

# 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

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**38** Hunger Motivation

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**39** Sexual Motivation

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**40** Affiliation and Achievement

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**41** Theories and Physiology of Emotion

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**42** Expressing Emotion

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**43** Stress and Illness

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**44** Health and Happiness

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### 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 night out with your friends, 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, instinct and the difference between physiological and psychological needs are each 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	homeostasis
instinct	incentive
physiological need	Yerkes-Dodson law
Drive-reduction theory	hierarchy of needs

#### Key Name

Abraham Maslow

### While You Read

Answer the following questions/prompts.

**37-1**

1. How do psychologists define motivation? Using this definition, identify a specific area in your life for which you experience high levels of motivation.
2. Explain how the following theories address the influence of both Nature and Nurture in motivating human behavior: Instinct theory, Drive-reduction theory, Abraham Maslow's hierarchy of needs and incentive theory.

3. Complete the chart below, this will allow you to compare Motivational theories side by side to see how they are similar and how they are different from one another.

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

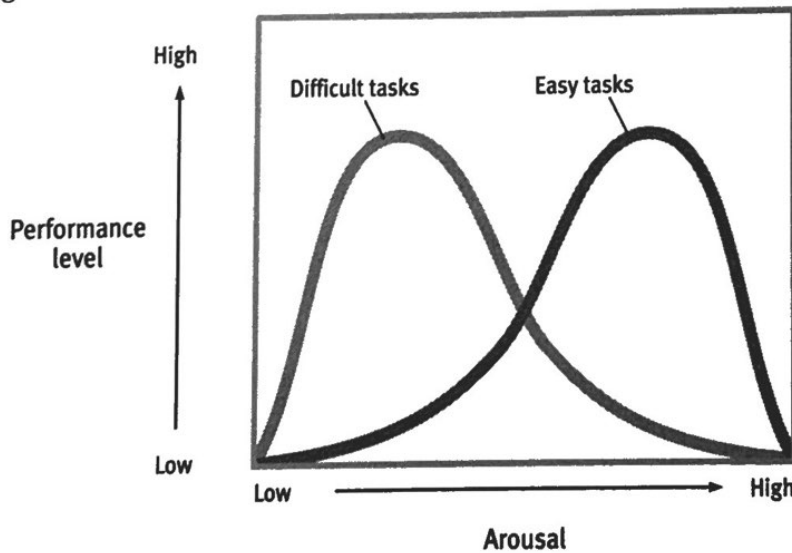
4. Briefly summarize the strengths and weaknesses of each theory as described by Table 37.1.

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? Describe an activity you do on a regular basis that allows you 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 theories of motivation 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 all 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. 2-year old Caroline does not enjoy eating carrots. Her mother tells her that if she eats all of her carrots she can go to the park later and Caroline eats every carrot. What motivational explanation best supports her behavior?
  - a. Maslow's hierarchy
  - b. Drive-reduction theory
  - c. arousal theory
  - d. incentive theory
  - e. instinct theory
  
6. 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  
obesity

### While You Read

Answer the following questions/prompts.

**38-1**

1. Explain how Cannon and Washburn's work established the relationship between stomach contractions and hunger that pushes or drives hunger.
2. Describe the role of glucose in triggering hunger.

3. Explain the effects on hunger and eating behavior when the appetite suppression areas of the hypothalamus are stimulated or destroyed.

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?

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? How have researchers tested this idea?
2. Discuss the cultural influence on eating behaviors.
3. Explain how geography and the environment in which people live can impact food choice and taste.
4. How can culture impact our preferences for certain foods?
5. 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?

## After You Read

## Module 38 Review

Answer the following questions to see if you have mastered the concepts related to hunger motivation.

1. Amina is experiencing hunger pangs and stomach contractions as the lunch break nears. Fill in the chart below to indicate which of the hormones in Amina's body are being secreted. Also include a brief description of where each hormone is produced in the body.

Hormone	Being Secreted	
	Yes	No
Ghrelin		
Orexin		
Leptin		
PYY		

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

- As blood glucose \_\_\_\_\_, hunger increases.
- As body weight rises, hunger \_\_\_\_\_ and energy expenditure \_\_\_\_\_.
- As food intake decreases, basal metabolic rate \_\_\_\_\_ and energy expenditure \_\_\_\_\_.
- 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  
asexual

estrogens  
testosterone

#### Key Names

Alfred Kinsey  
William Masters  
Virginia Johnson

### While You Read

Answer the following questions/prompts.

**39-1**

1. Discuss the impact of estrogens and testosterone on sexual motivation.
2. How do levels of hormones differ in men versus women?

3. How do hormones levels change over the course of the lifespan?

**39-2**

1. Briefly summarize the work of Masters and Johnson regarding sexual behavior.

2. Complete the chart below regarding the sexual response cycle described by Masters and Johnson.

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

**39-3**

1. Discuss the biopsychosocial factors impacting sexual motivation.
2. Explain how external and imagined stimuli impact sexual motivation. How can these materials have a detrimental effect on sexual behavior?
3. How does commitment in a relationship translate to the reported sexual satisfaction?

## After You Read

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### 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. Testosterone is known to play a role in which of the following ways?
  - a. High levels are related to the menstrual cycle in women.
  - b. High levels are demonstrated to lead to higher interest in sexual activities
  - c. Low levels lead to more aggressive behaviors in males and females..
  - d. High levels increase bonding and trust in others.
  - e. Low levels have been associated with depression.

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 peak 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. exposure to these materials increase one's satisfaction in their own sex life.
  - b. repeated exposure may be related to increased acts of sexual aggression.
  - c. women report twice as much arousal to the materials as men.
  - d. women experience no arousal while men experience high arousal.
  - e. both men and women who view explicit materials report less satisfaction from these materials than from long-term committed relationships.

# Module 40

## Social Motivation: Affiliation and Achievement

### 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. Finally, the module ends with a description of achievement motivation and the drive to master specific skills.

#### Key Terms

affiliation need	achievement motivation
ostracism	grit
narcissism	

### 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. Using the research presented in the module, summarize the benefits of belonging. Suggest an additional benefit of your own.





d. Person-to-person communication is no longer a predictor of life satisfaction.

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

2. How can the recommendations provided in the text regarding maintaining balance and focus with social media help in your day-to-day life?

**40-3**

1. Define achievement motivation and give an example from your own life of when you have experienced this type of motivation.

2. How did research with extremely gifted students find that achievement and success were impacted by motivation?

3. How does Angela Duckworth argue that grit plays a role in one's success?
  
4. Set one specific goal for yourself that you would like to accomplish in the next 6 months.

## After You Read

### Module 40 Review

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

1. **Part I:** 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 have social media sites and other means of communicating via technology. 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

**Part II:** Once you have completed the list, write a paragraph addressing your decision as a parent to buy the phone or not and explain the rationale behind your decision.

Pro	Con

# Module 41

## Theories and Physiology of Emotion

### Before You Read

#### Module Summary

Module 41 describes how physical 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 an evaluation of polygraph testing.

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  
Walter Cannon  
Robert Zajonc  
Joseph LeDoux  
Richard Lazarus

### While You Read

Answer the following questions/prompts.

41-1

Use these three words to answer questions 1 and 2.

Stimulus, emotion, physiological arousal, bodily response.

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

3. Think of an example of a situation in your own life that has produced 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. Using your knowledge of ethics in research, what ethical concerns might you have as a member of an Internal Review Board (ORB) who was determining if the Schachter-Singer study met all of the ethical guidelines set out by the American Psychological Association?

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

6. Evaluate which theory of emotion you believe is most accurate and explain your perspective.

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?



## 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 she remembered that she was in a dangerous neighborhood, so 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 after thinking about the situation that 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 simultaneously.
- \_\_\_\_\_ 5. Angelo noticed that his heart was racing and began to experience 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

## Expressing 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 and behavioral feedback effects.

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  
behavioral feedback effect  
health psychology

#### Key People

Paul Ekman

### 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. Explain how a Duchenne smile differs from a feigned smile.
  
  
  
  
  
  
  
  
  
  
3. Why is it often difficult to tell when someone is being dishonest?
  
  
  
  
  
  
  
  
  
  
4. How do introverts and extroverts differ in their ability to both observe and display emotions?

42-2

1. Briefly summarize how the research findings suggest men and women recognize and experience emotion differently from one another.
  
  
  
  
  
  
  
  
  
  
2. Explain how different nonverbal cues convey emotion across cultures. Provide a specific example for each and address how each can be interpreted correctly or incorrectly based on one's culture.
  - a. gestures:
  
  
  
  
  
  
  
  
  
  
  - b. facial expressions:
  
  
  
  
  
  
  
  
  
  
3. Why are smiles and expressed emotions social as well as emotional?

4. While researchers have found emotions that seem to be shared by people regardless of their culture or experience in the world, they have found some differences between emotion and culture. Briefly explain.

**42-3**

1. Define and give an example of the facial feedback effect.
2. Briefly explain the behavior feedback phenomenon. Explain why this is counterintuitive.
3. How do Botox injections alleviate depression for some individuals and how does this relate to the facial feedback hypothesis?
4. How does the behavioral feedback effect build off of the findings in the facial feedback effect?

## After You Read

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### 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 Illness

### 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. In addition, this module addresses the physiological components of stress and how stress, cognition and personality relate to disease.

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	coronary heart disease
general adaptation syndrome (GAS)	catharsis
tend-and-befriend response	type A personality
health psychology	type B personality
psychoneuroimmunology	

#### 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 common reactions to extended stress.

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

### 43-3

1. Provide a brief description of health psychology and psychoneuroimmunology.

2. Complete the chart below.

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

3. Discuss the link between stress and illness in general.



4. Explain how both an overactive and underactive immune system may lead to illness.

5. Explain the relationship between stress and cancer.

43-4

1. Coronary heart disease is the leading cause of death in the United States, describe the factors that put someone at higher risk for developing this disease.

2. What hormone is typically associated with stress?

3. Explain the personality characteristics and impact on health of someone who is

a. Type A:

b. Type B:

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

5. How do pessimists and optimists differ in their likelihood to live a long life?
  
6. Briefly explain catharsis and the research related to this concept.
  
7. The text recommends three methods that may be more successful than catharsis for alleviating anger, identify these recommendations and add one of your own.

## After You Read

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### Module 43 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. be more susceptible to colds and other illnesses.
  - c. heal faster from wounds.
  - d. fight off illnesses because of their fast-paced lives.
  - e. remain in the Alarm phase of Hansel Seyle's General Adaptation Syndrome.
  
3. How does catharsis propose to help individuals overcome anger?
  - a. Forgiving whomever you are angry with.
  - b. Meditate as a way to reduce levels of stress and anger.
  - c. Punch a pillow as a way to release one's anger.
  - d. Change one's personality from a type A to a type B.
  - e. Make an effort to avoid situations that will cause one to become angry.

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 limit 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?
  - a. It is more likely that she will have a heart attack being a Type B personality.
  - b. Pamela is less likely to have a heart attack since she is a Type B personality.
  - c. She is a Type A personality and less likely to have a heart attack.
  - d. Pamela is a Type A personality and more likely to have a heart attack.
  - e. Pamela has a higher risk of heart failure but does not fit in either Type A or B category.

## Notes

# Module 44

## Health and Happiness

### Before You Read

#### Module Summary

Module 44 discusses health and happiness. The module begins with an explanation of how social support, exercise and meditation relate to stress and well-being. The module goes on to explain the role of faith and other factors that impact levels of happiness and concludes with a discussion of predictors of happiness.

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

aerobic exercise  
mindfulness meditation  
feel-good, do-good phenomenon  
positive psychology

subjective well-being  
adaptation-level phenomenon  
relative deprivation

#### Key People

Martin Seligman

### While You Read

Answer the following questions/prompts.

44-1

1. Explain how the increased well-being of optimists can be at least in part explained by their outlook at life.
2. Provide evidence from the text that optimism may be in part determined by one's biology.
3. How have social supports been found to relate to well-being?





6. How does the adaptation-level phenomenon help explain why those who have more money are not necessarily happier despite people thinking that it will make them happier?
7. How can relative deprivation decrease levels of happiness?

44-6

1. What are some of the characteristics of happy people?
2. How do nature and nurture interact to determine our levels of reported happiness?
3. Based on evidence-based recommendations in the text for a happier life, what could you change in your own life to increase levels of happiness?

## After You Read

### Module 44 Review

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

- Betty is riding a roller coaster for the first time in her life, she feels her heart racing and realizes that she is afraid at the same time. Which theory of emotion best explains this example?
  - Schachter-Singer
  - Type B personality
  - James Lange
  - drive-reduction theory
  - Cannon-Bard
- 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?
  - B and T lymphocytes.
  - B lymphocytes and macrophages.
  - T lymphocytes and natural killer cells.
  - macrophages and B lymphocytes.
  - natural killer cells and macrophages.
- 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
  - develop a Type B personality.
  - catch colds more often than nonstressed people.
  - heal faster from wounds.
  - experience less risk for developing HIV.
  - experience the same risk for developing cancer as others.
- Which of the following is not related to biological factors that decrease levels of hunger?
  - Ghrelin.
  - PPY.
  - ventromedial hypothalamus.
  - leptin.
  - insulin.
- 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.
- Erica is in her 4th period class just before lunch, she finds that she cannot concentrate because she has not eaten since before her swim practice 7 hours ago. Which of the following theories of motivation best explains that Erica will not be able to focus on her studies until she satisfies her hunger?
  - instinct theory.
  - incentive theory.
  - drive-reduction theory.
  - arousal theory.
  - James-Lange theory.



7. Jonathan wants to create a lifestyle that will bring him happiness and longevity, which of the following would be LEAST likely to help Jonathan in this regard?
- He can get more exercise.
  - He can sacrifice sleep to excel in school.
  - He can find supportive social networks.
  - He can begin a gratitude journal.
  - He can help others in need.

### ✓ 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.

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.

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.

GAS:

Phase 1: alarm reaction—

Phase 2: resistance—

Phase 3: exhaustion—

**✓ 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
- Schachter and Singer two-factor theory
- Universal emotions
- Stress impact on the immune system



## Before You Move On

Use the checklist below to verify your understanding of the unit's main points.

Do I understand basic motivational concepts (for example, instincts, incentives, intrinsic versus extrinsic motivation, and so on), and do I know how to apply the concepts?

Can I describe the biological theories of motivation and use the correct terms in my descriptions (for example, needs, drives, homeostasis)?

Can I describe the basic components and compare and contrast the strengths and weaknesses of the different motivational theories?

Drive-reduction theory

Arousal theory

Maslow's hierarchy of 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 and gender shapes emotion?

Can I describe the research and findings of:

William James

Abraham Maslow

Stanley Schachter

Hans Selye

Can I understand the factors that lead to increased risk for stress related disease and the factors that lead to increased well-being and happiness?