

Chapter 10

Motivation and Emotion

Outline

I. Instincts

- A. **Motivation** is the process that arouses, directs, and maintains behavior.
- B. In the past, behaviors often were explained in terms of an **instinct**—an unlearned, complex pattern of behavior that occurs in the presence of certain stimuli.
- C. William McDougall believed that humans were motivated by 18 instincts.
 - 1. As more behaviors needed explaining, the list of instincts grew.
 - 2. Truth is, instincts may “name,” but they don’t explain.
 - 3. Still, the approach reminds us that we may engage in some behaviors for reasons that are basically biological, physiological, and inherited.

II. Needs and Drives

- A. In Clark Hull’s system, a **need** is a lack or shortage of some biological essential required for survival and resulting from deprivation.
 - 1. Needs give rise to drives.
 - 2. A **drive** is a state of tension, arousal, or activation resulting from an unlearned need that arouses and directs an organism’s behavior.
 - a. Primary drives are based on unlearned, physiological needs.
 - b. A **secondary drive** is a state of tension resulting from a learned or acquired need that motivates an organism’s behavior.
- B. Maslow’s hierarchy of needs is a stage theory with the following levels:
 - 1. Physiological
 - 2. Safety and security
 - 3. Love and belongingness
 - 4. Esteem
 - 5. Self-actualization.
 - 6. Although logical and appealing, Maslow’s system seems only to fit Western cultures and has actually received little research support.

III. Incentives

- A. **Incentives** are stimuli an organism may be motivated to approach or avoid.
- B. Whereas drives are said to “push” behaviors, incentives “pull” behaviors from without
- C. Many of the principles are similar to those of operant conditioning.

IV. Balance or Equilibrium

- A. There are several theories that involve the concepts of balance or equilibrium.
- B. Walter Cannon’s theory of **homeostasis** claimed that internal physiological conditions seek a balanced “set point.”
- C. **Arousal** theories suggest that for every task there is an optimal and balanced level of activation required to complete the task well.
- D. Leon Festinger’s theory of **cognitive dissonance** argues that we are motivated to maintain a state of balance or equilibrium among cognitions.

V. Temperature Regulation

- A. We are driven to regulate our body temperature.
- B. When body temperature changes from normal, the first reaction is physiological.
 - 1. The attempt is to return to set point by a process mediated by the hypothalamus.
 - 2. The **hypothalamus** is a small structure near the limbic system in the center of the brain, associated with temperature regulation, feeding, drinking, and sex.
- C. If automatic processes are insufficient, we are driven to engage in behavior to change body temperature.

VI. The Thirst Drive and Drinking Behaviors

- A. There are several cues to thirst.
 - 1. *Intracellular* fluid loss is monitored by the hypothalamus.
 - 2. A complex chain of events involving the kidneys monitors *extracellular* loss.
- B. Sensory qualities can give rise to external cues to thirst.

VII. The Hunger Drive and Eating Behaviors

- A. There are several internal cues to “feeling hungry.”
 - 1. The hypothalamus has both an eat (the lateral hypothalamus) and no-eat (ventromedial hypothalamus) center.
 - 2. We may be sensitive to levels of blood sugar or glucose.
 - 3. The liver may be sensitive to levels of fat supply.
 - 4. There may be an overall drive to maintain a set point body weight.
 - 5. Genetic factors clearly are involved in weight gain and obesity.
 - 6. An ob gene controls the amount of a hormone named leptin in the bloodstream which tells the brain how much fat is stored in the body
- B. Eating behaviors are influenced by non-physiological, external processes, such as time-of-the-day, the appearance of food, and social pressures from others.
- C. **Obesity** has become of epidemic proportions in the United States.
 - 1. Technically, obesity is defined in terms of a body mass index of 30 or greater.
 - 2. Nearly one-third of American adults are obese.
 - 3. Obesity seems to have a clear genetic basis.
 - 4. There seems to be no quick and easy treatment for obesity.
 - a. The body protects better against weight loss than weight gain.
 - b. Fully 95 percent of those on a weight-loss program will be back at their original weight within five years.
 - c. The only useful plan seems to be a gradual shift in lifestyle: eat a bit less; exercise a bit more.
- D. Eating disorders afflict approximately 8 million Americans, 90 percent of whom are women..
 - 1. **Anorexia nervosa** is characterized by an inability (or refusal) to maintain one’s body weight through self-starvation and/or increased activity.
 - 2. **Bulimia** is characterized by episodes of binge eating followed by purging.
 - a. Females most often experience eating disorders.
 - b. There are no known causes of eating disorders, but social/cultural pressures and physiological predispositions are both suspected as being important.
 - c. Prognosis for anorexia is poor with high degrees of relapse, but the outlook for bulimia is better.

VIII. Sexual Motivation and Human Sexual Behaviors

- A. Sex can be an important motivator for humans and non-humans alike.
 - 1. On a physiological level, the sex drive is unique.
 - a. The survival of the individual does not depend upon its completion.
 - b. It depletes rather than replenishes bodily energy.
 - c. It requires maturation before it is apparent.
 - d. Whereas in “lower species” internal physiological states are of prime importance, they are less so for higher species such as humans.

2. For humans in particular, hormones are neither necessary nor sufficient to account for sexual behaviors.
- B. Men and women differ in but a few, but in important ways with regard to sexuality.
1. Men demonstrate more interest in sex, fantasize about it more and have a decidedly more greater interest in engaging in sex than do women.
 2. Whereas women seek commitment in sexual relationships, men tend to seek sex first, relationships later.
 3. Men are significantly more likely to be the sexual aggressor and initiate sexual contact.

IX. SPOTLIGHT: Sexual Orientation

- A. **Homosexuality** is a sexual orientation involving sexual attraction and arousal to members of the same sex.
1. **Heterosexuality** is a sexual orientation involving sexual attraction to and arousal by members of the opposite sex.
 2. The terms **gay**, which is most often used to refer to males with a same-sex orientation, and **lesbian**, the term for women with a same-sex orientation, are preferred terms of reference.
 3. Homosexuality and heterosexuality are not mutually exclusive categories.
- B. In terms of sexual responsiveness, there is little difference between persons of homosexual and heterosexual orientations.
1. Homosexual orientation is related to an interaction among genetic, hormonal and environmental factors.
 2. There are no differences in sex hormone levels in adult homosexuals and adult heterosexuals.
 3. There are small but significant differences in the structure of the hypothalamus between gay and heterosexual men.

X. Psychologically Based Motives

- A. The **need to achieve (nAch)** is the acquired need to meet or exceed some standard of excellence in one's behavior.
1. The **Thematic Apperception Test**, a projective personality test requiring a subject to tell a series of short stories about a set of ambiguous pictures, measures the nAch.
 2. People with high nAch seek tasks in which success is not guaranteed but in which there is a reasonable chance of success.
 3. The need to achieve probably is learned, usually in childhood.
- B. The **need for power** involves the need to be in control, to be in charge of the situation and others.
1. The need for power in itself is neither good nor bad.
 2. There are no reliable differences between men and women in measured needs for power.
- C. The **need for affiliation** is a need to be with others, to work with others toward some end, and to form friendships and associations.
- D. The **need for intimacy** is a need to form and maintain close, affectionate relationships with others.
1. Intimacy involves self-disclosure.
 2. Women are more likely than men to show high intimacy needs.
- E. Loneliness is a psychological state arising when our actual social relationships are discrepant from the relationships we would like to have.

XI. Defining and Classifying Emotions

- A. There are four components of an emotional reaction.
1. One experiences a subjective feeling of affect.
 2. One has a cognitive reaction, i.e., "knows what happened."
 3. There is an internal physiological reaction.
 4. Finally, there is an overt behavioral reaction.

- B. Emotions are motivators in that they arouse behaviors.
- C. Classifying the “subjective feeling” component of emotion has been very difficult.
 - 1. Wilhelm Wundt proposed three, intersecting dimensions.
 - 2. Carroll Izard proposed nine primary emotions.
 - 3. Robert Plutchik argued for eight basic emotions, each related to survival and adaptation.
 - 4. Richard Lazarus defined basic emotion in terms of being motivated to approach or avoid.
- D. The only issue on which there is any consensus is that emotions represent a valenced state, meaning that they could be classified as positive or negative.

XII. Physiological Aspects of Emotion

- A. Emotionality involves the autonomic nervous system (ANS).
 - 1. The parasympathetic division of the ANS is actively involved in maintaining a relaxed, calm, unemotional state.
 - 2. When one is emotional, his or her **sympathetic division of the ANS** takes over, producing several reactions.
 - a. The pupils of the eye dilate.
 - b. Heart rate and blood pressure are elevated.
 - c. Blood is diverted away from the digestive tract toward the limbs and brain.
 - d. Respiration increases.
 - e. Moisture is brought to the surface of the skin in the form of perspiration.
 - f. Blood sugar levels increase.
 - g. Blood will clot more readily than usual.
- B. The two brain structures most involved in emotionality are the limbic system and the hypothalamus.
- C. The role of the cerebral cortex in emotionality seems to be largely inhibitory and cognitive.

XIII. Theories of Emotion

- A. Theories of emotion are systematic attempts to explain how we become emotional and how the various components of an emotion interact.
- B. Common sense tells us that we encounter a stimulus, become emotional, and then react.
- C. The James-Lange Theory claims reality is reversed: We encounter a stimulus, react to it, and then (noting our reaction) experience an emotion.
- D. The Cannon-Bard Theory claims that encountering an emotion-producing stimulus produces an appropriate response and the experience of an emotion simultaneously.
- E. In their theory, Schachter and Singer add a cognitive component, claiming that a stimulus simultaneously produces a visceral reaction and a cognitive appraisal of the situation and these two combined produce the experience of emotion.
- F. Contemporary theories of emotion (for example, the *cognitive appraisal theory*) tend to be cognitive in flavor.

XIV. Outward Expressions of Emotion

- A. Charles Darwin was one of the first to understand that facial expressions provide indicators of an organism’s emotional state.
- B. Whereas non-human animals have many instinctive patterns of behavior to communicate emotional state, humans have language.
- C. Much research by Paul Ekman has demonstrated a reliable relationship between emotional states and facial expressions across cultures.
- D. Emotions can have several behavioral manifestations.
 - 1. **Aggression** is a behavior intended to inflict harm on another organism or a symbol of that organism.
 - 2. The **frustration-aggression hypothesis** argues that aggression is always a consequence of frustration.
 - a. We now know that this hypothesis is too simplistic.
 - b. When frustration is accompanied by anger, aggression is more likely.

3. What factors lead to the arousal of anger?
 - a. How we judge the intent of a person who frustrates us
 - b. The perception that we have been treated unjustly
 - c. A need to restore justice and equity
 - d. Feelings of powerlessness
4. Aggressive drivers tend to be young, poorly educated males with a history of violence and drug or alcohol problems.

Practice Test Questions

Multiple Choice

- Which of these is LEAST involved in motivational states?
 a. the arousal of behavior c. the directing of behavior
 b. the memory of behavior d. the maintenance of behavior
- Of these, which psychological process is LEAST affected by one's motivations?
 a. memory c. perception
 b. learning d. sensation
- What is the major problem with using the concept of instinct to explain human behavior?
 a. There are too many human instincts to keep track of.
 b. There are too few human behaviors that have a biological basis.
 c. Referring to instincts may describe behaviors, but it doesn't explain them.
 d. Too many human instincts have opposites, such as needs to socialize and needs to be alone.
- In Hull's theory (as an example) what gives rise to a drive?
 a. a need c. a behavior
 b. a motive d. a goal or incentive
- Approaches to motivation that focus on stimuli outside the organism are approaches that focus on
 a. incentives. c. arousal.
 b. drives. d. homeostasis.
- Which of these terms is most like Cannon's concept of homeostasis?
 a. drive c. fulfillment
 b. sensation-seeking d. balance
- Which brain structure is MOST involved in temperature regulation?
 a. the hypothalamus c. the brain stem
 b. the limbic system d. the corpus callosum
- Most of the water in our bodies is contained
 a. in our bloodstream.
 b. within the cells of our bodies.
 c. in sweat glands.
 d. in spaces between the cells in our bodies.
- Which is likely to be LEAST involved in motivating us to eat or not eat?
 a. the physical appearance of food c. how empty our stomachs are
 b. our hypothalamus d. reactions of our liver
- Which of these statements is TRUE about bulimia, but FALSE about anorexia nervosa?
 a. It is an eating disorder found mostly in young women.
 b. It involves a preoccupation with one's weight and body size.
 c. With proper treatment, the prognosis for a full recovery is good.
 d. In virtually all cases, at least some hospitalization will be required.

11. In what way is the sex drive in humans most different from the sex drive in rats?
- a. It does not appear until after puberty.
 - b. Its satisfaction does not determine the survival of the individual.
 - c. It is strongly affected by learning and experience.
 - d. Its physiological basis is largely hormonal.
12. With regard to homosexuality, which observation is most TRUE?
- a. Sexual preference is a matter of choice freely made.
 - b. Gay males have excess levels of female hormones in their systems.
 - c. Homosexuality is a dimension, a matter of degree, not either/or.
 - d. Most homosexuals (male and female) have not tried heterosexual sex.
13. At the moment, which of these can be taken as the most reasonable hypothesis for the development of a homosexual orientation?
- a. genetic differences in X and Y chromosomes
 - b. the lack of a father-figure in single-parent homes
 - c. unsatisfying or frustrating sexual encounters in early adolescence
 - d. hormonal imbalances that occur during prenatal development
14. If given a choice, a person with a high need to achieve (aAch) would probably chose a job in which he or she
- a. could succeed with very little effort.
 - b. would be in a position to control the fate of others.
 - c. would be working with as many people as possible.
 - d. could do well, but only with effort and hard work.
15. Of the following, which question reflects a current debate concerning the nature of emotions?
- a. Do facial expressions express emotions?
 - b. Are cognitions required for an emotional experience?
 - c. Does becoming emotional involve the ANS?
 - d. Do emotions serve any useful adaptive functions?
16. Which change is LEAST likely during an emotional reaction?
- a. Heart rate decreases.
 - b. Digestion stops.
 - c. Blood flow is diverted to the limbs.
 - d. Pupils dilate.
17. According to the characterization presented in the text, which of these is NOT included in our conceptualization of an emotional reaction?
- a. a subjective feeling, or affect
 - b. a cognitive awareness of what is happening
 - c. a judgment of whether the emotion is adaptive
 - d. an overt behavioral reaction
18. How many basic emotions are there?
- a. 4
 - b. 8
 - c. 9
 - d. It depends.
19. Which aspect of the brain is most directly involved in emotion?
- a. the thalamus
 - b. the limbic system
 - c. the brain stem
 - d. the basal ganglia
20. In emotional states, the major role of the cerebral cortex seems to be to
- a. trigger reactions in lower centers, like the limbic system.
 - b. increase heart rate and blood pressure.
 - c. cognitively interpret the situation at hand.
 - d. cause the organism to engage in fight or flight.

21. According to the James-Lange Theory of emotion, after an emotion-arousing stimulus is perceived, the next reaction is

- a. a cognitive appraisal
- b. an appropriate internal response
- c. activation of the thalamus
- d. the experience of the emotion

22. Which expression of emotion is uniquely human?

- a. verbal description
- b. facial expression
- c. body language
- d. posture and gestures

True/False

1. ___ True ___ False The concepts of balance, equilibrium, and set-point refer only to physiological conditions or physiological processes.
2. ___ True ___ False Arousal theory tells us that one's performance on a task will continue to improve as one's level of arousal continues to increase.
3. ___ True ___ False Although our hypothalamus may inform us that we are hungry or thirsty, learning and experience inform us about what to eat or drink.
4. ___ True ___ False The prognosis for anorexia nervosa is significantly better than the prognosis for bulimia.
5. ___ True ___ False Whereas men are motivated by a need to achieve, women are motivated by a fear of failure.
6. ___ True ___ False Emotions that we classify as "negative" seldom have any survival value.
7. ___ True ___ False Most psychologists agree that there are four basic, or primary, emotions.
8. ___ True ___ False The only emotions that appear to be universal are joy and fear.

Key Terms and Concepts

motivation _____

instincts _____

need _____

drive _____

secondary drive _____

incentive _____

homeostasis _____

arousal _____

cognitive dissonance _____

obesity _____

anorexia nervosa _____

bulimia nervosa _____

homosexuality _____

heterosexuality _____

gay _____

lesbian _____

need to achieve (nAch) _____

Thematic Apperception Test (TAT) _____

need for power _____

need for affiliation _____

need for intimacy _____

loneliness _____

emotion _____

valenced state _____

parasympathetic division (of the ANS) _____

sympathetic division (of the ANS) _____

aggression _____

frustration-aggression hypothesis _____

Answers to Practice Test Questions

Multiple Choice

- b** We say that motivation arouses, directs, and maintains behavior. Now memory is surely involved in motivation—it's involved in nearly everything—but it is less central than the other three.
- d** Actually, the more complex, or “higher” a psychological process, the more likely that motivation will be a significant factor. The best choice here is the nearly physiological process of sensation.
- c** There is value to the notion of instinct, of course, but with regard to human behavior, instinct tends more to name and describe than to explain anything.
- a** Don't get rattled just because I dropped a name in here. In virtually anyone's system—including Hull's—needs give rise to drives.
- a** Drives, arousal, and homeostasis all refer to conditions or states within the organism, whereas incentives are thought of as being “out there” in the environment.
- d** By definition, homeostasis is a condition of balance or equilibrium.
- a** This one is fairly obvious. The hypothalamus would be the best guess if you weren't sure—it seems to be involved in almost all physiological drives.
- b** Most of the water in our bodies is stored within the cells.
- c** Clearly it has an impact, but curiously, of these choices, the sense of fullness of the stomach is the least important.
- c** Alternatives **a** and **b** are both true. Alternative **d** is true of anorexia, but not bulimia.
- c** Alternatives **a**, **b**, and **d** are true of the sex drive for both humans and rats. The sex drive and sexual behaviors in rats do not seem to be much affected by learning or experience.
- c** Only the third alternative is true, and beyond that, the others are very false.
- d** The total picture is far from clear. We're quite sure that none of the observations made in the first three alternatives are even relevant, and we are becoming quite convinced that the fourth alternative makes the best statement that we can make right now..
- d** The best alternative here is the last one.
- b** I don't think that any of the others are debatable at all, but there is now quite a discussion centering on the role—or even the necessity—of cognition for emotional experiences.
- a** Heart rate increases, it doesn't decrease—in fact, think of this item in terms of “what would you like to have happen if you were faced with a bear in the woods?”
- c** It is not possible to have an emotional reaction without the processes named in alternatives **a**, **b**, and **d**. If there is ever a judgment made about the adaptive value of an emotion, it would be made later.
- d** This one is sort of silly, isn't it? Different theorists have different ideas, and for now the safest thing that we can say is that it depends—mostly on which theorist you'd like to believe.
- b** As we've seen, all of the parts of the brain tend to work together and all of its aspects are involved in all reactions, but having said that, it is the limbic system that is most involved in emotionality.
- c** The main role of the cerebral cortex is to bring a cognitive, thoughtful analysis to the situation that is being experienced.
- b** Remember, the James-Lange approach is nearly the opposite of common sense, arguing that we respond (internally, perhaps) first, *then* experience an emotion.
- a** This has less to do with emotion than it does with the difference between humans and nonhumans. Only humans can talk (verbalize) about how we feel.

True/False

- F** At one point in history, we might have been able to say that this statement was true, but now we see that these concepts can be applied well beyond physiological functioning.
- F** Well, at first, maybe, but what makes this statement false is that if arousal continues to rise, eventually it will become so high as to be debilitating.
- T** If the truth of this statement is not obvious, you only need think about it for a moment longer.

4. **F** No, in fact, quite the opposite is true.
5. **F** With regard to achievement and failure, there is little evidence that there are any sensible gender differences at all.
6. **F** Actually, some of the “negative” emotions—fear, for example—may have more survival value than some of the “positive” emotions.
7. **F** Here’s this one again. Previously, it was item #4 in multiple-choice form. Psychologists have come to no general agreement on the number of primary emotions—and are wondering if there even is such a thing as a primary, basic, emotion.
8. **F** The text addresses the universality of facial expressions of emotion and suggests that anger, fear, disgust, sadness, and happiness are all expressed in the same way across cultures. This does not mean that there are not even more emotional expressions in common, as yet not confirmed.

EXPERIENCING PSYCHOLOGY

Joy to the World

This is a little exercise that demonstrates just how complex emotions can be—particularly for those who would like to organize or categorize “basic” human emotions.

JOY or **HAPPINESS** is commonly considered to be a basic emotion. There are a great many words in our language that are somehow related to the basic concept of joy or happiness. Here is a list of some of them:

BLISS	AMUSEMENT	CHEERFULNESS
GAIETY	GLEE	JOLLINESS
JOVIALITY	DELIGHT	GLADNESS
ENTHRALLMENT	ENJOYMENT	HAPPINESS
JUBILATION	ELATION	SATISFACTION
ECSTASY	EUPHORIA	ENTHUSIASM
ZEST	EXCITEMENT	THRILL
PLEASURE	CONTENTMENT	TRIUMPH
PRIDE	EXHILARATION	EAGERNESS
OPTIMISM	HOPE	JOY
RAPTURE	MIRTH	LEVITY
RELIEF	GIDDYNESS	

Write each of these (and any others you can think of) on a sheet of paper. Read each of the following statements to others and ask them to indicate which of these words best describes the situation being described. For which item(s) on the list was there the most agreement? Did you notice any sex differences in which terms were chosen?

- 1. Colleen didn't think that she would be accepted at the college she most wanted to attend, but she just received notification that she had been accepted.*
- 2. Tom's uncle told him that he was sending him a check. Tom was expecting a check for about \$100. He has just opened the envelope from his uncle and found a check for \$3000.*
- 3. One of Juanita's professors has just read her paper to the class as an example of a thoughtful and well-written paper.*
- 4. An instructor who usually dresses very conservatively has just walked into class wearing an oversized T-shirt with a picture of Mickey Mouse on the front.*

5. *A male student that Mary admires very much has just asked her if she will meet with him and help him with his math assignment.*
6. *Sam's mother had a brain tumor surgically removed two days ago. Sam has just received word from his father that the tumor was not malignant.*
7. *Jan's best friend has just told her that she and Jack, whom Jan admires and likes a lot, are planning to get married at the end of the term.*
8. *Julio worked hard campaigning for Alice Hawkins for student body president. He has learned that she has been elected with 71 percent of the votes.*
9. *It is Father's Day. The picnic is over, and Ralph is thinking about what great kids he and Evelyn have and how beautiful his six grandchildren are.*
10. *Gail went to visit her friend Margaret. When she arrived, seventeen of her friends were there to give her a surprise birthday party.*
11. *The party that Judy had worked so hard to plan was a great success. The guests have all gone home, and Judy is exhausted. She is thinking about the party as she settles herself into bed.*
12. *Joe's favorite team just won the Super Bowl.*

Using the Internet to Expand Your Appreciation of Psychology

1. WHAT MOTIVATES US? (pp. 348-354)

What motivates us? What arouses, maintains, and directs our behaviors? As we saw in Chapter Ten, the general answer is, “Lots of things,” and we reviewed many of them. Information about the various approaches to motivation and the specific drives and motives covered in the chapter also can be found on the Internet. Here is a sampling.

<http://allpsych.com/psychology101/motivation.html>

(the AllPsych Online websites are not very dramatic, are a bit wordy, but nonetheless provide good summaries of important issues—this can be said for this site on approaches to motivation)

http://changingminds.org/explanations/theories/a_motivation.htm

(the list of approaches to motivation found in Chapter Ten is not an exhaustive one (although we do believe that we have included the most important). Here you will find a description of some that we have sampled and several that we have not. Before clicking to the various theories presented here, click on the link to “ChangingMinds.org” homepage to get a sense of why some theories from Chapter Ten are listed, and why some are not.)

http://faculty.washington.edu/brengelm/neut_zone/indexpg.html

(What a great site! At first it appears to be very wordy, but you will soon discover that each heading in the outline provides a link to additional information. It makes for an excellent summary of set-point and homeostasis.)

2. SPECIFIC DRIVES AND MOTIVES (pp. 355-370)

Here we have another case where common sense suggests it best to address specific drive and motives in one section. Most of the websites to found on the Internet cover hunger—and obesity.

<http://www.purchon.com/biology/osmoregulation.htm>

(a website on thirst and there's a lot of good information here. I suspect that some students may be immediately attracted to the link, "What happens if you drink too much beer?")

<http://www.eufic.org/gb/food/pag/food12/food121.htm>

(a few words and good advice from the European Food Information Center concerning the necessity of maintaining levels of bodily fluids. It is short.)

<http://www.i-sis.org.uk/ObesityEpidemic.php>

(many—if not most—of the Internet websites with "obesity" in their URLs are commercial sites trying to sell you something to either treat obesity or keep you from becoming obese. This non-commercial website from the UK is a product of the "Institute for Science in Society.")

<http://www.obesity.org>

(The American Obesity Association calls itself "The Leading Organization for Advocacy and Education on Obesity." Their homepage also claims that they think that theirs is "the most comprehensive site on obesity and overweight on the Internet." On this claim I am ready to agree. Typical of good websites, the strength of this one is in the extensiveness of their links.)

<http://www.cdc.gov/nccdphp/dnpa/obesity>

(If the American Obesity Association (above) has not answered all of your questions, you can turn here. It is from The Centers for Disease Control and Prevention. There are many links here.)

<http://www.niddk.nih.gov/index.htm>

(the website of the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health. It approaches obesity from a medical perspective—their outline looks like a copy of our issues in Chapter Ten.)

<http://www.nationaleatingdisorders.org>

<http://www.edauk.com>

<http://www.nlm.nih.gov/medlineplus/eatingdisorders.html>

(Each of these three websites on eating disorders can be highly recommended.)

http://health.yahoo.com/health/centers/sexual_health/2390

(not terribly exciting, and focusing on problems with sexuality is this site, called the “Sexual Health Center”)

3. PSYCHOLOGY AND EMOTIONS (pp. 374-383)

Psychologists from the time of Wilhelm Wundt (and non-psychologist thinkers long before him) have been intrigued by emotions. As central as the study of emotion has been in psychology, answers to even basic questions have proven difficult to pin down. Are there basic, fundamental emotions? Are any emotions universal? How are emotions expressed in a social context? There is little doubt that emotions color our lives and give value to our experience. For the sadness of loss there also is the joy of discovery. There are simply not all that many Internet websites devoted to the psychology of emotion in the way we want approach as students of the science of psychology. There are many more “self-help” and commercial sites.

Although your textbook divides the topic of emotion into five sections, from “Defining and Classifying Emotions” to the “Frustration-Aggression Hypothesis,” the Internet has no such organization. Hence, the following websites are presented more or less in order, and covering the entire issue of emotionality.

<http://plato.stanford.edu/entries/emotion>

(the “Stanford Encyclopedia of Philosophy” includes this lengthy, relevant essay on the nature of emotions. It is wordy, but it covers a lot of familiar ground. I suggest starting at the top and working your way down through what is here. Toward the bottom is a link to “Other Internet Resources.” Go there and then to “Links on Emotion”—what comes up is nearly overwhelming.)

<http://emotion.bme.duke.edu/emotion.html>

(the “Emotion Home Page”—perhaps my best find so far. What a grand and glorious “repository of information about emotion research.” You can easily spend hours exploring here, overturning a new gem with nearly every click of your mouse.)

<http://changingminds.org/explanations/emotions/emotions.htm>

(Simple-appearing at first, this website has many very good links. It takes up issues such as “basic emotions,” “purpose of emotions,” and the “seven deadly sins and seven virtues”—all of them emotions at that!)

<http://www.paulekman.com>

(this website is devoted to Paul Ekman and his research on the facial expression of emotions. The homepage is simple and navigating it is easy. A good bit of what you will find here is surprisingly commercial. You probably will find the link “PUBLICATIONS” most satisfying.)

<http://psychclassics.yorku.ca/FrustAgg>

(It is a classic (and we’ve been to this area before).. This lengthy piece is a report on a 1941 symposium on the frustration-aggression hypothesis. There are seven articles here from giants in the field.)