

STUDY GUIDE – Answers

8A: Motivation

Introduction and Motivational Concepts

1. a need or desire that energizes behavior and directs it toward a goal
2. instinct; evolutionary; drive-reduction; arousal; hierarchy; Abraham Maslow
3. instincts; did not; genes
4. need; drives
5. homeostasis
6. incentives
7. increase; do not
8. arousal; optimum levels
9. lower-level
10. physiological; self-actualization; . self-transcendence
11. arbitrary; universally
12. financial; home-life; self-esteem

Hunger

1. semi-starvation
2. stomach contractions
3. did
4. insulin; glucose; increase
5. hypothalamus; lateral hypothalamus; decreases; ventromedial hypothalamus; overeat
6. orexin
7. ghrelin
8. less
9. leptin
10. PYY
11. obestatin
12. set point; less; more
13. basal metabolic; lowering
14. is not accepted; slow, sustained changes in body weight; overeat; gain weight; settling point
15. memory
16. serotonin; calms
17. genetic; conditioning; culture
18. unfamiliar; neophobia
19. social; more; unit bias
20. anorexia nervosa
21. bulimia nervosa; binge-purge; binge-eating
22. obesity; negative; competitive; high-achieving; protective
23. may
24. increases
25. India; Western; body image
26. ashamed; depressed; dissatisfied
27. does not pose; 34; diabetes, high blood pressure, heart disease, gallstones, arthritis, and certain types of cancer
28. famine; affluence; social status

29. abdomens (stomachs); Alzheimer's
30. slow; lazy; sloppy
31. less; married
32. overweight
33. 3500
34. fat cells; genetic predisposition, early childhood eating patterns, adult overeating
35. can; cannot
36. lower; less
37. is; hunger; metabolism

Obese persons have higher set-point weights than nonobese persons. During a diet, metabolic rate drops to defend the set-point weight. The dieter therefore finds it hard to progress beyond an initial weight loss. When the diet is concluded, the lowered metabolic rate continues, so that relatively small amounts of food may prove fattening. Also, some people have lower metabolic rates than others.

38. do; FTO
39. more; social; more; less
40. gain

Begin only if you are motivated and self-disciplined. Minimize exposure to tempting food cues. Eat healthy foods. Don't starve all day and eat one big meal at night; Beware of binge eating. Be realistic and moderate. Boost your metabolism through exercise.

Sexual Motivation

1. Masters; Johnson; excitement; plateau; orgasm; resolution
2. refractory period
3. estrogens; estradiol
4. testosterone; testes; testosterone
5. little; decreases; decline
6. are
7. amygdala; men

Erotic material may increase the viewer's acceptance of the false idea that women enjoy rape, may increase men's willingness to hurt women, may lead people to devalue their partners and relationships, and may diminish people's satisfaction with their own sexual partners.

8. have; frequent, physical, and less romantic; do not
9. culture; time
10. Western Europe; Latin America; Asian; Arab; Asian
11. unprotected; sexually transmitted infections (STIs); lower; lower; higher

Among the factors that contribute to unprotected sex among adolescents are (1) ignorance about the safe and risky times of the menstrual cycle, (2) guilt related to sexual activity, (3) minimal communication about birth control, (4) alcohol use that influences judgment, and (5) mass media norms of unprotected promiscuity.

12. sexually transmitted infection (STI); antibodies Teens with high intelligence test scores, those who are actively religious, those whose father is present, and those who participate in service learning programs more often delay sex. Trends toward commitment show declining teen birth rates and sexual activity.

13. sexual orientation
14. all; the late teens or early twenties
15. 3 or 4; 1 or 2; high
16. suicide
17. does not; women; erotic plasticity
18. are not; does not
19. do not
20. were not
21. poets; fiction writers; artists; musicians
22. more; fraternal birth-order effect; immune; male
23. does
24. hypothalamus; heterosexual; odors; right hemisphere
25. do; mother's; father's
26. hormone; females; two; five
27. fingerprint; left; cochlea
28. temperament; difficult; biology; biology

The Need to Belong

1. Aristotle; social; survival; attachments; reproduce
2. close, satisfying relationships with family, friends, or romantic partners
3. self-esteem
4. social; liking
5. isolated; chain migration
6. Throughout the world; ostracism
7. self-defeating; aptitude tests; aggressive

Progress Test 1

Multiple-Choice Questions

1. d. is the answer. (p. 328)
 - a. & b. Although motivation is often aimed at reducing drives and satisfying biological needs, this is by no means always the case, as achievement motivation illustrates.
 - c. Motivated behavior not only is energized but also is directed at a goal.
2. b. is the answer. A drive is the psychological consequence of a physiological need. (p. 329)
 - a. Needs are unlearned states of deprivation.
 - c. & d. Since needs are physical and drives psychological, their strengths cannot be compared directly.
3. a. is the answer. The curiosity of a child or a scientist is an example of behavior apparently motivated by something other than a physiological need. (p. 329)
 - b. & d. Some behaviors, such as thirst and hunger, are partially explained by drive reduction.
 - c. Drive reduction is directly based on the principle of homeostasis. .
4. c. is the answer. (p. 358) a., b., & d. None of these is linked to homosexuality.
5. a. is the answer. Increases in insulin increase hunger indirectly by lowering blood sugar, or glucose. (p. 333)
6. a. is the answer. This area of the hypothalamus seems to elevate hunger. (p. 333)
 - b. Stimulating the ventromedial hypothalamus has this effect.
 - c. Destroying the ventromedial hypothalamus has this effect.
 - d. The hypothalamus is involved in sexual motivation, but not in this way.
7. b. is the answer. (p. 336)
 - a. Neophobia for taste is typical of all age groups.

- c. Neophobia for taste is not an indicator of an eating disorder.
 - d. With repeated exposure, our appreciation for a new taste typically increases.
8. d. is the answer. (p. 334)
 - a. PYY signals fullness, which is associated with decreased metabolism.
 - b. Ghrelin is a hormone secreted by the empty stomach that sends hunger signals.
 - c. Orexin is a hormone secreted by the hypothalamus.
 9. d. is the answer. (pp. 328-329)
 10. b. is the answer. (p. 349)
 11. c. is the answer. (p. 328)
 - a. & b. Needs and drives are biologically based states that stimulate behaviors but are not themselves behaviors.
 - d. Incentives are the external stimuli that motivate behavior.
 12. c. is the answer. Research studies suggest that women's sexual orientation is potentially more fluid and changeable than men's. (p. 355)
 13. c. is the answer. The deprived men focused on food almost to the exclusion of anything else. (p.332)
 - a. In order to conserve energy, the men's metabolic rate actually decreased.
 - b. & d. Far from losing interest in food, the men came to care only about food—a finding consistent with Maslow's hierarchy, in which physiological needs are at the base.
 14. c. is the answer. (p. 360)
 15. a. is the answer. (p. 337)
 - b., c., & d. All of these are characteristic of anorexia nervosa.
 16. a. is the answer. (p. 350)
 - c. & d. Castration of the testes, which produce testosterone, does not alter estrogen levels.
 17. a. is the answer. (p. 344)
 18. b. is the answer. (pp. 342-343)
 19. d. is the answer. (pp.342-343)

Progress Test 2

Multiple-Choice Questions

1. d. is the answer. Memory of the time of the last meal is an example of a psychological influence on hunger motivation. (p. 335) a., h., & c. Each of these is a biological influence on hunger motivation.
2. a. is the answer. (p. 329)
 - b. This describes extrinsic motivation.
 - c. This describes set point.
 - d. Homeostasis has nothing to do with sexual orientation.
3. b. is the answer. (p. 340)
 - c. If anything, just the opposite is true.
 - d. Men and women do not differ in the tendency to overeat.
4. a. is the answer. The text does not indicate whether their metabolism is higher or lower than most. (pp. 338-339) b., c., & d. Genes, family background, and cultural influence have all been proposed as factors in eating disorders.
5. b. is the answer. (p. 333)
 - a. Stimulation of the lateral hypothalamus triggers eating.
 - c. & d. The thalamus is a sensory relay station; stimulation of it has no effect on eating.
6. b. is the answer. The time between the middle of the second and fifth months after conception may be a critical period for the brain's neurohormonal control system. Exposure to abnormal hormonal conditions at other times has no effect on sexual orientation. (p. 358) .

7. d. is the answer. Researchers have not been able to find any clear differences, psychological or otherwise, between homosexuals and heterosexuals. Thus, the basis for sexual orientation remains unknown, although recent evidence points more to a physiological basis. (pp.357-358)
8. c. is the answer. (p. 338)
9. b. is the answer. (p. 330)
10. c. is the answer. Such behavior, presumably motivated by curiosity rather than any biological need, is inconsistent with a drive-reduction theory of motivation. (p. 329) a., b., & d. Each of these examples is consistent with a drive-reduction theory of motivation.
11. d. is the answer. (pp. 337-338)
12. c. is the answer. (p. 354)
13. d. is the answer. (p. 339,351)
14. d. is the answer. During the resolution phase males experience a refractory period. (p. 349) a., b., & c. The male and female responses are very similar in each of these phases.
15. b. is the answer. (p. 333)
 - a. These effects are the reverse of what takes place.
 - c. If anything, set point is lowered by destruction of the lateral hypothalamus and elevated by destruction of the ventromedial hypothalamus.
 - d. These effects do not occur.
16. d. is the answer. Most researchers today discount the idea that people are obese because they lack willpower. (p. 342)
17. d. is the answer. (p. 330)
18. b. is the answer. (p. 351)
 - a. The anterior cingulate cortex has been found to be implicated in feelings of ostracism.
 - c. & d. The occipital and temporal lobes do not play a major role in motivation.

True-False Items

- | | |
|---------------|----------------|
| 1. F (p. 335) | 6. T (p. 361) |
| 2. F (p. 349) | 7. F (p. 333) |
| 3. F (p. 350) | 8. T (p. 346) |
| 4. F (p. 351) | 9. T (p. 355) |
| 5. F (p. 335) | 10. T (p. 340) |

Psychology Applied

Multiple-Choice Questions

1. b. is the answer. Following the initial weight loss, metabolism drops as the body attempts to defend its set-point weight. This drop in metabolism means that eating an amount that once produced a loss in weight may now actually result in weight gain. (p. 343)
2. a. is the answer. Dieting, including fasting, lowers the body's metabolic rate and reduces the amount of food energy needed to maintain body weight. (p.347)
 - b., c., & d. Each of these strategies would be a good piece of advice to a dieter.
3. c. is the answer. Drive-reduction theory maintains that behavior is motivated when a biological need creates an aroused state, driving the individual to satisfy the need. It is difficult to believe that Mary's hang-gliding is satisfying a biological need. (p. 329)
 - a., b., & d. Mary may enjoy hang-gliding because it is a challenge that "is there" (incentive), because it satisfies a need to do something challenging (arousal), or because it increases her self-esteem and sense of fulfillment in life (Maslow's hierarchy of needs).
4. d. is the answer. According to Maslow's theory, physiological needs, such as the need to satisfy hunger, must be satisfied before a person pursues loftier needs, such as making political statements. (p.330)

- a. Masters was concerned with sexual behavior.
 - b. Murray was concerned with achievement motivation.
 - c. Keys was concerned with hunger.
5. c. is the answer. (p. 337)
 - a. & b. These are more typical of the families of anorexia patients.
 6. b. is the answer. (pp. 352-353)
 7. d. is the answer. (pp. 328-329)
 - a. & b. Instinct theory emphasizes biological factors rather than environmental or cognitive factors.
 - c. Instinct theory applies to both humans and other animals.
 8. c. is the answer. Although people with anorexia are significantly underweight, those with bulimia often are not unusually thin or overweight. (p.337) a., b., & d. Both anorexia and bulimia victims are more likely to be women than men, preoccupied with food... fearful of becoming overweight ... and suffer from depression or low self-esteem.
 9. c. is the answer. This is an example of salivating :in response to an :incentive rather than to maintain a balanced internal state. (p. 329)
 - a. & b. Both examples are behaviors that maintain a balanced internal state (homeostasis).
 10. d. is the answer. Destruction of the ventromedial hypothalamus produces overeating and rapid weight gains. Destruction of the lateral hypothalamus suppresses hunger and produces weight loss. (p. 333)
 - a. & b. The hippocampus and amygdala are not involved in regulating eating behavior.
 11. c. is the answer. Individual differences in metabolism and set point explain why it is possible for two people to have very different weights despite similar patterns of eating and exercise. (p.' 335)
 12. c. IS the answer. Our preferences for sweet and salty tastes are genetic and universal. (p. 335)
 13. b. is the answer. (p. 356)
 14. c. is the answer. (p. 360)
 15. b. is the answer. Adolescent females with low self-esteem and high-achieving families seem especially prone to eating disorders such as anorexia nervosa. (pp. 337-338)
 - a. & d. Eating disorders occur much more frequently in women than in men.
 - c. Eating disorders usually develop during adolescence, rather than during adulthood.
 16. b. is the answer. The body acts to defend its set point, or the weight to which it is predisposed. If Lucille was already near her set point, weight loss would prove difficult. (p. 343)
 - a. If the weight level to which her body is predisposed is low, weight loss upon dieting should not be difficult.
 - c. The eating disorders relate to eating behaviors and psychological factors and would not explain a difficulty with weight loss.
 - d. People influenced by external factors might have greater problems losing weight because they tend to respond to food stimuli, but this can't be the explanation in Lucille's case because she has been sticking to her diet.
 17. c. is the answer. Serotonin is a neurotransmitter that is elevated by the consumption of carbohydrates and has a calming effect. (p. 335)
 - a. & b. These answers do not explau1 the feelings of relaxation that Randy associates with eating junk food.
 - d. The consumption of sugar tends to elevate insulin level rather than lower it.
 18. c. is the answer. (p. 354) a., b., & d. Teens with high rather than average intelligence (therefore, not a.), and those who are religiously active (therefore, not b.) are most likely to delay sex.

Essay Question

Under the influence of Darwin's evolutionary theory, it became fashionable to classify all sorts of behaviors as instincts. Instinct theory fell into disfavor for several reasons. First, instincts do not explain behaviors, they merely name them. Second, to qualify as an instinct... a behavior must have a fixed and automatic pattern and occur in all people, regardless of differing cultures and experiences. Apart from a few simple reflexes, however, human behavior is not sufficiently automatic and universal to meet these criteria. Although instinct theory failed to explain human motives, the underlying assumption that genes predispose many behaviors is as strongly believed as ever.

Instinct theory was replaced by drive-reduction theory and the idea that biological needs create aroused drive states that motivate the individual to satisfy these needs and preserve homeostasis. Drive reduction theory failed as a complete account of human motivation because many human motives do not satisfy any obvious biological need. Instead, such behaviors are motivated by environmental incentives.

Arousal theory emerged in response to evidence that some motivated behaviors increase, rather than decrease, arousal.

Key Terms

1. Motivation is a need or desire that energizes and directs behavior. (p. 328) .
2. An instinct is a complex behavior that is rigidly patterned throughout a species and is unlearned. (p.328)
3. Drive-reduction theory attempts to explain behavior as arising from a physiological need that creates an aroused tension state (drive) that motivates an organism to satisfy the need.(p. 329)
4. Homeostasis refers to the body's tendency to maintain a balanced or constant internal state. (p.329)
5. Incentives are positive or negative environmental stimuli that motivate behavior. (p.329) ,
6. Maslow's hierarchy of needs proposes that human motives may be ranked from the basic, physiological level through higher-level needs for safety, love, esteem, self-actualization" and self-transcendence; until they are satisfied}the more basic needs are more compelling than the higher level ones. (p. 330)
7. Glucose, or blood sugar, is the major source of energy for the body's tissues. Elevating the level of glucose in the body will reduce hunger. (p.333)
8. Set point is an individual's regulated weight level, which is maintained by adjusting food intake and energy output. (p. 335)
9. Basal metabolic rate is the body's base rate of energy expenditure when resting. (p. 335)
10. Anorexia nervosa is an eating disorder, most common in adolescent females, in which a person restricts food intake to become significantly underweight and yet, still feeling fat, continues to starve. (p. 337)
11. Bulimia nervosa is an eating disorder characterized by episodes of overeating, usually of high calorie foods, followed by vomiting, laxative use, fasting, or excessive exercise. (p. 337)
12. Binge-eating disorder is characterized by episodes of overeating, followed by remorse, but not by purging, fasting, or excessive exercise. (p.337)
13. The sexual response cycle described by Masters and Johnson consists of four stages of bodily reaction: excitement, plateau, orgasm, and resolution. (p.349)
14. The refractory period is a resting period after orgasm, during which a male cannot be aroused to another orgasm. (p. 349)
15. Estrogens are sex hormones, such as estradiol, secreted in greater amounts by females than by males. In mammals other than humans, estrogen levels peak during ovulation and trigger sexual receptivity. (p. 350)
16. Testosterone is a sex hormone secreted in greater amounts by males than by females. In males, higher testosterone levels stimulate the prenatal growth of the male sex organs and the development of the male sex characteristics during puberty. (p. 350)
17. Sexual orientation refers to a person's enduring attraction to members of either the same or the opposite gender. (p. 354)