

UNIVERSITY OF ESWATINI

FACULTY OF HEALTH SCIENCES

FINAL EXAM

DECEMBER 2019

COURSE : HSC 403 / GNS 311

TITLE OF PAPER : HEALTH SYSTEMS RESEARCH/
RESEARCH METHODS

DURATION : 2 HOURS

MARKS: 75

INSTRUCTIONS:

1. DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR
2. ANSWER ALL THREE (3) QUESTIONS
3. EACH QUESTION IS TO BE ANSWERED ON A SEPARATE SHEET OF PAPER

QUESTION 1

MULTIPLE CHOICE QUESTIONS

For the following questions, write number and possible corresponding letter.
Example, 26. A

1. Which of the following is the first step in starting the research process?
 - A. Searching sources of information to locate problem.
 - B. Survey of related literature
 - C. Identification of problem
 - D. Searching for solutions to the problem

2. What is meant by the term research design?
 - A. A framework used for investigating a research problem.
 - B. A choice between using qualitative or quantitative methods.
 - C. A research style specifically used in qualitative studies.
 - D. A research style specifically used in quantitative studies.

Scenario: You are employed as a research assistant by EGPAF to be part of a study, which will seek to examine the effectiveness of strategies for improving retention to care and ART adherence in Eswatini. The study will be conducted in two regions; Hhohho and Shiselweni. The participants that will be based in Hhohho region will be given food packages, money for transport and will be called three days before to remind them about their next visit appointment while the Shiselweni ones will be offered usual care.

Question 3 to 5 relate to the above scenario.

3. What type of research design is used in this study
 - A. Experimental research design
 - B. Randomised controlled trial research design
 - C. Quasi-experimental research design
 - D. Non-experimental research design

4. The Shiselweni based participants would be
- A. The control group
 - B. The manipulated group
 - C. Observational group
 - D. Both A and B are correct
5. The Hhohho based participants would be;
- A. The control group
 - B. The manipulated group
 - C. Observational group
 - D. Both A and B are correct
6. How can you describe this study?
- A. The study is unethical
 - B. This study is a true experiment
 - C. The study lacks randomisation
 - D. Both A and C are correct
7. Researchers often use observations in situations in which;
- A. The study participants cannot be expected to provide reliable answers
 - B. There is no access to existing healthcare records
 - C. The researcher does not want his/her presence to be noticed.
 - D. The researcher is knowledgeable about the expected answers.
8. A reasoning where we start with certain particular statements and conclude with a universal statement is called
- A. Deductive Reasoning
 - B. Inductive Reasoning
 - C. Abnormal Reasoning
 - D. Transcendental Reasoning
9. Which of the following variables can be expressed in quantitative terms?
- A. Socio-economic Status
 - B. Marital Status
 - C. Status of the grade point average
 - D. Professional Attitude

10. Veli is in the process of developing his research proposal, and he is worried about choosing the research methodology. He comes to you for advice about his concern. What guide would you give him concerning selecting the appropriate research methodology?

- A. It depends on the researcher's preferences.
- B. It depends on the type of problem and the supervisor's preferences.
- C. It depends on the knowledge already available about the problem.
- D. It depends on the ethical acceptability of the research methodology.

11. A questionnaire is a

- A. Research method
- B. Measurement technique
- C. Tool for data collection
- D. Data analysis technique

12. "Controlled Group" is a term used in

- A. Survey research
- B. Historical research
- C. Experimental research
- D. Descriptive research

13. When you were reading a research article, you concluded that the researcher interpreted the findings on the perspective of the study participants. What type of researcher does that?

- A. Emic researcher
- B. Etic researcher
- C. Atheist researcher
- D. Both A and B are correct

14. All of the following are possible goals of an exploratory study EXCEPT _____.

- A. discover future research tasks
- B. expand understanding of a topic
- C. test hypotheses
- D. provide insight

15. Which type of research includes an array of interpretative techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning of certain phenomena?

- A. Quantitative
- B. Qualitative
- C. Statistical
- D. Descriptive

16. What is the primary concern with using qualitative techniques?

- A. expensive
- B. require less-time
- C. subjective
- D. objective

17. Which of the following research purposes are associated with qualitative research?

- A. Description
- B. Prediction
- C. Theory building
- D. Theory testing

18. One of the following statements is TRUE about quantitative research, and that is.....

- A. It uses a nonprobability sampling method
- B. Results are generalizable
- C. Data analysis is ongoing during the project
- D. Sample sizes are generally small

19. All of the following are types of nonprobability sampling techniques EXCEPT.

- A. purposive sampling
- B. snowball sampling
- C. convenience sampling
- D. random sampling

20. What type of hypothesis is the following? "Children with cystic fibrosis who use a cough assist device will experience less anxiety about their disease"

- A. Directional hypothesis
- B. Null hypothesis
- C. Associative hypothesis
- D. Non – directional hypothesis

Identify which of the following research could be Quantitative or Qualitative Research. (5 marks)

- 21. Researchers undertook an in-depth study to describe the experience of students who fall pregnant during their course of Bachelor's studies.
- 22. A study was conducted to determine the effectiveness of a preoperative pain management intervention for relieving pain among elders undergoing surgery.
- 23. One study explored the experiences of nurses who cared for patients who had been pronounced brain dead but kept alive to serve as organ donors
- 24. A study sought to investigate the incidence and severity of nausea accompanying combinative antiretroviral therapies among HIV infected patients and explored patterns of nausea in relation to patient characteristics.
- 25. A study determined prevalence of HIV among men in one of the rural communities in Manzini

QUESTION 2

2.1 Explain what is meant by the term research design? (1 marks)

2.2 Differentiate the between qualitative and quantitative approaches as guided by the following items;

- i. Data analysis procedures
- ii. Type of data and data collection methods
- iii. Literature review

You are required to draw a table to show your answers. Each item carries two marks, which means 1 mark for each approach. (2×3=6 marks)

2.3 Describe any 5 essential elements required in a Method Section for a research study.

(5 marks)

- 2.4 Explain two benefits of planning data collection for the researcher (2 marks)
- 2.5 What aspects of the research tool would be evaluated during pre-testing? (3 marks)
- 2.6 Differentiate between a sample parameter and a sample statistic (2 marks)
- 2.7 Differentiate between quota sampling and cluster sampling. (4 marks)
- 2.8 What is the difference between comparative and correlation studies? (2 marks)
- (25 marks)

QUESTION 3

- 3.1 Describe the following concepts in relation to the data collection tool and give an example for each (2 marks)
- (i) Validity
 - (ii) Reliability
- 3.2. What are the benefits of using combined data collection methods? (2 marks)
- 3.3. State why you would encourage a colleague of yours to use a written questionnaire to collect data for his research project? (3 marks)
- 3.4 A colleague of yours knows you are studying at the University of Eswatini and asks your advice about developing a questionnaire/ interview guide for research. She particularly wants to know what she should avoid and how she should phrase her questions. What information would you give her about these aspects? (6 marks)
- 3.5 Explain how justice could be ensured in research, mention four (4) issues (4 marks)
- 3.6 Differentiate between a research purpose and objectives. (2 marks).
- 3.7 You are expected to conduct a study among a population of 100 First year students. You are also given a sampling frame. State and explain the procedure you would follow to determine a sample size if there 25 participants. (6 marks)
- (25 marks)

GRAND TOTAL – 75 MARKS