UNSW PSYCHSOC

PSYC1111
Practice Examination

SURNAME: _____

GIVEN NAMES: _____

zID: _____

DATE: _____

1. Which of these is not a goal of science?
   A. Explanation
   B. Description
   C. Prediction
   D. Interpretation

2. Which of these types of validity is correct?
   A. Internal: Whether the research design and evidence allows us to demonstrate a clear cause and effect relationship
   B. Population: Whether the results generalise to different situations
   C. Construct: Whether the operationalised measurements actually represent what they are supposed to be measuring.
   D. Concurrent: If the measurement accurately predicts future behaviour

3. The grades for an exam you complete are symmetrical with $\mu=70$ and $\sigma=2.0$. You managed to score 69 on the exam, based on your z-score, how many standard deviations are you below the mean?
   A. 1
   B. 2
   C. 0.5
   D. 0.68

4. A correlational value of -1.00 indicates:
   A. A perfect relationship
   B. A direct relationship
   C. A moderate relationship
   D. No linear relationship

5. A scientific researcher was found to have changed and manipulated his data. Which form of scientific misconduct did he commit?
   A. Plagiarism
   B. Conflict of Interest
   C. Fabrication
   D. Falsification

6. Which of the following is NOT a measure that describes a sample or group of scores?
   A. median
   B. variance
   C. Skewed distribution
   D. z-score

7. In a normal distribution, _____ of the scores fall between Z = -1 and Z = 2.
   A. 68%
   B. 95%
   C. 81.5%
   D. 91.7%

8. What is described as the 'gold standard of experimental research'?
   A. Observational research
   B. Drug studies
   C. Double-blind procedures
   D. Selection bias

9. What is not a correct requirement for causality?
   A. Covariation
   B. Eliminate artifacts
   C. Temporal sequence
   D. Eliminate confounds

10. In testing for a hypothesis, when does a Type I error occur?
   A. When a significant test on a small sample does not produce a statistically significant result despite substantial differences between the true and null values
   B. The null hypothesis is incorrectly rejected when it is true
   C. The null hypothesis is incorrectly accepted when it is false
   D. When a test is biased

11. A pharmaceutical company has recently developed a drug that is hypothesised to cure Virus X. The drug is tested in a clinical trial among a sample of 1436 patients. While results show that there was no statistically significant reduction in overall symptoms, the drug was still concluded to be effective in curing the disease.

What can be concluded from this research?
   A. The conclusion is a false positive
   B. The conclusion is a false negative
   C. The sample size is too small to conclude anything significant
   D. There is no error in the conclusion

12. What is true of quasi-experiments?
   A. The researcher only has partial control over the independent variables + no random assignment
   B. The two types of quasi-independent variables are person/attribute and natural variables
   C. They are higher in external validity
   D. All of these are correct

13. What are the steps of the scientific method?
   A. Test> Hypothesis > Analyze and conclude > Update or discard > Theory
   B. Hypothesis > Test > Analyze and conclude > Update or discard > Theory
   C. Hypothesis> Test > Update or discard > Analyze and conclude > Theory
   D. Theory > Hypothesis > Update or discard > Analyze and conclude > Test

14. Study A saw that 100 similar-aged people were observed on their alcoholic behaviours for 30 years. Study B saw that 100 people of different ages were observed on their alcoholic behaviours. Which correctly describes these studies?
   A. A: Latitudinal, B: Cross-Divide
   B. A: Longitudinal, B: Cross-Sectional
   C. A: Latitudinal, B: Cross-Sectional
   D. A: Longitudinal, B: Cross-Divide

15. Which of the following is not a feature of measures of central tendency?
   A. Central tendency is a statistical measure
   B. Central tendency measures determine a single value
   C. Central tendency measures always accurately describe the shape of distribution
   D. The median and mode of measures of central tendency

16. Your exam score is 34/50 and your percentile rank is 45. Which of the following is true?
   A. 45% of the cohort got a mark higher than 34
   B. 34% of the cohort got a mark lower than 55
   C. 55% of the cohort got a mark higher than 34
   D. 34% of the cohort got a mark lower than 45

17. What is not an assumption of the *t*-test?
   A. Reasonably large sample size must be used
   B. It can be used for all measurement scales
   C. Values in the sample must consist of independent observations
   D. Population sampled must be from a normal distribution

18. Which of the following values fall under Pearson's *r*?
   A. 1.01
   B. -2.00
   C. 1.2
   D. -0.89

19. Emily participated in an experiment where she watched a traumatic and scarring video of shetland ponies eating flesh and kept getting intrusions from the video even weeks after the initial viewing. She was given an explanation of the study and was assured that her details were safeguarded. The study also had a valid design and yielded important results.
Which key tenet of ethical codes was likely violated?
   A. First do no harm
   B. Informed consent
   C. Protection of privacy
   D. Valid research design

20. Vaccines causing autism or humans only being able to use 10% of their brain is known as what?
   A. Information from tenacity
   B. Information from authority
   C. Superstition
   D. Common sense

21. When data is a positively skewed unimodal distribution, which of the following correctly orders the measures of central tendencies from their highest numerical value to the lowest?
   A. Mode, median, mean
   B. Mean, median, mode
   C. Mean, mode, median
   D. Median, mode, mean

22. Which of the following defines a repeated-measures hypothesis test?
   A. Evaluates mean difference between two populations using data from a single sample
   B. Evaluates mean difference between two populations using data from two distinct samples
   C. Evaluates mean difference between the two treatment conditions using data from a single sample
   D. Evaluates mean difference between the two treatment conditions using data from two distinct samples

23. What did the hot sauce experiment NOT demonstrate?
   A. How to operationalise dependent variables
   B. Hot sauce can be used to measure aggression
   C. How to operationalise independent variables
   D. People will force you to drink hot sauce if you make them angry

24. What is true of observational research?
   A. It is usually good for external validity
   B. It is usually good for internal validity (by themselves)
   C. Participant observation will not lead to experimenter bias
   D. Longitudinal and cross-sectional designs allow for the manipulation of variables

25. Which of the following is a limitation of using percentile?
   A. They only provide an overall picture of scores
   B. It can be confusing, because the percentile you are in relates to how much of the population falls below you and not the percentage of the population you are in
   C. The distance between the scores is not specified, as equal differences in percentiles do not reflect equal differences in actual scores
   D. They only tell you if you are in the upper or lower quartile

26. In the example 'He kicked the cat because he was angry vs. He kicked the cat because his anger summoned an evil leprechaun who pushed his foot into the cat", why is the first explanation better?
   A. It falls under empiricism
   B. It falls under parsimony
   C. It falls under testability
   D. It falls under verification

27. Within the office there is a range of incomes, with 95% of employees earning between $34 and $42 when calculated on an hourly rate. What is the mean hourly income for all the members of this office?
   A. $35
   B. $36
   C. $37
   D. $38

28. When is the value of effect size considered as medium according to Cohen's d?
   A. 0.10
   B. 0.20
   C. 0.30
   D. 0.40

29. What is correct of two-way designs?
   A. They are high in internal validity and low in external validity
   B. They are high in external validity and low in internal validity
   C. They cannot isolate temporal sequences
   D. They are easy to generalise outside the laboratory

30. Which of these types of validity is incorrect?
   A. External: How well a causal relationship holds across different people, settings, treatment, etc.
   B. Ecological: How well you can generalise the results outside of a laboratory environment to the real world.
   C. Content: Degree to which the items or tasks on a multi-faceted measure accurately sample the target domain
   D. Predictive: Compares the scores on two current measures to determine whether they are consistent

31. A graph depicted an increase in ice cream consumption which 'led' to murder. What kind of correlation is this?
   A. Negative indirect correlation
   B. Positive direct correlation
   C. Spurious correlation
   D. Third variable correlation

32. What type of measurement scale would be used for a question regarding the gender of the individual (with the answers female, male, or other)?
   A. Ordinal
   B. Nominal
   C. Interval
   D. Ratio

33. In which situation would outcomes defining the critical region be almost impossible to obtain?
    A. If H_0 is true
    B. If H_1 is true
    C. If H_0 is false
    D. If H_1 is false

34. What is operationalisation?
    A. Quantifying empirically the definition of variables
    B. Qualifying empirically the definition of variables
    C. A specific statement about the predicted/expected relationship between variables
    D. Updating and discarding theories when a hypothesis has a lack of evidence/evidence refutes it

35. What is the most appropriate method of measuring attribute variables?
    A. Mean Split
    B. Median Split
    C. Mode Split
    D. Masculinity Split

36. The definition of a two-tailed test is that it can:
    A. Run in either two directions and leads to acceptance of null hypothesis
    B. Run in either two directions and leads to rejection of null hypothesis
    C. Have no results that lead to acceptance of null hypothesis
    D. Have no results that lead to rejection of null hypothesis

37. Which among the following statements is TRUE with regards to a researcher selecting a larger alpha level?
    A. Increasing risk of making a Type II error
    B. Increased detection of treatment effect
    C. Greater difficulty in rejecting the null hypothesis
    D. None of the above

38. How was the LSD and Psychopath Psychotherapy experiment relevant to quasi-experiments?
    A. It was considered as a natural variable
    B. It was not considered as an attribute variable
    C. The experiment had good internal validity
    D. The experiment had bad external validity

39. In a tutorial of 5 students, the results on their first exam were 15, 16, 17, 18, 19. The same tutorial got the following results on their second exam 13, 15, 17, 19, 21. The results from the second exam have a _____ standard deviation and a _____ variance in comparison to the first exam.
    A. Smaller, larger
    B. Larger, smaller
    C. Smaller, smaller
    D. Larger, larger

40. What is the availability heuristic?
    A. A 'rule of thumb' for estimating probabilities based on the ease with which occurrences can be brought to mind
    B. The effect of linguistics in memory recall
    C. Critical thinking is essential for modern psychology
    D. Gaining knowledge from authority figures

41. Transforming any distribution of raw scores into z-scores results in a distribution with a mean of ___ and a standard deviation of ___.
    A. 0; 1
    B. 0; 0
    C. 1; 1
    D. 1; 0

42. Which of these is not an assumption of science?
    A. Determinism
    B. Empiricism
    C. Test-retest ability
    D. Verification

43. Which definition does not describe the types of reliability correctly?
    A. Inter-observer: the consistency between two observers or raters on a measurement
    B. Internal (split-half): whether all the measures on a test or set of measures are consistently measuring the same construct
    C. Test-retest: the inconsistency of measurement across singular sessions of testing
    D. All of these are correct

44. Under what condition is a t-test preferred over a z-score?
    A. When population mean is unknown
    B. When sample mean is unknown
    C. When significance of outcome cannot be determined
    D. When standard deviation is too great

45. Which of these accurately describes scientific variables?
    A. IV: Used to assess or measure the results/effects, Quasi-IV: Cannot be randomly allocated, DV: Manipulated or controlled by experimenter
    B. IV: Manipulated or controlled by experimenter, Quasi-IV: Cannot be randomly allocated, DV: Used to assess or measure the results/effects
    C. IV: Manipulated or controlled by experimenter, Quasi-IV: Can be randomly allocated, DV: Used to assess or measure the results/effects
    D. IV: Used to assess or measure the results/effects, Quasi-IV: Cannot be randomly allocated, DV: Manipulated or controlled by experimenter

46. The following numbers are the results of response scores on the Inventory of Callous-Unemotional Traits (ICU): 12, 4, 20, 5, 23, 21, 10, 19, 11, 12, 9.

What is the mean and mode of these scores?
    A. 13; 12
    B. 12; 13
    C. 11; 12
    D. 11; 11

47. Which of these is not a characteristic of a true experiment?
    A. Systematic manipulation of at least one variable
    B. Partial control of natural variables
    C. Measurement of at least one variable
    D. Random assignment of participants to groups

48. Which of the following is NOT a disadvantage of the repeated-measures design?
    A. Changes in participants' health of mood
    B. Time-related factors in conducting the study
    C. Influence of first treatment on the second treatment
    D. In cases such as in learning/development, the study changes over time

49. Which of the following **describe** the factors influencing a hypothesis test?
    A. Ability to detect when H_1 is false
    B. Influences size of effect
    C. Influences size of standard error in the denominator of a z-score
    D. All of the above

50. Which of these is not a threat to validity?
    A. Experimenter bias
    B. Participant effects
    C. Third variable
    D. Space effects