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# Psych- ology

# Answer Key

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## Chapter 1

1. D 3. C 5. B 7. D 9. A 11. B 13. D 15. D 17. Psychology courses deal with a number of issues that are helpful in a variety of settings. The text made mention of the types of skills as well as the knowledge base with which students of psychology become familiar. As mentioned in the link to learning, psychology is often helpful/valued in fields in which interacting with others is a major part of the job. 19. In its early days, psychology could be defined as the scientific study of mind or mental processes. Over time, psychology began to shift more towards the scientific study of behavior. However, as the cognitive revolution took hold, psychology once again began to focus on mental processes as necessary to the understanding of behavior. 21. Although the different perspectives all operate on different levels of analyses, have different foci of interests, and different methodological approaches, all of these areas share a focus on understanding and/or correcting patterns of thought and/or behavior. 23. An undergraduate education in psychology hones critical thinking skills. These skills are useful in many different work settings.

## Chapter 2

1. D 3. B 5. B 7. C 9. D 11. D 13. D 15. D 17. D 19. C 21. B 23. C 25. There is probably tremendous political pressure to appear to be hard on drugs. Therefore, even though D.A.R.E. might be ineffective, it is a well-known program with which voters are familiar. 27. Case studies might prove especially helpful using individuals who have rare conditions. For instance, if one wanted to study multiple personality disorder then the case study approach with individuals diagnosed with multiple personality disorder would be helpful. 29. Longitudinal research would be an excellent approach in studying the effectiveness of this program because it would follow students as they aged to determine if their choices regarding alcohol and drugs were affected by their participation in the program. 31. The cereal companies are trying to make a profit, so framing the research findings in this way would improve their bottom line. However, it could be that people who forgo more fatty options for breakfast are health conscious and engage in a variety of other behaviors that help them maintain a healthy weight. 33. If research is limited to students enrolled in Introduction to Psychology courses, then our ability to generalize to the larger population would be dramatically reduced. One could also argue that students enrolled in Introduction to Psychology courses may not be representative of the larger population of college students at their school, much less the larger general population. 35. In general, the fact that consent cannot be obtained from animal research subjects places extra responsibility on the researcher to ensure that the animal is treated as humanely as possible and to respect the sacrifice that the animal is making for the advancement of science. Like human research, the animals themselves should also receive some of the benefits of the research, and they do in the form of advanced veterinary medicine, and so on.

## Chapter 3

1. D 3. C 5. D 7. B 9. B 11. D 13. D 15. B 17. D 19. A 21. Variability is essential for natural selection to work. If all individuals are the same on a given trait, there will be no relative difference in their reproductive success because everyone will be equally adapted to their environments on that trait. Mutations are one source of variability, but sexual reproduction is another important source of variation given that individuals inherit half of their genetic makeup from each of their parents. 23. The action potential is initiated by an influx of  $\text{Na}^+$  into the neuron. If this process is prevented, then no action potentials in neurons in a given area will occur. Therefore, any painful stimuli would not result in action potentials carrying that information to the brain. 25. Most of these effects directly impact energy availability and redistribution of key resources and heightened sensory capacity. The individual experiencing these effects would be better prepared to fight or flee. 27. The most viable techniques are fMRI and PET because of their ability to provide information about brain activity and structure simultaneously. 29. Both systems involve chemical messengers that must interact with receptors in order to have an effect. The relative proximity of the release site and target tissue varies dramatically between the two systems. In neurotransmission, reuptake and enzymatic breakdown immediately clear the synapse. Metabolism of hormones must occur in the liver. Therefore, while neurotransmission is much more rapid in signaling information, hormonal signaling can persist for quite some time as the concentrations of the hormone in the bloodstream vary gradually over time.

## Chapter 4

1. C 3. B 5. C 7. B 9. C 11. C 13. C 15. D 17. C 19. A 21. A 23. D 25. Given that rotating shift work can lead to exhaustion and decreased mental efficiency, individuals working under these conditions are more likely to make mistakes on the job. The implications for this in the health care professions are obvious. Those in health care professions could be educated about the benefits of light-dark exposure to help alleviate such problems. 27. Those individuals (or species) that expend the greatest amounts of energy would require the longest periods of sleep. 29. One evolutionary theory of sleep holds that sleep is essential for restoration of resources that are expended during the demands of day-to-day life. A second theory proposes that our sleep patterns evolved as an adaptive response to predatory risks, which increase in darkness. The first theory has little or no empirical support, and the second theory is supported by some, though not all, research. 31. Dreaming occurs during REM sleep. One of the hallmarks of this particular stage of

sleep is the paralysis of the voluntary musculature which would make acting out dreams improbable. 33. Similarities include muscle atony and the hypnagogic hallucinations associated with narcoleptic episodes. The differences involve the uncontrollable nature of narcoleptic attacks and the fact that these come on in situations that would normally not be associated with sleep of any kind (e.g., instances of heightened arousal or emotionality). 35. Given that currently available programs designed to help people quit using tobacco products are not necessarily effective in the long term, programs designed to prevent people from using these products in the first place may be the best hope for dealing with the enormous public health concerns associated with tobacco use. 37. Ideally, double-blind experimental trials would be best suited to speak to the effectiveness of meditation. At the very least, some sort of randomized control trial would be very informative.

## Chapter 5

1. A 3. D 5. B 7. D 9. D 11. A 13. D 15. D 17. D 19. C 21. D 23. A 25. D 26. This would be a good time for students to think about claims of extrasensory perception. Another interesting topic would be the phantom limb phenomenon experienced by amputees. 28. Other species have evolved to best suit their particular environmental niches. For example, the honeybee relies on flowering plants for survival. Seeing in the ultraviolet light might prove especially helpful when locating flowers. Once a flower is found, the ultraviolet rays point to the center of the flower where the pollen and nectar are contained. Similar arguments could be made for infrared detection in snakes as well as for the differences in audible ranges of the species described in this section. 30. The trichromatic theory of color vision and the opponent-process theory are not mutually exclusive. Research has shown they apply to different levels of the nervous system. For visual processing on the retina, trichromatic theory applies: the cones are responsive to three different wavelengths that represent red, blue, and green. But once the signal moves past the retina on its way to the brain, the cells respond in a way consistent with opponent-process theory. 32. Sound localization would have allowed early humans to locate prey and protect themselves from predators. 34. When traveling by car, we often have visual information that suggests that we are in motion while our vestibular sense indicates that we're not moving (assuming we're traveling at a relatively constant speed). Normally, these two sensory modalities provide congruent information, but the discrepancy might lead to confusion and nausea. The converse would be true when traveling by plane or boat. 36. Research has shown that women and men do differ in their experience of and tolerance for pain: Women tend to handle pain better than men. Perhaps this is due to women's labor and childbirth experience. Men tend to be stoic about their pain and do not seek help. Research also shows that gender differences in pain tolerance can vary across cultures. 38. Playing on their expectations could be used to influence what they were most likely to see. For instance, telling a story about Peter Rabbit and then presenting this image would bias perception along rabbit lines.

## Chapter 6

1. C 3. A 5. B 7. A 9. D 11. A 13. B 15. A 17. Both classical and operant conditioning involve learning by association. In classical conditioning, responses are involuntary and automatic; however, responses are voluntary and learned in operant conditioning. In classical conditioning, the event that drives the behavior (the stimulus) comes before the behavior; in operant conditioning, the event that drives the behavior (the consequence) comes after the behavior. Also, whereas classical conditioning involves an organism forming an association between an involuntary (reflexive) response and a stimulus, operant conditioning involves an organism forming an association between a voluntary behavior and a consequence. 19. The food being toasted is the UCS; the sound of the toaster popping up is the CS; salivating to the sound of the toaster is the CR. 21. This occurs through the process of acquisition. A human or an animal learns to connect a neutral stimulus and an unconditioned stimulus. During the acquisition phase, the neutral stimulus begins to elicit the conditioned response. The neutral stimulus is becoming the conditioned stimulus. At the end of the acquisition phase, learning has occurred and the neutral stimulus becomes a conditioned stimulus capable of eliciting the conditioned response by itself. 23. In negative reinforcement you are taking away an undesirable stimulus in order to increase the frequency of a certain behavior (e.g., buckling your seat belt stops the annoying beeping sound in your car and increases the likelihood that you will wear your seatbelt). Punishment is designed to reduce a behavior (e.g., you scold your child for running into the street in order to decrease the unsafe behavior.) 25. Prosocial modeling can prompt others to engage in helpful and healthy behaviors, while antisocial modeling can prompt others to engage in violent, aggressive, and unhealthy behaviors.

## Chapter 7

1. B 3. B 5. D 7. D 9. A 11. A 13. D 15. C 17. B 19. D 21. C 23. B 25. Answers will vary. When attending a basketball game, it is typical to support your team by wearing the team colors and sitting behind their bench. 27. People tend to talk about the things that are important to them or the things they think about the most. What we talk about, therefore, is a reflection of our values. 29. Grammatical errors that involve overgeneralization of specific rules of a given language indicate that the child recognizes the rule, even if he or she doesn't recognize all of the subtleties or exceptions involved in the rule's application. 31. An algorithm is a proven formula for achieving a desired outcome. It saves time because if you follow it exactly, you will solve the problem without having to figure out how to solve the problem. It is a bit like not reinventing the wheel. 33. You are visiting Madrid, Spain, on a language immersion trip. Your Spanish is okay, but you still not sure about some of the facial expressions and body language of the native speakers. When faced with a sticky social situation, you do not engage immediately as you might back home. Instead,

you hold back and observe what others are doing before reacting. 35. The Wechsler-Bellevue IQ test combined a series of subtests that tested verbal and nonverbal skills into a single IQ test in order to get a reliable, descriptive score of intelligence. While the Stanford-Binet test was normed and standardized, it focused more on verbal skills than variations in other cognitive processes. 37. Learning disabilities are specific neurological problems within the brain and are separate from intelligence. Intellectual disabilities are pervasive and related to intelligence.

## Chapter 8

1. C 3. D 5. C 7. D 9. C 11. A 13. Both are types of long-term memory. Explicit memories are memories we consciously try to remember and recall. Explicit memory is also called declarative memory and is subdivided into episodic memory (life events) and semantic memory (words, ideas, and concepts). Implicit memories are memories that are not part of our consciousness; they are memories formed from behaviors. Implicit memory is also called non-declarative memory and includes procedural memory as well as things learned through classical conditioning. 15. Information is encoded through automatic or effortful processing. Automatic processing refers to all information that enters long-term memory without conscious effort. This includes things such as time, space, and frequency—for example, your ability to remember what you ate for breakfast today or the fact that you remember that you ran into your best friend in the supermarket twice this week. Effortful processing refers to encoding information through conscious attention and effort. Material that you study for a test requires effortful processing. 17. There are two types of interference: retroactive and proactive. Both are types of forgetting caused by a failure to retrieve information. With retroactive interference, new information hinders the ability to recall older information. With proactive interference, it's the opposite: old information hinders the recall of newly learned information. 19. The self-reference effect is the tendency an individual to have better memory for information that relates to oneself than information that is not personally relevant. You can use the self-reference effect to relate the material to something you have already learned for another class, or think how you can apply the concepts to your life. When you do this, you are building a web of retrieval cues that will help you access the material when you want to remember it.

## Chapter 9

1. C 3. A 5. D 7. D 9. C 11. A 13. B 15. The nature versus nurture controversy seeks to understand whether our personalities and traits are the product of our genetic makeup and biological factors, or whether they are shaped by our environment, which includes such things as our parents, peers, and culture. Today, psychologists agree that both nature and nurture interact to shape who we become, but the debate over the relative contributions of each continues. An example would be a child learning to walk: Nature influences when the physical ability occurs, but culture can influence when a child masters this skill, as in Aché culture. 17. Children develop at different rates. For example, some children may walk and talk as early as 8 months old, while others may not do so until well after their first birthday. Each child's unique contexts will influence when he reaches these milestones. 19. Gilligan criticized Kohlberg because his theory was based on the responses of upper class White men and boys, arguing that it was biased against women. While Kohlberg concluded that women must be deficient in their moral reasoning abilities, Gilligan disagreed, suggesting that female moral reasoning is not deficient, just different. 21. Alcohol is a teratogen. Excessive drinking can cause mental retardation in children. The child can also have a small head and abnormal facial features, which are characteristic of fetal alcohol syndrome (FAS). Another teratogen is nicotine. Smoking while pregnant can lead to low-birth weight, premature birth, stillbirth, and SIDS. 23. In the embryonic stage, basic structures of the embryo start to develop into areas that will become the head, chest, and abdomen. The heart begins to beat and organs form and begin to function. The neural tube forms along the back of the embryo, developing into the spinal cord and brain. In the fetal stage, the brain and body continue to develop. Fingers and toes develop along with hearing, and internal organs form. 25. The sucking reflex is the automatic, unlearned sucking motions that infants do with their mouths. It may help promote survival because this action helps the baby take in nourishment. The rooting reflex is the newborn's response to anything that touches her cheek. When you stroke a baby's cheek she will naturally turn her head that way and begin to suck. This may aid survival because it helps the newborn locate a source of food. 27. Emerging adulthood is a relatively new period of lifespan development from 18 years old to the mid-20s, characterized as a transitional time in which identity exploration focuses on work and love. According to Arnett, changing cultural expectations facilitate the delay to full adulthood. People are spending more time exploring their options, so they are delaying marriage and work as they change majors and jobs multiple times, putting them on a much later timetable than their parents. 29. Hospice is a program of services that provide medical, social, and spiritual support for dying people and their families.

## Chapter 10

1. B 3. D 5. B 7. D 9. C 11. A 13. B 15. C 17. The idea of optimal levels of arousal is similar to a drive theory of motivation. Presumably, we all seek to maintain some intermediate level of arousal. If we are underaroused, we are bored. If we are overaroused, we experience stress. The rides at an amusement park would provide higher arousal (however, we would hope that these rides don't actually pose significant threats to personal safety that would lead to a state of panic) to push us toward our own optimal level of arousal. Individuals at the park would choose different rides based on their specific arousal thresholds; for example, one person might find a simple water ride optimally arousing and an extreme roller coaster overarousing, while others would find the extreme roller coaster optimally arousing. 19.

Using BMI as a sole metric can actually be misleading because people who have large amounts of lean muscle mass can actually be characterized as being overweight or obese based on their height and weight. Weight versus height is a somewhat crude measurement as it doesn't distinguish the amount of body weight that comes from lean versus fatty tissue. 21. Given the stigma associated with being non-heterosexual, participants who openly identify as homosexual or bisexual in research projects may not be entirely representative of the non-heterosexual population as a whole. 23. The James-Lange theory would predict that I would not feel fear because I haven't had the physiological arousal necessary to induce that emotional state.

## Chapter 11

1. D 3. D 5. B 7. C 9. B 11. B 13. D 15. B 17. A 19. B 21. A 23. A 24. The particular quality or trait must be part of an enduring behavior pattern, so that it is a consistent or predictable quality. 26. If parents are too harsh during potty training, a person could become fixated at this stage and would be called anal retentive. The anal-retentive personality is stingy, stubborn, has a compulsive need for order and neatness, and might be considered a perfectionist. On the other hand, some parents may be too soft when it comes to potty training. In this case, Freud said that children could also become fixated and display an anal-expulsive personality. As an adult, an anal-expulsive personality is messy, careless, disorganized, and prone to emotional outbursts. 28. Horney disagreed with the Freudian idea that women had penis envy and were jealous of a man's biological features. Horney discussed that the jealousy was more likely culturally based, due to the greater privileges that males often have, and that differences between men and women's personalities were cultural, not biologically based. Horney also suggested that men may have womb envy, because men cannot give birth. 30. Skinner disagreed with Freud's idea that childhood plays an important role in shaping our personality. He argued that personality develops over our entire life, rather than in the first few years of life as Freud suggested. Skinner said that our responses can change as we come across new situations; therefore, we can see more variability over time in personality. 32. The Big Five traits are relatively stable over our lifespan with a tendency for the traits to increase or decrease slightly. Researchers have found that conscientiousness increases through young adulthood into middle age, as we become better able to manage our personal relationships and careers. Agreeableness also increases with age, peaking between 50 to 70 years. However, neuroticism and extroversion tend to decline slightly with age. 34. Since culture influences one's personality, then Western ideas about personality may not be applicable to people of other cultures. In addition, Western-based measures of personality assessment may not be valid when used to collect data on people from other cultures. 36. A projective test could give the clinician clues about dreams, fears, and personal struggles of which the client may be unaware, since these tests are designed to reveal unconscious motivations and attitudes. They can also help clinicians diagnose psychological disorders.

## Chapter 12

1. D 3. B 5. B 7. C 9. B 11. A 13. B 15. C 17. A 19. C 21. B 23. C 25. A 27. C 29. A situationism view is that our behaviors are determined by the situation—for example, a person who is late for work claims that heavy traffic caused the delay. A dispositional view is that our behaviors are determined by personality traits—for example, a driver in a road rage incident claims the driver who cut her off is an aggressive person. Thus, a situational view tends to provide an excuse for inappropriate behavior, and a dispositional view tends to lay blame for inappropriate behavior. 31. The good guards were fulfilling their social roles and they did not object to other guards' abusive behavior because of the power of the situation. In addition, the prison supervisor's behavior sanctioned the guards' negative treatment of prisoners. The prisoners were not weak people; they were recruited because they were healthy, mentally stable adults. The power of their social role influenced them to engage in subservient prisoner behavior. The script for prisoners is to accept abusive behavior from authority figures, especially for punishment, when they do not follow the rules. 33. One example is choosing which college to attend—the public school close to home or the Ivy League school out of state. Since both schools are desirable, the student is likely to experience cognitive dissonance in making this decision. In order to justify choosing the public school close to home, the student could change her cognition about Ivy League school, asserting that it is too expensive and the quality of education at the public school is just as good. She could change her attitude toward the Ivy League school and determine that the students there are too stuffy and wouldn't make good classmates. 35. Outsiders can serve as a quality control by offering diverse views and views that may differ from the leader's opinion. The outsider can also remove the illusion of invincibility by having the group's action held up to outside scrutiny. An outsider may offer additional information and uncover information that group members withheld. 37. In the United States, many people believe that sexual orientation is a choice, and there is some debate in the research literature as to the extent sexual orientation is biological or influenced by social factors. Because race and gender are not chosen, many Americans believe it is unfair to negatively judge women or racial minority groups for a characteristic that is determined by genetics. In addition, many people in the United States practice religions that believe homosexuality is wrong. 39. Hostile aggression is intentional with the purpose to inflict pain. Hostile aggression is often motivated by anger. In contrast, instrumental aggression is not motivated by anger or the intention to cause pain. Instrumental aggression serves as a means to reach a goal. In a sense it is a more practical or functional form of aggression, whereas hostile aggression is more emotion-driven and less functional and rational. 41. Proximity is a major situational factor in relationship formation; people who have frequent contact are more likely to form relationships. Whether or not individuals will form a relationship is based on non-situational factors such as similarity, reciprocity, self-disclosure, and physical attractiveness. In relationships, people seek reciprocity (i.e., a give and take in costs and benefits), self-disclosure of intimate information, and physically attractive partners.

## Chapter 13

1. C 3. B 5. B 7. C 9. C 11. D 13. A 15. Answers will vary. The student should allude to the fact that organizational psychology finds social relations of employees important and that historically workers were thought of more as individual machines rather than a social group. 17. Answers will vary depending on the occupation and question. The question should relate to a specific skill for the job and the rating should relate to how the answer demonstrates the skill. 19. Answers may vary, but they should include that the assessment would include more than one question to try to understand the reasons for the level of job satisfaction. It may also include questions that assess the importance of emotional and cognitive job satisfaction factors. 21. Answers will vary, but they should include that the simulator would be used to determine how pilots interact with the controls and displays within the cockpit, including under conditions of simulated emergencies.

24. Answers may vary, but they should include telling the person that you are not comfortable with these actions and then reporting it to human resources. The definition of sexual harassment may discuss the sexual nature of the event, feelings of discomfort, fear, or anxiety, and recurrences of events.

## Chapter 14

1. D 3. A 5. D 7. C 9. C 11. A 13. A 15. D 17. B 19. C 21. Answers will vary. One example is divorce. People may perceive a divorce as a threat if they believe it will result in loneliness, change of lifestyle (due to loss of additional income), or humiliation in the eyes of their family. However, divorce may be perceived as a challenge if they view it as an opportunity to find somebody more compatible, and if they consider the process of finding a new partner a pleasant one, perhaps involving mystery and excitement. 23. Answers will vary. For example, many people look forward to celebrating the Christmas holiday, but it can be stressful in that it requires some degree of readjustment. Getting together with family may bring eustress, while the schedule and travel demands of may bring distress. Giving gifts to others and seeing their enjoyment may bring eustress, but the financial burden associated with buying presents could produce distress. Each of these things requires making some minor adjustments to one's life, and thus is considered somewhat stressful. 25. Type A was conceptualized as a behavioral style characterized by competitiveness, time urgency, impatience, and anger/hostility. It was later discovered, however, that anger/hostility seems to be the dimension that most clearly predicts heart disease. 27. Emotion-focused coping would likely be a better coping strategy in situations in which a stressor is uncontrollable, or in which nothing could otherwise be done about it, such as a fatal illness. 29. Answers will vary, but may include mentioning things that boost positive emotions (the pleasant life), developing and using skills and talents (the good life), and using one's talents to help others (the meaningful life).

## Chapter 15

1. A 3. D 5. A 7. B 9. A 11. D 13. A 15. A 17. B 19. C 21. C 23. Just because something is atypical or unusual does not mean it is disordered. A person may experience atypical inner experiences or exhibit unusual behaviors, but she would not be considered disordered if they are not distressing, disturbing, or reflecting a dysfunction. For example, a classmate might stay up all night studying before exams; although atypical, this behavior is unlikely to possess any of the other criteria for psychological disorder mentioned previously. 25. The ICD is used primarily for making clinical diagnoses and more broadly for examining the general health of populations and monitoring the international prevalence of diseases and other health problems. While the DSM is also used for diagnostic purposes, it is also highly valued as a research tool. For example, much of the data regarding the etiology and treatment of psychological disorders are based on diagnostic criteria set forth in the DSM. 27. Learning theories suggest that some anxiety disorders, especially specific phobia, can develop through a number of learning mechanisms. These mechanisms can include classical and operant conditioning, modeling, or vicarious learning. Cognitive theories, in contrast, assume that some anxiety disorder, especially panic disorder, develop through cognitive misinterpretations of anxiety and other symptoms. 29. Risk factors associated with PTSD include gender (female), low socioeconomic status, low intelligence, personal and family history of mental illness, and childhood abuse or trauma. Personality factors, including neuroticism and somatization, may also serve as risk factors. Also, certain versions of a gene that regulates serotonin may constitute a diathesis. 31. This kind of research is important because it enables investigators to identify potential warning signs that predict the onset of schizophrenia. Once such factors are identified, interventions may be developed. 33. The environment is likely to be very instrumental in determining the likelihood of developing antisocial personality disorder. Research has shown that adverse family environments (e.g., divorce or marital problems, legal problems, and drug use) are connected to antisocial personality disorder, particularly if one is genetically vulnerable. Beyond one's family environment, peer group delinquency and community variables (e.g., economic deprivation, community disorganization, drug use, and the presence of adult antisocial models) heighten the risk of violent behavior.

## Chapter 16

1. B 3. A 5. A 7. D 9. A 11. B 13. C 15. Beginning in the Middle Ages and up until the mid-20th century, the mentally ill were misunderstood and treated cruelly. In the 1700s, Philippe Pinel advocated for patients to be unchained,

and he was able to affect this in a Paris hospital. In the 1800s, Dorothea Dix urged the government to provide better funded and regulated care, which led to the creation of asylums, but treatment generally remained quite poor. Federally mandated deinstitutionalization in the 1960s began the elimination of asylums, but it was often inadequate in providing the infrastructure for replacement treatment. 17. I would recommend psychodynamic talk therapy or cognitive therapy to help the person see how her thoughts and behaviors are having negative effects. 19. The rationale behind using group therapy for addiction treatment is that addicts are much more likely to maintain sobriety when treatment is in a group format. It has been suggested that it's due to the rewarding and therapeutic benefits of the group, such as support, affiliation, identification, and even confrontation. Because this client is single, he may not have family support, so support from the group may be even more important in his ability to recover and maintain his sobriety.