

Unit VIII

Motivation, Emotion, and Stress

Overview

Unit VIII explores the motivations and emotions that drive our behavior, and examines the health effects of intense or prolonged emotions such as anger and stress. The unit begins by explaining the contrasting theories of motivation and applies them to common motivations: hunger, sex, and affiliation. The unit then explores the theories of emotion and explains the differences between the James-Lange, Cannon-Bard, and Schachter and Singer two-factor theory, as well as introducing two newer theories of emotion. Our ability to communicate nonverbally with facial expressions and gestures is explained in Module 42 and research into cultural similarities and differences in emotional expression is discussed. The unit concludes with two modules covering the impact of stress on health and the prevalent illnesses impacted by stress, such as cancer, AIDS, and depression.

Modules

37 Motivational Concepts

38 Hunger Motivation

39 Sexual Motivation

40 Social Motivation: Affiliation Needs

41 Theories and Physiology of Emotion

42 Expressed Emotion

43 Stress and Health

44 Stress and Illness

Tip #8

Reduce Stress by Reducing “Busy-ness”

Reducing stress is not always as easy as it sounds. There are many demands placed on you by family members, teachers, coaches, and of course, yourself! How to balance all of these demands and still find time for quiet reflection, a fun game of Monopoly, a walk in your local park, or just staying healthy is the challenge. It may seem like there is never enough time to finish all of your schoolwork and chores and still have time for you. You can work to reduce your overall load and that starts by taking a look at your schedule. Evaluate the courses you are taking and the homework load each of those courses requires. Is it right for you? Could you make some changes this year or register for different courses next year to provide more time for rest, fun and that all-important sleep? How many clubs or outside activities are you involved in? Do you actually get fulfillment and enjoyment from each of them or might you cut back on a few? Carefully choosing your daily scheduled activities with stress reduction in mind can make a big difference on your overall well-being. Give it a try!

Module 37

Motivational Concepts

Before You Read

Module Summary

Module 37 defines motivation and introduces four main theories of motivation. Key terms like homeostasis and instinct are explained in detail.

Before beginning the module, take a moment to read each of the following terms and the name you will encounter. You may wish to make vocabulary cards for each.

Key Terms

motivation

instinct

drive-reduction theory

homeostasis

incentive

Yerkes-Dodson law

hierarchy of needs

Key Name

Abraham Maslow

While You Read

Answer the following questions/prompts.

37-1

1. How do psychologists define *motivation*?

2. Describe some of the nature and nurture factors that influence motivation.

3. Complete the chart below.

Perspective/Theory	Key Terms	Key Contributors	Summary
Instinct/Evolutionary			
Drive-Reduction		<i>none mentioned</i>	
Arousal			
Hierarchy of Needs			

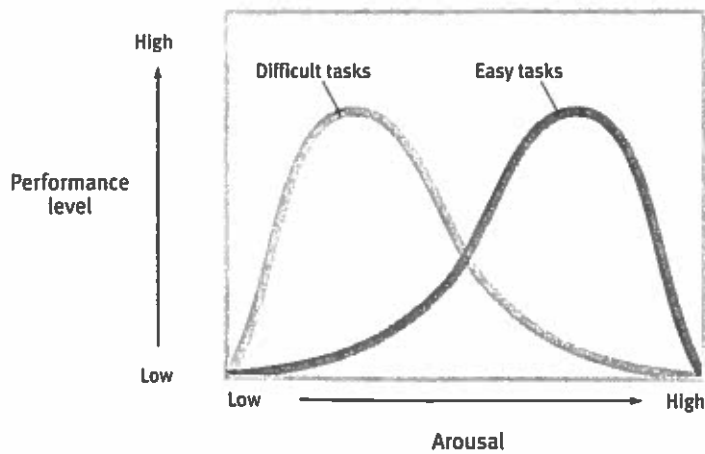
4. Briefly summarize the strengths and weaknesses of each theory as described by Table 37.1.

5. Explain and use a new example to illustrate the relationship between a need, a drive, and a behavior.

6. How does the body try to maintain homeostasis?

7. How do incentives pull behavior from an organism?

8. Explain why different levels of arousal might be required for tasks of different difficulty. Use the following figure as a guide.



9. Consider a typical day in your life. Using Figure 37.3, provide one example from your day of how you are motivated to meet each of the needs described in Maslow's hierarchy. The chart below is provided for your work.

Maslow's Need	My Example
physiological	
safety	
belongingness and love	
esteem	
self-actualization	
self-transcendence	

After You Read

Module 37 Review

Select the best answers to see if you have mastered the basics.

1. Every day, after a long day of work, Juan heads out to practice his sky-diving maneuvers. He often spends weekends jumping out of planes and bungee jumping. Which of the following motivation theories most correctly explains why Juan enjoys these risky behaviors?
 - a. drive-reduction theory
 - b. instinct theory
 - c. arousal theory
 - d. evolution theory
 - e. incentive theory

2. Mohandas Gandhi and Alice Paul are two historical figures who often fasted or used hunger strikes as a means of gaining attention to their cause. Their motivations refute which of the following theories of motivation?
 - a. hierarchy of needs
 - b. instinct theory
 - c. drive-reduction theory
 - d. arousal theory
 - e. incentive theory

3. Studies have shown that newborn waterfowl, when presented with a model of a bird with a short neck like a hawk, who are a threat to them, were more prone to try to escape from the area than when they were shown a bird model with a long neck like that of a goose. The young waterfowl's motivation to try to flee from this natural predator is best explained by which theory?
 - a. arousal theory
 - b. drive-reduction theory
 - c. incentive theory
 - d. instinct theory
 - e. homeostasis theory

4. A survivalist has been in the forest for over two weeks and is out of food and water. In desperation, she has begun eating leaves and various insects and can think of nothing more than satisfying her hunger. Which of the following theories would best explain her motivation to eat these items?
 - a. instinct theory
 - b. drive-reduction theory
 - c. incentive theory
 - d. arousal theory
 - e. Yerkes-Dodson theory

5. Martin is a brain surgeon with an extremely successful track record for treating a wide variety of brain damage in his patients. Each difficult surgery he undertakes requires painstaking precision, patience and skill. According to new research into optimal arousal, what would Martin's optimal arousal level be prior to beginning a new operation?
 - a. moderate
 - b. low
 - c. high
 - d. very high
 - e. somewhat high

Module 38

Hunger Motivation

Before You Read

Module Summary

Module 38 describes the physiological, cultural, and situational factors that influence hunger and motivate eating behavior. The module concludes with a discussion of the physiology and environmental factors affecting obesity.

Before beginning the module, take a moment to read each of the following terms you will encounter. You may wish to make vocabulary cards for each.

Key Terms

glucose

set point

basal metabolic rate

While You Read

Answer the following questions/prompts.

38-1

1. Explain how Cannon and Washburn's work established one factor that pushes or drives hunger.

2. Describe the role of glucose in triggering hunger.

3. Explain the effects on hunger and eating behavior when stimulating or destroying the appetite suppression areas of the hypothalamus.
4. Explain the impact of the set point on hunger and energy output.
5. Why might the term *set point* be too limiting in explaining weight gain and loss? How might a person attempt to increase his or her basal metabolic rate? OK?

6. Use Figure 38.4 and the text to complete the chart.

Appetite Hormone	Location of Secretion	Effect on Hunger
Insulin		
Ghrelin		
Orexin		
Leptin		
PYY		

38-2

1. How might memory impact our desire to eat?
2. Discuss the cultural influence on eating behaviors.
3. Explain how geography and the environment in which a culture lives can impact food choice and taste.

Given that culture is covered in 2 and a culture doesn't live, how about "people live"

4. How do the following impact eating behavior and weight?

Group size:

Portion size:

Food variety:

38-3

1. List one social and one physiological/health consequence of being overweight or obese.
2. What role do set (or settling) point and metabolism play in obesity?
3. What role do genetics play in obesity?
4. What role do environmental factors play in obesity? What information in the Close-Up can help you make better choices regarding what you eat?

After You Read

Module 38 Review

Haven't identified "Short answer" before. Doesn't seem necessary. OK?

Answer the following questions to see if you have mastered the basics.

1. Keisha is experiencing hunger pangs and stomach contractions as the lunch break nears. Fill in the chart below to indicate which of the hormones in Keisha's body are being secreted.

Want to change Keisha's name? She appears also in Module 35.

Hormone	Being Secreted	
	Yes	No
Ghrelin		
Orexin		
Leptin		
PYY		

Choose either increases or decreases for the fill-in-the-blank questions below.

2. As blood glucose _____, hunger increases.
3. As body weight rises, hunger _____ and energy expenditure _____.
4. As food intake decreases, basal metabolic rate _____ and energy expenditure _____.
5. When an overweight or obese person's body weight drops below its set point, the person's hunger _____ and metabolism _____.

Module 39

Sexual Motivation

Before You Read

Module Summary

Module 39 describes the phases of the human sexual response cycle and lists the various dysfunctions that disrupt it. In addition, the module explains the impact of hormones and environmental stimuli on human sexual motivation.

Before beginning the module, take a moment to read each of the following terms and names you will encounter. You may wish to make vocabulary cards for each.

Key Terms

sexual response cycle
refractory period
sexual dysfunction

estrogens
testosterone

Key Names

William Masters
Virginia Johnson

While You Read

Answer the following questions/prompts.

39-1

1. Briefly summarize the work of Masters and Johnson in the 1960s.

2. Complete the chart.

Stage of Sexual Response Cycle	Physiological Changes
Excitement Phase	
Plateau Phase	
Orgasm	
Resolution Phase	

3. Discuss three sexual dysfunctions that impair sexual arousal or functioning.

a.

b.

c.

4. Briefly address how the APA determines if a given experience/behavior is qualified as a sexual dysfunction.

39-2

1. Discuss the impact of estrogens and testosterone on sexual motivation.
2. Discuss the biopsychosocial factors impacting sexual motivation.
3. Explain how external and imagined stimuli impact sexual motivation. How can these materials have a detrimental effect on sexual behavior?

After You Read

Module 39 Review

Select the best answers to see if you have mastered the basics.

1. Which shows the correct order of the phases of the sexual response cycle?
 - a. excitement, orgasm, plateau, resolution
 - b. plateau, excitement, orgasm, resolution
 - c. excitement, plateau, orgasm, resolution
 - d. plateau, orgasm, excitement, resolution
 - e. excitement, plateau, refractory period, orgasm, resolution
2. At a routine doctor appointment, a woman tells her physician that she rarely experiences orgasm with her husband of twenty years. The physician is most likely to tell her she has a sexual dysfunction called
 - a. exhibitionism.
 - b. premature ejaculation.
 - c. erectile disorder.
 - d. fetishism.
 - e. female orgasmic disorder.

3. Which of the following is the correct relationship between the sex hormone and its effect on sexual behavior?
 - a. lower testosterone levels result in increased interest in sex
 - b. estrogens peak during ovulation
 - c. testosterone peaks during ovulation
 - d. estrogens decline right before ovulation
 - e. women's sexual interest rises as testosterone levels decrease

4. The period of time following orgasm in which a man cannot achieve another orgasm is referred to as
 - a. a plateau.
 - b. a sexual dysfunction.
 - c. the sexual response cycle.
 - d. the exhibition phase.
 - e. the refractory period.

5. Findings regarding men's and women's interest in sexually explicit materials show that
 - a. women experience only half as much arousal as men.
 - b. women report nearly as much arousal to the materials as men.
 - c. women report twice as much arousal to the materials as men.
 - d. women experience no arousal while men experience high arousal.
 - e. women report men experience decreased arousal when viewing materials.

Module 40

Social Motivation: Affiliation Needs

Before You Read

Module Summary

Module 40 presents evidence that supports the benefits of affiliating and explains the pain of being shut out of social interactions. The module also tackles the timely subject of Internet social connections, exploring the ways in which this novel technology impacts us both positively and negatively.

While You Read

Answer the following questions/prompts.

40-1

1. Using real-life examples, summarize what is meant by our need to “affiliate.”

2. Summarize the benefits of belonging. Suggest an additional benefit of your own.

3. What are some behavioral effects of being excluded?

f. Narcissistic people have many more “friends” on social networking sites and more pictures posted of themselves.

2. How can the recommendations provided in the Close-Up on Managing Social Networking help you have a healthy relationship with both social media and the outside world?

After You Read

Module 40 Review

Answer the following prompt to see if you have mastered the basics.

You are a parent raising a pre-teen daughter who is desperate to have her first cell phone. She argues that all of her friends have a phone and since she does not currently have one, she misses out on all the gossip and invitations to parties. In addition, you have not yet allowed her to have a presence on a social networking site, although many of her friends are signed up. Because you are an authoritative parent, you want to consider all of the benefits and drawbacks to your daughter’s request and therefore you make the following “pro/con” list. In the “pro” column, list the reasons your daughter should have a cell phone and social networking access and in the “con” column list the reasons she should not. Be sure to address affiliation needs and the influences of social networking as described in the module.

Pro	Con

Module 41

Theories and Physiology of Emotion

Before You Read

Module Summary

Module 41 describes how arousal and expressive behaviors interact in emotional situations and discusses the link between emotional arousal and the autonomic nervous system. The role of consciously interpreting and labeling emotions in our understanding and experiencing of them is explained, and is followed by an examination of whether different emotions activate different physiological and brain-pattern responses. The module concludes with a review of the effectiveness and limitations of polygraph technology in detecting lies.

Before beginning the module, take a moment to read each of the following terms and names you will encounter. You may wish to make vocabulary cards for each.

Key Terms

emotion

James-Lange theory

Cannon-Bard theory

two-factor theory

polygraph

Key Names

William James

Stanley Schachter

While You Read

Answer the following questions/prompts.

41-1

Use these three words to answer questions 1 and 2.

emotion

physiological arousal

bodily response.

1. Place the three words in the box above in the order they would occur according to the James-Lange theory of emotion.
2. Place the three words in the box above in the order they would occur according to the Cannon-Bard theory.

3. Think of an example of a stimulus that produces an emotional response. Use both the James-Lange and the Cannon-Bard theory to explain why that emotion occurred.

41-2

1. What is the additional component Schachter and Singer add to the James-Lange and Cannon-Bard theories? Discuss how important you think that component is to emotional theory.

2. Place the following four words in the order they would occur according to Schachter and Singer's two-factor theory.

emotion stimulus physiological arousal cognitive label.

3. Briefly summarize Schachter and Singer's experiment with epinephrine in the waiting room. What is the key component that causes participants to create the label for the emotion they are experiencing?

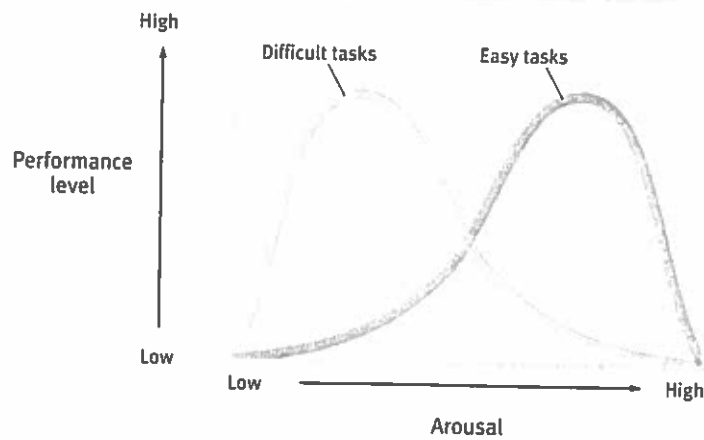
4. In what way does the work of Zajonc, LeDoux, or Lazarus contradict the work of the previous theorists?

41-3

1. What role do the sympathetic and parasympathetic nervous systems play in emotional arousal?

2. What are the physiological changes that occur in the sympathetic and parasympathetic nervous systems as a result of emotional arousal?

3. Consider the following figure. How does the Yerkes-Dodson law explain emotional arousal?



After You Read

Module 41 Review

Answer the following questions to see if you have mastered the basics.

Decide which theory of emotion best explains each scenario below. Write JL for the James-Lange theory, CB for the Cannon-Bard theory, and SS for Schachter and Singer's theory.

- _____ 1. Shelby had tears streaming down her cheeks and became sad.
- _____ 2. Daneen was out walking in a strange neighborhood at night when a man turned the corner and began walking toward her. Daneen recognized that her breathing and heart rate were accelerating and decided she must be afraid. Fearfully, she crossed over to the other side of the street.
- _____ 3. The next day, Daneen was out walking in her own neighborhood when a man turned the corner and began walking toward her. Daneen recognized that her breathing and heart rate were accelerating and decided she must be excited. She screamed with delight as she ran to greet her father who just arrived from a long trip.
- _____ 4. Ji-hoon is walking between classes at school when he encounters a student who has been bullying him. Immediately, his pulse increases and he begins to sweat as he is overwhelmed by fear.
- _____ 5. Angelo noticed that his heart was racing and began shaking with fear.

Use the following scenario to answer questions 6 through 10.

You are hoping to ask a girl in your next class if she will accompany you to the school dance. You are very nervous and excited. Address the impact the autonomic nervous system will have on each of the bodily processes described below as you enter the room to pop your question.

6. What role does your liver play? Why?
7. How will your lungs assist you in asking your question? Why?

8. What is happening with your digestion? Why?

9. What is happening to your pupils? Why?

10. What is happening with your sweat glands? Why?

Module 42

Expressed Emotion

Before You Read

Module Summary

Module 42 describes the nonverbal communication of emotion and discusses cultural and gender differences in this form of expression. The impact of facial expressions on our emotions is explained by the facial feedback effect.

Before beginning the module, take a moment to read each of the following terms you will encounter. You may wish to make vocabulary cards for each.

Key Terms

facial feedback effect

health psychology

While You Read

Answer the following questions/prompts.

42-1

1. Cite three examples from the text to support the following statement: "Humans communicate and detect emotion nonverbally."
 - a.
 - b.
 - c.

2. Why are smiles and expressed emotions social as well as emotional?

42-3

1. Using original examples, discuss how facial expressions can actually influence emotion. Explain why this is counterintuitive.

2. Define and give an example of the facial feedback effect.

3. Briefly explain the behavior feedback phenomenon.

4. On which specific areas does health psychology focus?

After You Read

Module 42 Review

Answer the following questions to see if you have mastered the basics.

1. Patrick is new to the school and is eager to meet new people and make new friends. Use your understanding of the facial feedback effect to offer Patrick advice on meeting his goal.
2. Hakim is new to your school, having just arrived from Ethiopia where he has lived since he was born. He is worried that he will have trouble being accepted here as people may not understand his facial expressions and may misinterpret them. Based on your understanding of culture and emotional expression, address Hakim's concern.
3. As a photographer, you are interested in having your subjects look as real and authentic as possible. When your models put on a smile for the camera you notice that it seems artificial and staged. You suggest they use a Duchenne smile for better pictures. The models don't take psychology and do not understand the reference. Explain to the models what you mean by the term and how it differs from the smile they are currently making for you.
4. Your best friend is upset with you over this text you sent last night.

Ur speech 2day made me LOL

You intended the text to be funny, but your friend interpreted it seriously, thinking you were laughing at her. Demonstrating your understanding of nonverbal communication, explain to her why she misinterpreted your text. Then, indicate how you could modify your text to make sure your friend knew you were joking.

Module 43

Stress and Health

Before You Read

Module Summary

Module 43 identifies events that provoke stress responses and describes how we respond and adapt to stress. This module makes the distinction between a stressor, a stress reaction, and stress. Hans Selye's general adaptation syndrome is explained in the context of possible responses to stress.

Before beginning the module, take a moment to read each of the following terms and name you will encounter. You may wish to make vocabulary cards for each.

Key Terms

stress

general adaptation syndrome (GAS)

tend-and-befriend response

Key Name

Hans Selye

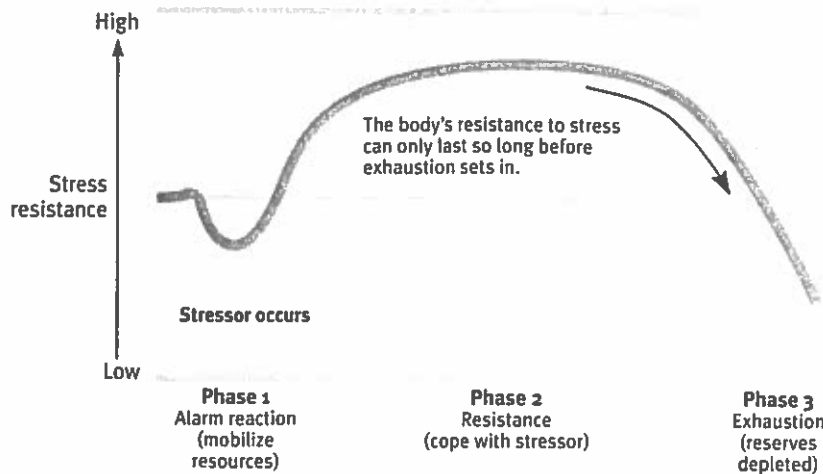
While You Read

Answer the following questions/prompts.

43-1

1. Use an example from your own life to explain the difference between a stressor, a stress reaction, and stress.
2. Explain how stressors can have positive effects. What stressors in your life have positive effects?

3. Discuss the negative effects of stress. What negative effects of stress have you experienced?
4. List and give an example from your life of the three types of stressors. Provide a hypothetical example if you have not experienced one of the types.
- a.
 - b.
 - c.
5. Use the diagram below to explain the three phases of the general adaptation syndrome (GAS). Create a hypothetical example to illustrate each of the three phases.



6. Discuss common reactions to extended stress.

7. Explain the tend-and-befriend response to stress.

After You Read

Module 43 Review

Answer the following question to see if you have mastered the basics.

Ethan, a junior in high school, is the captain of the hockey team and attends practice every afternoon for three hours and tournament games out of town most weekends. He is being scouted by colleges in the area and hopes to be offered an athletic scholarship to play hockey, since his family does not have enough money to send him to college. In addition, he is taking three Advanced Placement® classes and two honors classes at school in the hopes of getting an academic scholarship to help pay his college tuition. Juggling all these demands has cost Ethan a lot of sleep. He has a lot riding on his grades and athletic performance this year; however, the sustained pressure of keeping up with the athletic and academic requirements is overwhelming him. He got a D- on his last test and his coach yelled at him for not running as fast during conditioning. He has begun to develop a cold and is feeling grouchy and uptight.

Identify the stressor, stress reaction, and stress in this scenario, then apply Hans Selye's work with the general adaptation syndrome to Ethan's case. Discuss the changes that might occur as Ethan moves through the three phases of the GAS.

Module 44

Stress and Illness

Before You Read

Module Summary

Module 44 explains the link between stress and illness. It discusses the relationship between cancer, AIDS, and depression with stress and highlights the personality types of people who are more prone to coronary illness.

Before beginning the module, take a moment to read each of the following terms you will encounter. You may wish to make vocabulary cards for each.

Key Terms

psychophysiological illness
psychoneuroimmunology
lymphocytes

coronary heart disease
Type A personality
Type B personality

While You Read

Answer the following questions/prompts.

44-1

1. Explain why the newly adopted term *psychophysiological illness* is a better description of the effects of stress-related illness than *psychosomatic*.

2. Complete the chart below.

Immune Cell	Action Against Invaders
B Lymphocytes	
T Lymphocytes	
Macrophage	
Natural Killer Cells	

b. Type B:

3. Discuss how depression is linked to stress and heart disease.

After You Read

Module 44 Review

Select the best answer to see if you have mastered the basics.

1. Coralee has just been diagnosed with cancer. Which of the following pairs of cells are at work in her immune system trying to fight off the cancerous cells?
 - a. B and T lymphocytes
 - b. B lymphocytes and macrophages
 - c. T lymphocytes and natural killer cells
 - d. macrophages and B lymphocytes
 - e. natural killer cells and macrophages
2. Boone is a highly stressed adult working in the high-paced field of advertising. He works long hours, often all seven days of the week, and consistently has a deadline to meet. According to stress researchers, it is likely that Boone will
 - a. develop a Type B personality.
 - b. catch colds more often than nonstressed people.
 - c. heal faster from wounds.
 - d. contract HIV.
 - e. develop cancer.
3. Which of the following statements is true regarding AIDS?
 - a. Once acquired, stress does not impact the progression of the disease.
 - b. AIDS kills quite rapidly.
 - c. AIDS is most prevalent in males in Western Europe and women in Africa.
 - d. Stress gives people AIDS.
 - e. AIDS is contracted first, followed by HIV.
4. Which of the following statements is false regarding cancer?
 - a. NK cells search out and destroy cancer cells.
 - b. Stress creates cancer cells.
 - c. Stress can impact a person's ability to fight off cancer.
 - d. Some people are at increased risk for cancer a year after experiencing depression.
 - e. Some people are more at risk for colon cancer when under workplace stress.

5. Pamela is a partner in a law firm and is known to be a competitive and verbally aggressive co-worker. She is easily angered and impatient and expects all of her employees to report exactly on time, work precisely the required number of hours, and put in overtime work on demand. According to studies on stress and heart disease, how might Pamela be typified and what health issues might she encounter?
- It is more likely that she will have a heart attack being a Type B personality.
 - Pamela is less likely to have a heart attack since she is a Type B personality.
 - She is a Type A personality and less likely to have a heart attack.
 - Pamela is a Type A personality and more likely to have a heart attack.
 - Pamela has a higher risk of heart failure but does not fit in either Type A or B category.

✓ Check Yourself

Now that you have mastered the basics, work through the problem below to see if you can *synthesize*, *evaluate*, and *analyze* what you have learned.

Caitlin is shipwrecked and abandoned on the eastern side of a deserted island. The island is rich with varied food sources and materials to make a shelter. Caitlin has seen many strange animals on this island and is often unsure of her safety. She has been focused solely on survival and has been alone for over a month, but is now planning to hike to the western side of the island over the next few days to see if there are any other people on the island.

Describe how each of the following will impact her ability to survive on this island:

- Drive-reduction theory

- Glucose

- Affiliation needs

Can I describe classic research findings of specific motivations?

- Hunger
- Sex
- Affiliation and aggression

Can I discuss theories of stress and the effects of stress on psychological and physical well-being?

- General adaptation syndrome (GAS) theory

Can I compare and contrast the major theories of emotion?

- James-Lange
- Cannon-Bard Thalamic
- Singer and Schachter two-factor

Can I explain how culture shapes emotion and discuss the impact body language has on emotion?

Can I describe the research and findings of:

- William James
- Abraham Maslow
- Stanley Schachter
- Hans Selye