

Reading 1

WHAT IS STRESS?

The term **stress** has been defined in several different ways. Sometimes the term is applied to stimuli or events in our environment that make physical and emotional demands on us, and sometimes it is applied to our emotional and physical reactions to such stimuli. In this discussion, we will refer to the environmental stimuli or events as **stressors** and to the emotional and physical reactions as stress.

Many sorts of events can be stressors, including disasters, such as hurricanes or tornadoes; major life events, such as divorce or the loss of a job; and daily hassles, such as having to wait in line at the supermarket when you need to be somewhere else in 10 minutes. What all these events have in common is that they interfere with or threaten our accustomed way of life. When we encounter such stressors, we must pull together our mental and physical resources in order to deal with the challenge. How well we succeed in doing so will determine how serious a toll the stress will take on our mental and physical well-being.

Reacting to stressors

The Canadian physiologist Hans Selye has been the most influential writer on stress. Selye proposed that both humans and other animals react to any stressor in three stages, collectively known as the *general adaptation syndrome*. The first stage, when the person or animal first becomes aware of the stressor, is the *alarm reaction*. In this stage the organism becomes highly alert and aroused, energized by a burst of epinephrine. After the alarm reaction comes the stage of *resistance*, as the organism tries to adapt to the stressful stimulus or to escape from it. If these efforts are successful, the state of the organism returns to normal. If the organism cannot adapt to the continuing stress, however, it enters a stage of *exhaustion*, or collapse.

stress an emotional or physical reaction to demanding events or stimuli

stressors events or stimuli that cause stress

come into contact with

important

solve problem

30 Selye developed his model of the general adaptation syndrome as a result of research with rats and other animals. In rats, certain stressors, such as painful tail-pulling, consistently led to the same sorts of stress reactions. In humans, however, it is harder to predict what will be stressful to a particular person at a particular time. Whether a
35 particular stimulus will be stressful depends on the person's subjective appraisal of that stimulus. How threatening is it? How well have I handled this sort of thing in the past? How well will I be able to handle it this time? For one person, being called on to give a talk in front of a class is a highly stressful stimulus that will immediately produce such
40 elements as a pounding heart and a dry mouth. For another person, being called on to give a talk is not threatening at all, but facing a deadline to complete a term paper is extremely stressful. In humans, moreover, the specific stress reaction is likely to vary widely; some stressful situations give rise predominantly to emotions of fear, some
45 give rise to anger, and some give rise to helplessness and depression.

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1 Highlighting A V R

Highlighting makes important information stand out so that you can go back to the text to study for a test. Systematically using highlighter pens can make the review process easier. For example, use one color for key terms and another for their definitions. You can use a third color for the main idea and another for supporting details.

A Find the following words and phrases where they appear in the text and highlight them.

stress

stressors

general adaptation syndrome

alarm reaction

resistance

exhaustion

B Use a different-colored highlighter and highlight the following:

- a definition of *stress* and *stressors*
- a statement about what all stressors have in common
- a description of Stage 1 of the general adaptation syndrome
- a description of Stage 2 of the general adaptation syndrome
- a description of Stage 3 of the general adaptation syndrome
- the sentence containing the main idea of the last paragraph

C Compare your answers with a partner's.

2 Preparing for a test A R

When you prepare for a test, you need to pay close attention to key terms and main ideas. If you have highlighted these in the text, go back to those parts as you review it. They are the parts of the text that you will be tested on.

Look back at the text that you highlighted in "What Is Stress?" and use the information you highlighted to say how you would answer questions that might be on a test about this text.

1. What is a *stressor*?
2. What are the three different stages of the general adaptation syndrome?
3. Why are going on vacation and getting divorced both stressful to some degree?
4. What is one major difference in the way that rats react to stress compared to the way that humans do?

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