

The following are questions that students had difficulty with on the first three exams.

Exam 1

1. A measure has construct validity if it: a) really measures what it is supposed to measure b) appears, on the surface, to measure what it is supposed to measure c) results in similar scores for the same person when it is repeated d) a & b above
2. Measuring the time that a participant takes to respond to the presence of a sound or measuring the height and weight of a participant are examples of _____ scales. a) nominal b) interval c) ratio d) ordinal
3. A measure is non-reactive (does not contain reactivity) if the measurement: a) is made in a field experiment b) occurs in a natural setting c) does not change the behavior being studied d) all of the above

Exam 2

For the next two questions, refer to the following paragraph.

A researcher is interested in possible genetic factors in panic disorder. She randomly selects a sample of students from Introductory Psychology classes and each participant is given a structured interview to determine if they have panic disorder. All subjects are also given a questionnaire to determine the number of their relatives who have anxiety disorders.

1. The type of design that is being used is a(n): a) within subjects experimental design b) one group pretest-posttest design c) relational design d) none of the above
2. The dependent variable(s) in this study is(are): a) the type of class that students were selected from b) the structured interview c) the questionnaire about relatives with anxiety disorders d) b & c above
3. Advantages of relational research include: a) if a relationship is observed between two behaviors, then the relationship must be that one caused the other b) researchers can make causal statements about the behavior under investigation c) it can be used to investigate questions that would be unethical in an experiment d) a & b above

Exam 3

For the next three questions, refer to the following paragraph.

A researcher investigated a treatment for seasonal affective disorder with a small number of subjects (three). In order to test a new drug that can decrease feelings of loneliness and fatigue, she started measuring the baseline depression of her subjects at the same point in time. Then, she continued measuring the subjects' depression and introduced the drug to each of the different individuals at a different point in time.

1. This is an example of a(n): a) factorial experiment b) cross-sectional design c) ABAB return to baseline design d) multiple baseline design
2. The design controls for: a) history effects b) differential mortality (participant dropout) c) regression to the mean d) all of the above
3. The particular design used in this study eliminates: a) confounding variables so a cause-effect conclusion can be made b) effects of repeated testing (repeated use of the dependent measure) c) carry-over effects from the drug as a factor in the results d) a & c above

For the next three questions, refer to the following paragraph.

A researcher is investigating the influence of vitamin C on an individual's allergy symptoms. The participant answers questions about their allergy symptoms on a daily basis. Over the course of the study the researcher gives the participant an inert (placebo) pill or vitamin C in alternate weeks (the participant does not know which is which). The researcher finds that the participant reports fewer, less severe allergy symptoms when they are taking the vitamin C.

4. This is an example of a(n): a) multiple baseline design b) interrupted time series design c) cross-sectional design d) ABAB return to baseline design

5. The particular design used in this study is sensitive to (could be influenced by): a) carry-over effects from the vitamin C as a factor in the results b) maturation (aging) of the participant c) events in the environment as an alternative explanation for the results d) b & c above

6. The Null Hypothesis in this study would be that: a) taking vitamin C will lead to a reduction in allergy symptoms b) the participant is experiencing a placebo effect from knowing when they are taking the vitamin C c) only random variation is influencing the participant's reports of allergy symptoms d) a & b above

7. The advantage(s) of a longitudinal design for examining changes in development is(are) that: a) it takes less time to complete the study than it does for a cross-sectional design b) it allows cause-effect conclusions to be drawn c) it eliminates the influence of cohort differences on the results d) b & c above
8. In a 2 X 5 factorial design, for a complete within subjects (repeated measures) design where every subject participates in all of the conditions, how many participants will you need to have 10 participants in each condition? a) 10 b) 20 c) 50 d) 100
9. The purpose of matching subjects in designs with subject variables is to: a) allow causal conclusions to be drawn about the subject variable b) ensure that all groups of participants are identical c) reduce the influence of confounding variables d) all of above
10. If a correlation coefficient that is computed for two variables is small (around .25) but significant, this means: a) that there is a strong, linear relationship between the two variables b) most of what is present in the data is not part of the linear relationship between the two variables c) that one of the two variables caused the variation in the other d) that there is no third variable that can account for the relationship

Answers:

Exam 1 - 1:d, 2:c, 3:c

Exam 2 - 1:c, 2:d, 3:c

Exam 3 - 1:d, 2:a, 3:c, 4:d, 5:a, 6:c, 7:c, 8:a, 9:c, 10:b