***THINK Psychology***

**Research Methods: How Do Psychologists Conduct Scientific, Meaningful, and Ethical Research?**

**Multiple Choice Questions**

1. Which of the following is not one of the questions that a researcher should ask himself/ herself before conducting a research study?
   1. “How can I use statistics to analyze my results?”
   2. “What research strategies should I use to test my idea?”
   3. “Will I definitely be able to confirm my hypothesis?”
   4. “How can I guarantee that I obtain objective results?”

Answer: C

Page ref: 18

Moderate

1. Which of the following questions regarding the treatment of research participants is the most important for a psychologist to consider prior to beginning his/her research?
   1. “Is it okay to require introductory psychology students to be research participants so that I know that I will have enough data for my study?”
   2. “Is there some way of getting people to participate in my research without actually having to pay them?”
   3. “How can I ensure that people participating in my study are treated fairly?”
   4. “How much discomfort am I permitted to cause my participants before my research will be considered an ethical violation?”

Answer: C

Page ref: 18

Easy

1. “Oh MAN,” you complain! “I knew that I should have sold my stock in Research in Motion (RIM) when it was over $600 a share! Now it is under $400 a share and I lost all of my profits.” This kind of statement that suggests that we knew the right path to take after it is too late is what researchers call \_\_\_\_\_\_\_\_\_\_ bias.
   1. extraneous
   2. hindsight
   3. observer
   4. double-blind

Answer: B

Page ref: 18

Moderate

1. After the disaster of Hurricane Katrina in 2005, many people come forward and said that they knew that the levees in New Orleans should have been built stronger, and that they just *knew* that a catastrophe like this was coming. In research this is known as the \_\_\_\_\_\_\_\_\_\_.
   1. hindsight bias
   2. false consensus effect
   3. critical error
   4. empirical fallacy

Answer: A

Page ref: 18

Moderate

1. Which of the following is a true statement about psychologists’ susceptibility to hindsight bias?
   1. Even properly trained psychologists can be biased when they interpret their data, and so they must be as careful as possible not to let bias affect their conclusions.
   2. Properly trained psychologists are very aware of the possibility of hindsight bias impacting their research, and thus are able to eliminate this problem from their studies.
   3. Proper statistical manipulation can offset the effects of any hindsight bias in research. As long as a psychologist is properly trained in the use of statistics, hindsight bias becomes insignificant.
   4. Hindsight bias does not refer to the errors that researchers make. It is a type of error that research participants make.

Answer: A

Page ref: 18

Difficult

1. During the months prior to the last election, Wynn spent most of his free time at events supporting the Liberal candidate. He participated in the campaigning, went door to door in support of this candidate, and fully immersed himself in his goal to have the Liberal candidate elected. The day before the election, he told his wife “I just know that our candidate is going to win. *Everyone* says they are going to vote for him!” Wynn is very surprised the next day, however, when his candidate loses. Which of the following tendencies explains why Wynn was so sure his candidate would win?
   1. The false consensus effect
   2. The hindsight bias
   3. The A-not-B error
   4. The nature/nurture mistake

Answer: A

Page ref: 18

Difficult

1. The false consensus effect occurs when a person overestimates \_\_\_\_\_\_\_\_\_\_\_.
   1. the extent to which other people share his or her beliefs and behaviours.
   2. a researcher’s ability to accurately anticipate what is going to happen in the future.
   3. the importance of using random assignment to groups in a formal experiment.
   4. the frequency with which we use an inappropriate research design to explore the question we are investigating.

Answer: A

Page ref: 18

Moderate

1. According to the principles of critical thinking, which of the following statements is the most accurate?
   1. Research is only as good as the statistics used, so the research design we select is less important than the statistics we use to evaluate our data.
   2. Research outcomes that are contrary to expectations do not add anything to the science of psychology, and therefore can legitimately be discarded.
   3. Good researchers are willing to accept that sometimes our beliefs and intuition are, in fact, wrong.
   4. The importance of our own opinion in research should not be underestimated, and it has a legitimate place as we interpret the data that we collect.

Answer: C

Page ref: 18

Easy

1. The belief that people should accept the word of an authority figure without questioning or debating that word is called \_\_\_\_\_\_\_\_\_\_.
   1. consensus
   2. empiricism
   3. cynicism
   4. dogmatism

Answer: D

Page ref: 18

Easy

1. Joe is a student who has been a research assistant for Professor Smith for two years. Joe believes everything Professor Smith says is accurate and irrefutable. He would never think to question Professor Smith’s logic or reason. Based on what you have been learning in psychology, which of the following terms best describes Joe’s behaviour?
   1. brainwashing
   2. empiricism
   3. dogmatism
   4. gullibility

Answer: D

Page ref: 18

Difficult

1. What is the main difference between dogmatic beliefs and empirical beliefs?
   1. Empirical beliefs are the result of experimental research, while dogmatic beliefs are the results of correlational research.
   2. Dogmatic beliefs require absolute acceptance without questioning, while empirical beliefs encourage consideration of one’s own experiences.
   3. Dogmatic beliefs are the result of experimental research, while empirical beliefs are the result of correlational research.
   4. Empirical beliefs require absolute acceptance without questioning, while dogmatic beliefs encourage consideration of one’s own experiences.

Answer: B

Page ref: 18

Moderate

1. While writing an essay about psychological research Marilyn types the sentence, “When a researcher correctly employs the principles of empiricism, (s)he guarantees that the information they acquire will be completely accurate.” Which of the following is true of this statement?
   1. This statement is false because there is no way to guarantee with certainty that the information one gathers is accurate.
   2. This statement is true, because the use of empiricism helped eliminate all of the research errors caused by the use of dogmatism.
   3. This statement is only true when you gather data from a very small sample of research participants, because then the chance of research error drops.
   4. This statement is only true when you use a correlational design, but it is not true when you use an experimental design.

Answer: A

Page ref: 19

Difficult

1. The rules or techniques that provide a framework for our observations are referred to as a \_\_\_\_\_\_\_\_\_\_.
   1. strategy
   2. construct
   3. statistic
   4. method

Answer: D

Page ref: 19

Easy

1. When it comes to studying human beings, there are several empirical challenges that must be considered. Which of the following is not one of the challenges mentioned in the textbook?
   1. People are complex.
   2. People are different.
   3. People can be dishonest.
   4. People react to situations differently.

Answer: C

Page ref: 19

Easy

1. The fact that human beings have various thoughts and feelings that affect their behaviour demonstrates which empirical challenge related to studying people?
   1. People are complex
   2. People are different
   3. People react to situations differently
   4. People make mistakes.

Answer: A

Page ref: 19

Moderate

1. It is difficult for psychologists to make generalizations about our behaviours from one person to another. This limitation of research describes which of the empirical challenges of studying people?
   1. People are driven by situations
   2. People are complex
   3. People are different
   4. People are inconsistent

Answer: C

Page ref: 19

Moderate

1. The fact that our responses to certain stimuli are not consistent – that on a day to day basis people may not be as predictable as you’d expect them to be – illustrates which of the empirical challenges related to studying people?
   1. People are different
   2. People are biased
   3. People react to situations differently
   4. People are complex

Answer: C

Page ref: 19

Moderate

1. One famous story from the history of psychology describes a horse whose trainer claimed that he could do simple arithmetic problems and had learned to spell words. What was the name of that horse?
   1. Magical Ed
   2. Wonderous Wilhelm
   3. Little Albert
   4. Clever Hans

Answer: D

Page ref: 19

Easy

1. Which of the following types of questions was Clever Hans *not* able to correctly answer?
   1. Simple arithmetic calculations
   2. Spelling words
   3. Geography questions
   4. Calculating square roots

Answer: C

Page ref: 19

Easy

1. Who was the owner of Clever Hans?
   1. Wilhelm von Osten
   2. Wilhelm Wundt
   3. Max Wertheimer
   4. B.F. Skinner

Answer: A

Page ref: 19

Easy

1. After extensive investigation into the amazing abilities of Clever Hans, it was determined that he was not actually responding to the questions he was being asked, but rather was responding to the subtle facial and body gestures of his owner. Which psychologist made this determination?
   1. Wilhelm Steckel
   2. Oskar Pfungst
   3. Sigmund Freud
   4. Edward Titchener

Answer: B

Page ref: 19

Moderate

1. After the amazing case of Clever Hans was given a thorough investigation, psychologist Oskar Pfungst determined that there was a very simple explanation why this horse was able to demonstrate such amazing cognitive abilities. What did Pfungst conclude?
   1. Clever Hans had a genetic abnormality that had actually given him cognitive abilities never before seen in a stallion.
   2. Clever Hans was not actually answering the questions he was being asked, but was responding to subtle unconscious gestures made by his owner.
   3. Clever Hans had learned to answer questions as a result of rigorous training and tutoring, and was, in fact, answering the questions he was asked correctly.
   4. Clever Hans was really a myth that people had come to believe even though nobody had ever seen him. This demonstrated the power of “word of mouth” when it comes to incredible stories.

Answer: B

Page ref: 19

Easy

1. An objective statement that is made as a result of direct observation is a \_\_\_\_\_\_\_\_\_\_.
   1. hypothesis
   2. fact
   3. speculation
   4. theory

Answer: B

Page ref: 19

Easy

1. \_\_\_\_\_\_\_\_\_\_ are ideas that help us explain existing facts.
   1. Hypotheses
   2. Correlations
   3. Empiricals
   4. Theories

Answer: D

Page ref: 19

Easy

1. When a scientist makes predictions about new facts based on existing theories, (s)he has created a new \_\_\_\_\_\_\_\_\_\_.
   1. hypothesis
   2. theory
   3. fact
   4. speculation

Answer: A

Page ref: 19

Easy

1. Which of the following statements is true regarding the use of the scientific method?
   1. The scientific method uses hypotheses to generate theories, but facts are not relevant because there is no such thing as a true fact. All facts are merely relative, and so they are not important in the scientific method.
   2. The scientific method is concerned with facts and hypotheses, as we use the gathering of data to confirm or refute hypotheses. Theories are not relevant to the scientific method.
   3. The scientific method is only concerned with facts, as anything else is merely a form of a guess.
   4. Facts, theories and hypotheses all have very important functions in the use of the scientific method.

Answer: D

Page ref: 19

Moderate

1. Which concept is used in research to make sure that different scientists who are exploring the same concept are able to conduct a true replication of the original experiment?
   1. Theories
   2. Observer-expectancy controls
   3. Null hypotheses
   4. Operational definitions

Answer: D

Page ref: 20

Difficult

1. Dr. Fishkill is conducting a research study investigating racism among high-school students. His research method involves sitting down with volunteer students whose parents have given consent, and asking them questions about their beliefs regarding race. Whenever he asks a question that might reveal some level of racism, he unconsciously cocks one eyebrow and lowers his voice slightly. As a result, his research showed that virtually none of his participants held any racist beliefs. What error has Dr. Fishkill made in his method?
   1. He has failed to carefully observe his participants.
   2. He has failed to control the environment in which the study was taking place.
   3. He has allowed random assignment of his participants.
   4. He has allowed observer-expectancy effects to cloud his results.

Answer: D

Page ref: 20

Moderate

1. In order to test the effects of social pressure on conformity, Dr. Solomon Asch placed a research participant in a room with four other individuals. Those four other people worked for Asch, even though the real participant did not know this. In research terms, people who pose as research subjects but are really working for the researcher are called \_\_\_\_\_\_\_\_\_\_.
   1. research assistants
   2. manipulators
   3. confederates
   4. participant-observers

Answer: C

Page ref: 20

Moderate

1. In an experimental research design, the variable or condition that is manipulated by the researcher is called the \_\_\_\_\_\_\_\_\_\_ variable.
   1. dependent
   2. subject
   3. between-group
   4. independent

Answer: D

Page ref: 20

Easy

1. In an experimental research design, the variable or condition that is affected by the independent variable is called the \_\_\_\_\_\_\_\_\_\_ variable.
   1. within-group
   2. manipulated
   3. response
   4. dependent

Answer: D

Page ref: 20

Easy

1. Dr. Martinez is doing a research study examining the effects of a new headache medication on migraine pain. He decides to divide his participants up into four subject groups, each one of which will receive a different amount of medication to take when they have a migraine. He will ask the participants to write down their assessment of how much the pain has dropped on a ten-point scale an hour after taking the medication. What is the dependent variable in this study?
   1. The intensity of the migraine each participant has before taking the medication.
   2. The level of pain reduction reported by each participant.
   3. The amount of medication each participant takes.
   4. The number of people who are assigned to each of the subject groups.

Answer: B

Page ref: 20-21

Difficult

1. Dr. Martinez is doing a research study examining the effects of a new headache medication on migraine pain. He decides to divide his participants up into four subject groups, each one of which will receive a different amount of medication to take when they have a migraine. He will ask them to write down their assessment of how much the pain has dropped on a ten-point scale an hour after taking the medication. What is the independent variable in this study?
   1. The intensity of the migraine each participant has before taking the medication.
   2. The level of pain reduction reported by each participant.
   3. The amount of medication each participant takes.
   4. The number of people who are assigned to each of the subject groups.

Answer: C

Page ref: 20-21

Difficult

1. Dr. Martinez is doing a research study examining the effects of a new headache medication on migraine pain. He decides to divide his participants up into four subject groups, each one of which will receive a different amount of medication to take when they have a migraine. The participants in group one receive a pill with 10 milligrams of the experimental medication, while the participants in group two receive a pill with 20 milligrams. Those assigned to group three receive a pill with 30 milligrams, while those in group four receive a placebo pill that has zero milligrams of the medication. Which of the subject groups is the control group in this study?
2. Group one
3. Group two
4. Group three
5. Group four

Answer: D

Page ref: 21

Easy

1. Dr. Martinez is doing a research study examining the effects of a new headache medication on migraine pain. He decides to divide his participants up into four subject groups, each one of which will receive a different amount of medication to take when they have a migraine. The participants in group one receive a pill with 10 milligrams of the experimental medication, while the participants in group two receive a pill with 20 milligrams. Those assigned to group three receive a pill with 30 milligrams, while those in group four receive a placebo pill that has zero milligrams of the medication. How many experimental groups are in this research study?
   1. 1
   2. 2
   3. 3
   4. 4

Answer: C

Page ref: 21

Moderate

1. A study in which each participant is exposed to several different independent variables is referred to as a \_\_\_\_\_\_\_\_\_\_-group experiment.
   1. single
   2. within
   3. between
   4. repeated

Answer: B

Page ref: 21

Moderate

1. A study in which different groups of participants are exposed to different independent variables is referred to as a \_\_\_\_\_\_\_\_\_\_-group experiment.
   1. single
   2. within
   3. between
   4. repeated

Answer: C

Page ref: 21

Moderate

1. Dr. Adams is designing two new research projects to test the effects of temperature on academic performance. In project A her participants will have to take seven tests, each at seven different temperatures. In project B she will assign her participants to one of seven groups, and each group will take one test at a specific temperature. Dr. Adams is using a \_\_\_\_\_\_\_\_ research design for project A, and a \_\_\_\_\_\_\_\_\_\_ research design for project B.
   1. within-subjects; random assignment
   2. within-subjects; between subjects
   3. between- subjects; with-in subjects
   4. repeated exposure; random assignment

Answer: B

Page ref: 21

Difficult

1. Why is it important to make sure that different participant groups are roughly equivalent in terms of personal characteristics (e.g., age, gender) before any independent variable is introduced?
   1. Because it is important to treat all research participants equally so that they feel that they are not being manipulated.
   2. Because research ethics forbid any experiment to take place when the participant groups are fundamentally different from each other.
   3. So that no major differences between the groups unduly bias the results of the experiment.
   4. Because it threatens the integrity of a within-group experimental design.

Answer: C

Page ref: 21

Difficult

1. What procedure can a researcher use to make sure that the various subject groups are kept roughly equivalent before exposure to an independent variable?
   1. Snowball sampling
   2. Random assignment
   3. Double-blind assignment
   4. Single-blind sampling

Answer: B

Page ref: 21

Difficult

1. Your friend Cole is designing a research project for his introductory psychology lab assignment. He wants to create groups that are roughly equivalent across a variety of demographic variables. You would suggest that he use any of the following methods *except*:
   1. random assignment
   2. matched samples.
   3. matched pairs.
   4. blind observation.

Answer: D

Page ref: 21-22

Moderate

1. In a formal experiment, the participants who are given no treatment or a treatment that is believed to have no effect make up the \_\_\_\_\_\_\_\_\_\_ group.
   1. experimental
   2. comparison
   3. control
   4. outcome

Answer: C

Page ref: 21

Easy

1. In a formal experiment, the participants who are subject to an independent variable make up the \_\_\_\_\_\_\_\_\_\_\_\_ group.
   1. comparison
   2. control
   3. experimental
   4. outcome

Answer: C

Page ref: 21

Easy

1. What is the main difference between an experiment and a correlational study?
   1. A correlational study involves the manipulation of variables, while an experiment does not.
   2. An experiment looks at the relationship between independent and dependent variables, while a correlational study looks at the relationship between within-group and between-group variables.
   3. A correlational study looks at the relationship between independent and dependent variables, while an experiment looks at the relationship between within-group and between-group variables.
   4. An experiment involves the manipulation of variables, while a correlational study does not.

Answer: D

Page ref: 20-21

Difficult

1. Dr. Kochkodin wants to do a research study where he will be able to determine if changes in room lighting *cause* changes in exam score among undergraduate psychology students. What sort of research design is he most likely to use?
   1. A correlational study
   2. An experimental study
   3. A case study
   4. Naturalistic observation

Answer: B

Page ref: 21

Moderate

1. \_\_\_\_\_\_\_\_\_\_ studies allow us to make predictions about one variable based on the knowledge of another.
   1. Case
   2. Experimental
   3. Natural
   4. Correlational

Answer: D

Page ref: 21

Easy

1. Dr. Ayers conducts a correlational study examining the relationship between ice cream consumption and death by drowning. She finds that there appears to be a strong relationship between these two variables. Which of the following conclusions would be inappropriate for Dr. Ayers to make?
   1. Eating more ice cream causes people to drown!
   2. When people eat more ice cream there appears to be an increased risk of drowning.
   3. When people do not eat ice cream, their risk of drowning tends to decrease.
   4. It appears that the variables of eating ice cream and drowning vary with each other.

Answer: A

Page ref: 21

Difficult

1. In order to eliminate the third-variable problem in correlational research, which of the following techniques can a researcher employ?
   1. Matched samples
   2. Case studies
   3. Placebo techniques
   4. Random assignment

Answer: A

Page ref: 22

Moderate

1. In order to counteract the \_\_\_\_\_\_\_\_\_\_variable problem that affects correlational research, a psychologist might use the matched samples or matched pair technique.
   1. construct
   2. extraneous
   3. random
   4. third

Answer: D

Page ref: 22

Difficult

1. What is the main distinction of using a descriptive research design as compared to a correlational or experimental design?
   1. Descriptive studies allow researchers to use different types of statistics, which opens the field of psychology up to research questions that cannot be explored with other designs.
   2. Descriptive studies allow researchers to gather data from far fewer subjects so that cause and effect relationship can be determined in less time.
   3. Descriptive studies, unlike correlational or experimental designs, do not require actual human subjects for data gathering.
   4. Descriptive studies enable researchers to observe and describe behaviours without investigating the relationship between specific variables.

Answer: D

Page ref: 22

Difficult

1. Which of the following is not a descriptive research design?
   1. Experimentation
   2. Naturalistic observation
   3. Case study
   4. Surveys

Answer: A

Page ref: 22-23

Easy

1. Famed primatologist Jane Goodall earned international notoriety for her studies of chimpanzees. Much of her research was spent observing the animals from afar without interfering with their day to day lives. This type of research, called \_\_\_\_\_\_\_\_\_\_ observation, is important because it allows observation of behaviours without interfering with or changing those behaviours.
   1. case
   2. laboratory
   3. naturalistic
   4. external

Answer: C

Page ref: 22

Moderate

1. Based on the definition in your textbook, which of the following is the best example of naturalistic observation?
   1. watching a tiger do tricks in a traveling circus
   2. watching a tiger in an animal research lab
   3. watching a tiger in the jungle in which it was born
   4. watching a tiger in a controlled environment such as zoo

Answer: C

Page ref: 22

Moderate

1. Naturalistic observation allows the researcher to:
   1. always draw an objective conclusion about people’s behaviours.
   2. get a realistic picture of how people behave in their environments.
   3. fully understand the motives behind a person’s behaviour.
   4. get an understanding of how people perceive their environments.

Answer: B

Page ref: 22

Moderate

1. Canadian psychologists Debra Pepler and Wendy Craig use naturalistic observation to study\_\_\_\_\_\_\_\_\_\_.
   1. romantic relationships
   2. helping
   3. bullying
   4. conformity

Answer: C

Page ref: 22

Easy

1. Alex wants to conduct a research project to examine the behaviours of university students at parties. He decides to use naturalistic observation to collect his data. He knows he will have to justify his decision to use this method to his research supervisor. Alex would make all of the following arguments *except*:
   1. I can observe people’s behaviour as they occur.
   2. People sometimes change the way they behave when they know they are being watched and naturalistic observation allows me to watch them without their awareness.
   3. I can observe unique behaviours that will only occur once at that particular time, in that particular setting.
   4. Naturalistic observation allows me to avoid observer bias because I am forced to be objective when I use this method.

Answer: D

Page ref: 22

Difficult

1. Russell is conducting a study that employs naturalistic observation of teenagers at a local shopping mall food court. He is observing their “flirting” behaviours, and hypothesizes that the better clothes a teenager wears, the more likely he or she is to be flirted with. As he makes his observations, one of his research partners notices that he does not pay attention to the teenagers who have less “nice” clothing nearly as much as he does to those kids who have a lot of trendy, fashionable clothing. Russell is falling prey to which disadvantage of naturalistic observation?
   1. Blind bias
   2. Hindsight bias
   3. Observer bias
   4. Double-blind bias

Answer: C

Page ref: 22

Moderate

1. What is a technique that a researcher can use to avoid the observer bias effect when engaging in naturalistic observation?
   1. Using blind observers
   2. Using double-blind observers
   3. Using counter-balanced observers
   4. Using random observers

Answer: A

Page ref: 22

Moderate

1. The best way to conduct descriptive research in a highly controlled setting is to use \_\_\_\_\_\_\_\_\_\_ observation.
   1. correlational
   2. laboratory
   3. naturalistic
   4. experimental

Answer: B

Page ref: 22

Easy

1. When research participants are involved in laboratory observation, they often know that they are being observed. Why is this a potential problem for the results of the study?
   1. It is impossible to be able to draw cause and effect conclusions about participants who know they are being observed. In order to draw cause and effect conclusions, the observation must take place in a naturalistic setting.
   2. Participants’ awareness of the fact that they are being observed is not, in fact, a problem for laboratory observation. It is a problem for naturalistic observation.
   3. People may behave differently when they know they are being watched, and thus the results in the laboratory may not have meaning in the real world.
   4. If people know they are being watched, they will make sure to do exactly what they think the experimenter wants. This is called *demand bias*.

Answer: C

Page ref: 22

Moderate

1. Developmental psychologist Jean Piaget conducted rigorous observations of his own children as they grew up, and that is what formed the basis for his stage theory of cognitive development. From a research perspective, Piaget conducted a(n) \_\_\_\_\_\_\_\_\_\_.
   1. case study
   2. laboratory observation
   3. experiment
   4. correlational study

Answer: A

Page ref: 22

Easy

1. If you were interested in studying the impact that child abuse has on people later in life, you would probably be unable to use an experiment because this is an independent variable that could not be ethically manipulated. Instead, you might find a small number of people who had suffered abuse as children, and gather as much information as you could about them (with their consent, of course). This kind of research that involves gathering a lot of information about one or a few subjects is called a \_\_\_\_\_\_\_\_\_\_ study.
   1. case
   2. retrospective
   3. protagonistic
   4. survey

Answer: A

Page ref: 22-23

Moderate

1. Why is it difficult to make generalizations based on the results of case study research?
   1. Because case study research is, by definition, immune to the error of making generalizations. That is its greatest strength!
   2. Because case studies involve far too many people to allow for generalizations. You would be better off using a research design that uses fewer participants.
   3. Because a case study involves only one or a few subjects, their actions may be atypical and not representative of a larger group of people or population.
   4. Because the statistics involved in case study research do not allow one to draw larger conclusions about a population.

Answer: C

Page ref: 23

Moderate

1. If you wanted to get information from a very large number of university students about their drinking habits in a non-intrusive manner, which descriptive research method would probably be your best bet?
   1. Naturalistic observation
   2. A survey
   3. A laboratory observation
   4. A case study

Answer: B

Page ref: 23

Moderate

1. A single subject is to a(n) \_\_\_\_\_\_\_\_\_\_\_\_ as a large number of subjects is to a(n) \_\_\_\_\_\_\_\_\_\_\_.
   1. survey; experiment
   2. laboratory observation; case study
   3. experiment; naturalistic observation
   4. case study; survey

Answer: D

Page ref: 21-23

Easy

1. Dr. Hobbes is conducting research that investigates the frequency with which people eat at fast food restaurants. He asks 250 different participants a series of 45 questions, some of which have words like “unhealthy,” “fat-containing,” and “high-cholesterol” in them. What is a potential problem with Dr. Hobbes’s study?
   1. Dr. Hobbes should not be the one asking the questions, since there is too much room for observer bias. He should have a graduate student ask the questions instead.
   2. Some participants may answer questions dishonestly if the questions are worded in a way that makes them feel like their true answers are socially unacceptable.
   3. Surveys can only be conducted on 10 or fewer participants, so Dr. Hobbes’s use of 250 participants is a violation of survey design rules.
   4. Surveys must have a minimum of 50 questions in order to be statistically sound.

Answer: B

Page ref: 23

Moderate

1. The Minnesota Multiphasic Personality Inventory (MMPI-II) is a 567-question self-report assessment tool that psychologists use to gather information about various parts of an individual’s character and psychological make-up. The MMPI-II could best be described as what type of research tool?
   1. An experiment
   2. A laboratory observation
   3. A survey
   4. A case study

Answer: C

Page ref: 23

Easy

1. In order to conduct survey research in a way that will give the best chance to make generalizations beyond those surveyed, a researcher should give their survey to a wide sample of people from a larger population. \_\_\_\_\_\_\_\_\_\_ sampling is a technique that helps ensure the variety within a sample that helps ensure that it is representative of a larger population.
   1. random
   2. distributed
   3. snowball
   4. selective

Answer: A

Page ref: 23

Moderate

1. Which of the following research studies would take place “in the field?”
   1. Dr. Spinnozza has participants come to his laboratory so that he can ask them questions about the pictures of faces of different individuals.
   2. Dr. Buchman shows participants a short video of a television commercial in his office, and then asks them questions about their memory of the products advertised.
   3. Dr. Adeshak observes students in the local university “union,” and makes a study of the hours when students are likeliest to be drinking coffee.
   4. Dr. Martino watches children through a two-way mirror, and makes observations about their aggressive and cooperative behaviours.

Answer: C

Page ref: 23

Moderate

1. Which of the following statements about laboratory studies and field studies is the most accurate?
   1. Laboratory studies are always better because of their ability to control extraneous variables. The only time a field study should be used is if it is unethical to use a laboratory setting.
   2. Laboratory studies and field studies each have certain advantages and disadvantages, which is why each research question can be explored in only one of the two types of settings.
   3. Some research questions can be explored in both a field study and a laboratory study to enhance confidence in the results that are obtained.
   4. Field studies are always better than laboratory settings because they give a more accurate assessment of people’s behaviours. The only time a laboratory setting should be used is if a research question *cannot* be explored with a field study.

Answer: C

Page ref: 23

Difficult

1. Experimental research studies are more likely to be conducted in the \_\_\_\_\_\_\_\_\_, while descriptive and correlational studies are usually performed in the \_\_\_\_\_\_\_\_\_\_.
   1. hospital setting; university setting
   2. laboratory; field
   3. university setting; hospital setting
   4. field; laboratory

Answer: B

Page ref: 23

Easy

1. A \_\_\_\_\_\_\_\_\_\_-report method is a form of data collection in which people are asked to rate or describe their own behaviour or mental state. They are usually conducted in the form of questionnaires or interviews.
   1. reflective
   2. interactive
   3. self
   4. first-person

Answer: C

Page ref: 23

Moderate

1. One problem that exists when a researcher uses surveys and questionnaires is that the data they collect may not be accurate. As your author points out, even if a respondent is “unfailingly honest” and has no intent to provide answers that are untrue, why might their responses still be inaccurate or incomplete?
   1. Because there are some questions that cannot be asked via the use of a survey or questionnaire.
   2. Because all questionnaires and surveys, regardless of their purpose, are biased against certain types of respondents.
   3. Because the people assessing the answers provided on a survey or questionnaire may make mistakes in how the score the responses.
   4. Because even very honest people don’t have completely objective views of their own behaviours.

Answer: D

Page ref: 24

Difficult

1. Which of the following is one of the two types of statistics that researchers use to analyze the data that they collect?
   1. Referential statistics
   2. Inferential statistics
   3. Binomial statistics
   4. Cyclical statistics

Answer: B

Page ref: 24

Moderate

1. Descriptive statistics include all but which of the following types of analysis?
   1. Measures of central tendency
   2. Measures of variability
   3. Measures of normal and skewed distributions
   4. Frequency distributions

Answer: C

Page ref: 24-25

Moderate

1. Which measure of central tendency refers to the arithmetic average of a group of numbers or values?
   1. Mode
   2. Variance
   3. Mean
   4. Median

Answer: C

Page ref: 24

Easy

1. Melissa’s car has a really cool electronic readout that tells her the car’s fuel economy. The readout says “Average Kilometres per Litre.” In statistical terms, this feature is telling Melissa the \_\_\_\_\_\_\_\_\_\_ kilometres per litre that her car gets.
   1. mode
   2. mean
   3. maximum
   4. median

Answer: B

Page ref: 24

Moderate

1. Lakisha’s 5th grade class is having an election to decide who will be the new “class president.” There are five students running for the office. Out of 25 students, 9 vote for Lakisha, 6 vote for Mary, 6 vote for Michael, 2 vote for Allison, and 2 vote for Barry. In statistical terms, which student received the “mode” votes?
   1. Lakisha
   2. Mary
   3. Allison
   4. Barry

Answer: A

Page ref: 24

Moderate

1. Professor Spiegelman’s introduction to psychology class has 19 students. On the first exam, the students produce the following set of scores: 100, 100, 97, 97, 92, 86, 86, 85, 81, 80, 76, 72, 72, 72, 71, 68, 62, 59, and 48. What is the mode score on this exam?
   1. 48
   2. 100
   3. 80
   4. 72

Answer: D

Page ref: 24

Moderate

1. Professor Ken’s psychology class has 21 students. On the final exam, the students produce the following set of scores:, 100, 97, 97, 92, 86, 86, 86, 85, 81, 81 80, 76, 72, 72, 72, 71, 68, 62, 59, 54, and 48. What is the mode score on this exam?
   1. 72
   2. 86
   3. 72 and 86
   4. There is no mode.

Answer: C

Page ref: 24

Difficult

1. What is the median in a set of scores?
   1. The average of all of the scores in the data set.
   2. The middle score in a data set.
   3. The most frequently appearing score in the data set.
   4. The difference between the highest and lowest score in the data set.

Answer: B

Page ref: 24

Easy

1. Professor Spiegelman’s introduction to psychology class has 19 students. On the first exam, the students produce the following set of scores: 100, 100, 97, 97, 92, 86, 86, 85, 81, 80, 76, 72, 72, 72, 71, 68, 62, 59, and 48. What is the median score on this exam?
   1. 100
   2. 92
   3. 80
   4. 72

Answer: C

Page ref: 24

Moderate

1. The measure of \_\_\_\_\_\_\_\_\_\_ refers to the degree to which the numbers in a data set differ from one another and from the overall average (or mean) of that data set.
   1. extremeness
   2. variability
   3. outliers
   4. difference

Answer: B

Page ref: 24

Easy

1. The difference between the highest and lowest numbers in a data set is referred to as the \_\_\_\_\_\_\_\_\_\_.
   1. deviation score
   2. range
   3. standard deviation
   4. variance

Answer: B

Page ref: 25

Easy

1. Professor Spiegelman’s introduction to psychology class has 19 students. On the first exam, the students produce the following set of scores: 100, 100, 97, 97, 92, 86, 86, 85, 81, 80, 76, 72, 72, 72, 71, 68, 62, 59, and 48. What is the range on this exam?
   1. 100
   2. 100:48
   3. 52
   4. 48

Answer: C

Page ref: 25

Easy

1. Although the range is a good measure of variation in a data set because it gives us information about the distance between the most extreme values, it does have one peculiar drawback. What is that concern?
   1. The range is easily distorted by extreme values in a data set.
   2. The range cannot be used on data sets that do not have at least ten different values.
   3. The range is distorted when a data set has the same value that appears more than once.
   4. The range is changed when the standard deviation of the data set turns negative.

Answer: A

Page ref: 24-25

Difficult

1. Histograms and bar graphs are two ways of displaying a \_\_\_\_\_\_\_\_\_\_\_\_.
   1. normal distribution
   2. measure of central tendency
   3. standard deviation
   4. frequency distribution

Answer: D

Page ref: 25

Moderate

1. In a normal distribution, which of the following statements is true with regard to the mean, median, and mode of the data set?
   1. The mean, median, and mode are the same.
   2. The mean is highest, the median is in the middle, and the mode is the lowest.
   3. The mean and median are the same, but a normal distribution is bimodal.
   4. The mode is the highest, the median is in the middle, and the mean is the lowest.

Answer: A

Page ref: 26

Difficult

1. A graphical representation of a data set with an even distribution of results is called a \_\_\_\_\_\_\_\_\_\_ curve.
   1. symmetrical
   2. skewed
   3. normal
   4. vaulted

Answer: C

Page ref: 24-26

Moderate

1. A graphical representation of a data set where the scores cluster on one end rather than in the middle is known as a \_\_\_\_\_\_\_\_\_\_\_ distribution.
   1. normal
   2. skewed
   3. abnormal
   4. asymmetrical

Answer: B

Page ref: 26

Moderate

1. What is meant when the results of a research study are said to have “statistical significance?”
   1. It means that the data can be analyzed with multiple statistical methods, and do not have to be assessed using a single statistical calculation.
   2. It means that the results are likely to reflect reality, and did not occur by chance.
   3. It means that the results have practical significance in the real world.
   4. It means that random chance is the best explanation for the outcomes.

Answer: B

Page ref: 26

Moderate

1. What letter is used to represent the level of significance of a statistical effect, and what does that letter stand for?
   1. “s”, significance
   2. “p”, probability
   3. “d”, distribution
   4. “e”, effect

Answer: B

Page ref: 26

Easy

1. Traditionally, what probability level is needed in order to consider the results of a study to be statistically significant?
   1. Less than 0.01 (1%)
   2. Less than 0.05 (5%)
   3. Greater than 0.05 (5%)
   4. Greater than 0.10 (10%)

Answer: B

Page ref: 26

Easy

1. If the probability level of a study is greater than 5%, then what do researchers begin to get concerned about?
   1. That there is too much statistical significance to consider the results useful.
   2. That the results occurred by chance and do not reflect reality.
   3. That the subject pool that was used might have been tainted in some way that they did not control for.
   4. That the coefficient of determination will be infinite and therefore unusable.

Answer: B

Page ref: 26

Moderate

1. Dr. Barnes ran a set of inferential statistics. He will be primarily focused all but which of the following?
   1. The p value produced
   2. The size of the observed effect
   3. The number of subjects
   4. The measures of central tendency

Answer: D

Page ref: 26

Difficult

1. Which of the following factors does not need to be taken into consideration after a study’s results are statistically significant?
   1. The size of the observed effect.
   2. The number of subjects or observations.
   3. The variability of the data within each group.
   4. The number of variables investigated.

Answer: D

Page ref: 26

Difficult

1. If a study is found to have statistical significance, what is true of that study’s practical significance?
   1. The statistical and practical significance of a study two ways of reporting the same thing.
   2. The study cannot be practically significant.
   3. The study may or may not be practically significant.
   4. The study must be practically significant.

Answer: C

Page ref: 26

Moderate

1. Bess conducts a study about the effects of a new weight loss program for women. She finds that the new program helps a significant number of her participants lose between one and three pounds over the first six months. Her statistical analysis reveals that the results of her study are statistically significant. What can be said about the practical significance of her study?
   1. The study did not use a long enough timeframe to be able to demonstrate practical significance, regardless of the statistical significance.
   2. Because the study only used female participants, it does not have practical significance in the real world.
   3. Because her study showed better results for those in the program than those not in the program, her study shows strong practical significance.
   4. Even though the results are statistically significant, the relatively minimal weight loss shown by the participants reveals that her program is not practically significant.

Answer: D

Page ref: 26

Moderate

1. Why is it impossible to completely eliminate error from psychological research?
   1. Because it is impossible to control every variable that might influence the behaviour under investigation.
   2. Because all of the available research methods are fundamentally flawed.
   3. Because no matter how hard we try to prevent it, some participants in research studies are dishonest and therefore bring error into the study.
   4. Because statistics can be manipulated to show any outcome that is desired, and even the most honest researcher will invariable force the data to show the outcomes that they desire.

Answer: A

Page ref: 27

Easy

1. What basic research technique can be used to avoid biased samples?
   1. Random assignment to groups
   2. Blind assignment to groups
   3. Double-blind assignment to groups
   4. Two-way ignorant assignment to groups

Answer: A

Page ref: 27

Moderate

1. Nancy is using random assignment of participants to groups. Why is she using this procedure?
   1. She wants to avoid having a biased sample.
   2. She wants to have groups that are as similar as possible.
   3. She wants to use good research methods.
   4. She wants to create similar groups, avoid a biased sample, and use good research methods.

Answer: D

Page ref: 27

Moderate

1. Which of the following words is the best synonym for the term *reliability*?
   1. Accuracy
   2. Trustworthiness
   3. Error-proof
   4. Consistency

Answer: D

Page ref: 27

Moderate

1. Which of the following words is the best synonym for the term *validity*?
   1. Accuracy
   2. Trustworthiness
   3. Error-proof
   4. Consistency

Answer: A

Page ref: 27

Moderate

1. Moira checks her weight several times a day. One evening she steps on her bathroom scale and she is surprised when it is 6 pounds higher than her mid-day weigh-in. She steps on the scale again, but this time the weight is 2 pounds less. Puzzled, she steps on the scale again, only to find that she is 5 pounds lighter! Which of the following statements is true with regard to Moira’s scale?
   1. It lacks reliability
   2. It lacks face validity
   3. It lacks criterion validity
   4. It lacks internal validity

Answer: A

Page ref: 27-28

Moderate

1. \_\_\_\_\_\_\_\_\_\_ validity is the extent to which a study superficially measures what it is intended to measure.
   1. Reliable
   2. Criterion
   3. Face
   4. Surface

Answer: C

Page ref: 27

Easy

1. Zelda is given an intelligence test and scores in the high-average range. To make sure that this particular intelligence test has high \_\_\_\_\_\_\_\_\_ validity, her results are compared to her performance on her grade 12 standardized test, which is known to be related to intelligence.
   1. internal
   2. face
   3. construct
   4. criterion

Answer: D

Page ref: 27-28

Difficult

1. \_\_\_\_\_\_\_\_\_\_ validity is an indication of how closely a measurement correlates with another criterion of the characteristic being studied.
   1. Internal
   2. Construct
   3. Face
   4. Criterion

Answer: D

Page ref: 27

Difficult

1. Your best friend decided to go to university in the United States of America because her grandparents live there. She had to take the SAT, which is a standardized intelligence based test used as a part of the university admissions process. She thought it was a waste of time to take the test until she took introductory psychology and learned that students who score higher on the SAT tend to earn better grades in university. This example reflects the concept of \_\_\_\_\_\_\_\_\_\_ validity.
   1. descriptive
   2. predictive
   3. external
   4. anticipatory

Answer: B

Page ref: 28

Moderate

1. Which of the following is one important type of criterion validity?
   1. Predictive validity.
   2. Reliable validity
   3. External validity
   4. Construct validity

Answer: A

Page ref: 28

Easy

1. \_\_\_\_\_\_\_\_\_\_ validity uses a specific procedure that measures or correlates with a theoretical or intangible concept.
   1. Face
   2. Internal
   3. External
   4. Construct

Answer: D

Page ref: 28

Difficult

1. Dr. Subing conducted a research experiment investigating the effect of ceiling fans on water consumption in laboratory rats. She was able to control for almost every factor that would influence the rats’ desire to drink water, so in the end she had a lot of confidence that the dependent variable (water consumption) was caused exclusively by the independent variable (ceiling fans). In statistical terms, this project has high \_\_\_\_\_\_\_\_\_\_ validity.
   1. Construct
   2. Internal
   3. Predictive
   4. Criterion

Answer: B

Page ref: 28

Moderate

1. A test has \_\_\_\_\_\_\_\_\_\_ validity if the researcher is able to control all extraneous variables so that the only variable influencing the results of the study is the independent variable.
   1. continuous
   2. face
   3. internal
   4. external

Answer: C

Page ref: 28

Easy

1. In terms of validity, which quality of a study gives us the greatest confidence that the results discovered were due strictly to the relationship between the independent and dependent variables?
   1. internal
   2. external
   3. construct
   4. predictive

Answer: A

Page ref: 28

Difficult

1. Which of the following statements about internal and external validity is most accurate?
   1. Internal validity is focused on generalizability of findings, while external validity is focused on controlling for extraneous variables.
   2. A study that controls for all extraneous variables will have high internal validity, and high external validity because all the controls promote generalizability of findings.
   3. A study that controls for all extraneous variables will have high internal validity, but low external validity because findings from such controlled settings may not be generalizable.
   4. A study that does not control for extraneous variables will have high internal validity, and low external validity because freedom from controls promote generalizability of findings.

Answer: C

Page ref: 28

Difficult

1. Which type of bias or error most thoroughly explains the phenomenon of Clever Hans?
   1. The placebo effect
   2. The double-blind effect
   3. The subject expectancy effect
   4. The observer-expectancy effect

Answer: D

Page ref: 28

Easy

1. Dr. Zelman conducts research that explores the relationship between alcohol consumption and driving ability. He runs subjects through a driving obstacle course after they consume various amounts of alcohol. He concludes that the more alcohol a person consumes, the more impaired their driving will be. Because his results can be generalized to the larger population from which his sample was drawn, his study would be described as having high \_\_\_\_\_\_\_\_\_\_ validity.
   1. applicable
   2. external
   3. general
   4. criterion

Answer: B

Page ref: 28

Moderate

1. \_\_\_\_\_\_\_\_\_\_ validity is a type of validity indicating that a test can be generalized to the rest of the population.
   1. Face
   2. External
   3. Construct
   4. Internal

Answer: B

Page ref: 28

Easy

1. Keeping a participant unaware of the purpose of the study in which they are participating is one way to help reduce the \_\_\_\_\_\_\_\_\_\_\_ effect in research.
   1. subject-expectancy
   2. placebo
   3. observer-expectancy
   4. demand

Answer: A

Page ref: 28

Moderate

1. Canadian Psychologist Kang Lee told the children participating in a research study on lying that they were playing a guessing game. Each child was left alone in a room with a toy that was hidden behind him or her, and told not to peek. Later the child was asked to guess what toy was behind them, and whether they peeked. Why did Dr. Kang tell the children they were playing a guessing game when the real interest was whether or not the child would lie?
   1. To reduce the observer- expectancy effect
   2. To reduce the subject-expectancy effect
   3. To reduce both the observer and subject expectancy
   4. To reduce confirmatory bias

Answer: B

Page ref: 28

Easy

1. Dr. Muhammed wants to know if people will rate facial photographs more or less favourably based on the skin color and facial features of the pictures. He digitally alters photographs and mixes the features on each picture, so that participants in his study do not know exactly what they are looking at. Keeping subjects unaware of the exact nature of the study in which they are participating helps reduce \_\_\_\_\_\_\_\_\_\_ effects.
   1. criterion
   2. placebo
   3. subject-expectancy
   4. observer bias

Answer: C

Page ref: 28

Moderate

1. In a \_\_\_\_\_\_\_\_\_\_ experiment, both the research and participants are kept unaware of which participants are assigned to which subject group.
   1. double-blind
   2. single-blind
   3. unaware
   4. placebo

Answer: A

Page ref: 28

Easy

1. Dr. Baxter conducts an experiment investigating the effectiveness of a new antacid on reducing stomach pain. He recruits 100 chronic sufferers of acid indigestion, and places them in four groups, each receiving a different amount of medication. The first group receives a sham pill because it contains none of the new antacid whatsoever. He is very surprised, however, when he finds that group one reports a statistically significant reduction in stomach pain after taking their pill. Which of the following best explains why the participants in group one showed a response to the pill, even when it had no active ingredient?
   1. The subject-expectancy effect
   2. Demand characteristics
   3. The observer-expectancy effect
   4. The placebo effect

Answer: D

Page ref: 28

Easy

1. “Sometimes we experience a change just because we expect to experience a change.” This statement best summarizes the \_\_\_\_\_\_\_\_\_\_ effect.
   1. retrospect
   2. demand
   3. placebo
   4. validity

Answer: C

Page ref: 28

Moderate

1. The most extreme example of the power of suggestion is seen in the \_\_\_\_\_\_\_\_\_\_ effect.
   1. demand
   2. bias
   3. placebo
   4. sham treatment

Answer: C

Page ref: 29

Moderate

1. In 1971, a now famous experiment was conducted by psychologist \_\_\_\_\_\_\_\_\_\_, who assigned some participants to be mock prisoners and others to be mock prison guards. The project had to be discontinued within 5 days because of the unforeseen results that lead to extreme emotional and physical distress among the “prisoners.”
   1. Carl Rogers
   2. B.F. Skinner
   3. Philip Zimbardo
   4. Stanley Milgram

Answer: C

Page ref: 29

Easy

1. To give research participants a verbal description of the true nature and purpose of a study after the study has occurred is called \_\_\_\_\_\_\_\_\_\_.
   1. deception
   2. debriefing
   3. informed consent
   4. research ethics

Answer: B

Page ref: 29

Easy

1. Which of the following important issues are not among those that are of concern to a researcher who wants to conduct his/her project in an ethical manner?
   1. A participant’s right to privacy
   2. A participant’s right to be treated with respect
   3. The possibility of causing a participant discomfort or harm
   4. The use of deception

Answer: B

Page ref: 29

Easy

1. Dr. Lafferman conducts a research experiment that explores the use of different classroom techniques for helping students earn better grades. After the research is fully complete, he posts a list of all of the students’ grades on his office door, along with a description of which of the subject groups each student was in. Which rule of ethical behaviour has Dr. Lafferman forgotten to consider?
   1. A participant’s right to fair and just compensation for participation
   2. A participant’s right to privacy
   3. A participant’s right to be involved with research that does not include deception
   4. A participant’s right to give informed consent

Answer: B

Page ref: 29

Easy

1. Which of the following statements is true with regard to the ethical consideration that addresses causing harm or discomfort to research participants?
   1. The potential of causing harm or discomfort to participants is only permitted when the participants are animals and not human beings.
   2. A research project may run the risk of causing harm or discomfort as long as such potential is outweighed by the potential human benefits of the project.
   3. If a research participant could be caused harm or discomfort, then (s)he must be informed of the *full* nature of the research before it is conducted.
   4. Research participants who are placed at risk for harm or discomfort have the right to know, ahead of time, that they will not be permitted to discontinue their participation in the project.

Answer: B

Page ref: 29

Moderate

1. Which of the following is true with regard to using animals as research subjects?
   1. Many of the basic biological mechanisms underlying animal behaviours are significantly different than those underlying human behaviours.
   2. It is possible to obtain informed consent when using animal subjects.
   3. Animal suffering is a variable that does not need to be considered when designing an experiment because animals’ brains are not capable of registering pain or discomfort in a way that interferes with legitimate research questions.
   4. Animal protection organizations have suggested that the only way to ethically study animals is to observer them in their natural environments rather than in laboratory settings.

Answer: D

Page ref: 29

Easy

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_ is an ethics review panel established by a publicly funded institution to evaluate all proposed research by that institution.
   1. psychological review consortium
   2. research ethics panel
   3. institutional review board
   4. human considerations committee

Answer: C

Page ref: 29

Easy

1. The \_\_\_\_\_\_\_\_\_\_ has established a code of ethics that governs psychological research.
   1. Canadian Psychological Association (CPA)
   2. International Ethics Committee for Research (IECR)
   3. Canadian Psychological Research Board (CPRB)
   4. Canadian Research in Psychology Ethics Board (CRPEB)

Answer: A

Page ref: 29

Easy

1. What does an IRB do if a proposed research project is found to violate the rules governing ethical research practices?
   1. It would turn down that study.
   2. It would suggest that the study be conducted in a different country where research ethics rules are less stringent.
   3. It would insist that the researcher show a greater potential for human gain before approving the project.
   4. It would only approve the research if the institution for which the board worked stood to gain serious financial benefits as a result of the unethical research.

Answer: A

Page ref: 29

Easy

**True/False Questions**

1. People who use hindsight bias are often of the incorrect belief that they knew T F

what was going to happen all along.

Answer: True

Page ref: 18

1. The false consensus effect suggests that people are overly confident in their T F

knowledge of an event after the event has already taken place.

Answer: False

Page ref: 18

1. Dogmatism is an essential component of critical thinking. T F

Answer: False

Page ref: 18

1. Clever Hans was the young boy who was taught to be afraid of white, furry T F

animals by Rosalie Reyner and John B. Watson

Answer: False

Page ref: 19

1. The terms *hypothesis* and *theory* mean the same thing – an educated guess. T F

Answer: False

Page ref: 19

1. It is very important for a researcher to be sceptical in order to make sure that T F

all possible explanations for a research outcome are considered.

Answer: True

Page ref: 20

1. A confederate is a person who takes part in a study and acts like he/ she is T F

a participant when in fact he/ she works for the researcher.

Answer: True

Page ref: 20

1. When the data produced by one group of participants is compared to the data T F

produced by a different group of participants, it is called a within-group

experiment.

Answer: False

Page ref: 21

1. Random assignment to groups is an important technique to remember when T F

doing descriptive research.

Answer: False

Page ref: 21 - 22

1. Naturalistic observation enables researcher to get a realistic picture of how people T F

behave in their normal environments

Answer: True

Page ref: 22

1. Jean Piaget did a case study of his own children, and that study formed the T F

basis of his theories on cognitive development.

Answer: True

Page ref: 22

1. The most efficient way to get a large amount of data from a large number of T F

participants is to conduct a survey.

Answer: True

Page ref: 23

1. A standard deviation is the most useful type of inferential statistic to calculate. T F

Answer: False

Page ref: 25

1. A normal distribution is a symmetrical, bell-shaped curve. T F

Answer: True

Page ref: 26

1. Blinds and deception are sometimes used to avoid the subject –expectancy effect T F

Answer: True

Page ref: 28

1. Because research benefits humanity as a whole, researchers do not have T F

to be concerned with causing pain or discomfort to a few research participants.

Answer: False

Page ref: 29

1. The Canadian Psychological Association (CPA) has established a uniform T F

code of ethics that governs the research of all psychologists .

Answer: True

Page ref: 29

1. Psychological researchers must abide by the code of ethics established T F by the Canadian Psychological Association (CPA) of they wish to publish their work in scientific journals.

Answer: True

Page ref: 29

**Short Answer Questions**

1. What is the false consensus effect? Can you give an example of how you may have seen this occur in your life? Page ref: 18
2. Briefly define the terms *independent variable* and *dependent variable*. Page ref: 20
3. Why do researchers use random assignment when conducting an experiment? Page ref: 21
4. Why is it impossible for a researcher to draw cause-and-effect conclusions from a correlational study? Page ref: 21-22
5. What is the difference between a naturalistic observation and a laboratory observation? Page ref: 22
6. Why do researchers have to think long and hard about the wording they use on the questions contained in surveys? Page ref: 23
7. What are the two primary types of research settings, and what benefits and limitations do both offer a researcher? Page ref: 23
8. List and define the three measures of central tendency. Page ref: 24
9. What are the primary difference between a normal distribution and a skewed distribution? Page ref: 25-26
10. Define the terms reliability and validity. Which of the two is more critical and why? Page ref: 27
11. Define the observer-expectancy effect, and the subject-expectancy effect. How do we control for both? Page ref: 28
12. List and briefly describe three ethical considerations that must be addressed by a psychologist conducting a research project. Page ref: 29
13. What is an institutional Review Board? What purpose does it serve? Page ref: 29

**Essay Questions**

1. List and discuss the three empirical challenges of studying people. Why are they important as you gather data and draw conclusions about people’s behaviours? Page ref: 19
2. Create your own example of an experiment. Be sure to clearly indicate what the independent variable, dependent variable and type of design you are using are. Page ref: 20 -21
3. Compare and contrast between-group experiments and within-group experiments. What are the relative benefits and drawbacks of each type of design? Page ref: 21
4. Describe a research study that you might be interested in conducting that would most benefit from the use of a naturalistic observation design. Why would this be the preferred design for your study over another technique? Page ref: 22
5. Choose four of the following terms. Compare and contrast them. Discuss which you think is the most important in a research study. Page ref: 27-28

Reliability

Face validity

Criterion validity

Construct Validity

Internal Validity

External Validity

1. Discuss the Stanford prison experiment of Philip Zimbardo. What did we learn about the ethics of research from this event? Page ref: 29