Stress Affects Heart Rate Variability During Sleep by M. Hall, R. Vasko, D. Buysse, H. Ombao, Q. Chen, JD Cashmere, D. Kupfer, JF Thayer, *Psychosomatic Medicine* 66(1) (2004): 56-62.

### Stress Busting Behavior

#### STRESS LEVEL CHECKLIST

Monitor your stress levels regularly with the following list. Check the box if your answer to the question is "yes."

- |   |   |
|---|---|
| <input type="checkbox"/> Check your resting heart rate—is it higher than usual?             | <input type="checkbox"/> Do you have any other stress symptoms, such as headaches, tense muscles, or difficulty falling asleep? |
| <input type="checkbox"/> Are you breathing from your chest only (rather than your abdomen)? |   |
| <input type="checkbox"/> Is your rate of respiration elevated?                              |   |
| <input type="checkbox"/> Is your perceived stress level above a 5 on a scale of 1 to 10?    |   |

If any of the above are checked, take action to manage your stress!

The more often you experience these symptoms of stress, the more likely it is that stress is having a negative impact on your life. Stress is not the only factor to cause these symptoms. Athletes, for example, may experience sore muscles from training. However, when these symptoms occur for unexplained reasons, stress must be considered as a contributing factor. Like Angie in the opening vignette, you may be so used to feeling a certain way that you assume it is normal. If you don't know you are in distress, you can't change. Learning to be self-aware helps you recognize symptoms of

stress early so you can take action. Look back over Figure 2.2. Do you recognize symptoms of stress in yourself that you would like to eliminate or change? In later chapters you will learn proven strategies to help you eliminate the negative symptoms of stress in your life.

### FYI

#### Lesson from the Titanic

The blockbuster movie *Titanic* has a health lesson for us all. The captain of that mighty ship was warned six separate times to slow down, change course, and take the southern route because icebergs had been sighted. But he ignored all six specific warnings, lulled into complacency because he believed the ship was unsinkable. The lesson is: *Listen to your body when it sends you signals.* Symptoms and changes are warnings that you should slow down, change course, or take another route.

**Source:** Connections: Health Ministries Association Newsletter, "A Lesson from the Titanic," by Jean Wright-Elson, *Parish Nurse Note* (Huntington Beach, CA).

Nothing can bring you peace but yourself.

—RALPH WALDO EMERSON

## Perceived Stress Scale (PSS)

The Perceived Stress Scale (PSS) is represented in Figure 2.3. This classic stress assessment instrument remains a popular choice for helping us understand how different situations