編號： 383

國立成功大學 106 學年度碩士班招生考試試題

系　　所：教育研究所

考試科目：社會科學研究法

考試日期：0213，節次：1

※ 考生請注意：本試題不可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

一，選擇題(50 分，每題 5 分)

Select one or more than one correct answers to the following questions. Partial credits will be given to items answered half-right.

1. Which of the following threats to internal validity arises when participants are selected for treatment because they score particularly high on a less than perfectly reliable test?
(a) instrumentation
(b) testing
(c) convergence
(d) regression

2. Researchers may choose to use a repeated measures design when
(a) they have too many participants who want to participate in the research.
(b) they wish to examine participants' behavior at one point in time.
(c) the experimental conditions take a long time to implement.
(d) they expect the effect of the independent variable to be small.

3. The critical difference between a repeated measures design experiment and a longitudinal survey design is that
(a) an independent variable is manipulated in the repeated measures design.
(b) an independent variable is manipulated in the longitudinal survey design.
(c) the research goal of the repeated measures design is to establish test-retest reliability.
(d) a correlation coefficient is the main statistical test in the repeated measures design.

4. The Rorschach test involved participants being shown a symmetrical ink blot and asked what they could see in it. Their responses (☐ butterfly? ☐ flock of birds? etc.) were assessed by a psychotherapist. The Rorschach used to be used to test for psychoticism but was abandoned; both because different psychotherapists gave completely different results for the same participant and also because it appeared not to be measuring anything we would regard as psychoticism at all.
The Rorschach test was abandoned because it was
(a) unreliable.
(b) invalid.
(c) uninterpretable.
(d) subject to sampling error.

5. A researcher compares students' performance using a new learning strategy to their performance using the old strategy. Students' performance is first tested with the old strategy, followed by the new strategy. The results indicate that students perform better with the new strategy. These results
(a) indicate that teachers should use the new strategy.
(b) are uninterpretable due to the confounding with practice effects.
(c) show the order of the two learning strategies does not matter.
(d) all of the above

6. An IQ test was administered to all students on admission to the Tainan City High School System. This IQ score was then correlated with each student's grade point average (an average of all students' grades throughout their degree studies). The correlation between the two scores was $r = 0.86$ ($p < 0.001$). Therefore, we can say that
(a) this IQ test has good inter-rater reliability.
(b) this IQ test has good predictive validity.
(c) this IQ test has good test-retest reliability.
(d) GPA depends on intelligence

7. The best way to demonstrate that an effect of an independent variable is reliable is through
(a) replication.
(b) computing an effect size.
(c) statistical significance testing.
(d) random assignment to conditions.

8. Which of the following is not one of the conditions that must be met in order to state confidently that the independent variable caused differences between groups in the dependent variable?
(a) establishing a covariation between the independent and dependent variables
(b) eliminating plausible alternative explanations for the differences in the dependent variable
(c) establishing a time-order relationship such that the change in the independent variable preceded the change in the dependent variable
(d) establishing that the independent variable is the only factor that could ever cause a change in the dependent variable

9. Which of the following factors does not influence the reliability of a measure of students' understanding of course material?
(a) how much the individuals differ in their understanding of the material
(b) number of items used to measure students' understanding of the material
(c) the way in which the measure is administered (e.g., whether the instructions are clear and the testing

situation is free of distractions)
(d) how much discriminant validity the measure of understanding has from other measures, such as intelligence

10. When not everyone answers a mail survey it is reasonable to assume that those who do respond are different in important ways from those who do not respond. The term used to describe this problem in survey research is
(a) response bias.
(b) selection bias.
(c) inadequate response rate.
(d) differential response rate.

二，簡答題(50%)

1. Classify the following studies as most likely being quantitative or qualitative: (12%)
   (a) the effect of ability grouping on academic outcomes for gifted students
   (b) racial stereotypes in middle school literature textbooks
   (c) teaching in an alternative high school
   (d) What is the relationship between adolescents' self-esteem and their self-perception as a student?
2. A principal wants to know if it is beneficial to keep class sizes small in kindergarten to grade 2.
   (a) Write an appropriate research question designed to answer this question (2%).
   (b) What is the independent variable (3%)?
   (c) What could be the dependent variable (3%)?
   (d) What is the population (3%)?
3. Please describe three different types of qualitative research: ethnography, grounded theory, phenomenological study (18%), and please match each of the following research questions with one type of qualitative research (9%):
   (a) What does this experience mean for the participants in the experience?
   (b) What theory can be derived inductively about a phenomenon from the data collected in a particular setting?
   (c) What are the culture and perspectives of this group of people in its natural setting?