

UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

FINAL EXAMINATION

JUNE 2021

COURSE : HSC 403

TITLE OF PAPER : HEALTH SYSTEMS RESEARCH

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

INSTRUCTIONS: For the following multiple choice questions write the number and the corresponding letter of the correct response, for example; 16 - D

1. A researcher has the following in his write up; (Dlamini 2002 as cited by Nkumane, 2015). This suggests that the source of information is from a (an);
 - A. Primary source
 - B. Secondary source
 - C. Tertiary source
 - D. Abstract

2. Research that provides practical solutions is one that is;
 - A. Participatory
 - B. Action oriented
 - C. Timed barred
 - D. Multi-disciplinary

3. The following are components that should be included in a research topic EXCEPT the:
 - A. phenomena or variables to be studied
 - B. population to be studied
 - C. geographical location
 - D. Significance of study

4. In the literature report of a study on Quality of Life (QoL), the researcher describes two previous investigations suggesting that spirituality is related to QoL. This information suggests the current study is significant because it:
 - A. Influences theology.
 - B. Builds on previous research.
 - C. Challenges existing theory.
 - D. Addresses multidisciplinary concerns.

5. Which of the following represents a concise, clear statement of the aim or purpose of a research study?
 - A. The research problem was identified as the general area of ignorance surrounding the causation and diagnosis of meningococcal meningitis, especially among soldiers in uniform, and this constituted a significant gap in the literature.

B. The study aimed to identify changes in the variable of hypertension across time, with the four most prevalent treatment modalities prescribed by primary health care workers in Manzini.

C. The phenomenon of depression experienced by the primary schoolchild was focused upon in this study. It is an under-researched topic, especially since recent research has identified correlational links with childhood obesity, especially in among urban communities.

D. Despite the fact that studying the disease, especially from standpoints of prevention and early detection, is costly and time-consuming, it represents a clear priority, since treatment itself is remarkably costly and the afflicted are not likely to experience even short remissions without early intervention.

6. All EXCEPT one, are factors you consider for planning how long the data collection will take by;

- A. Time it will take to allocate the research participants
- B. Time to locate the area
- C. Number of household members
- D. Number of interviews per person

7. A hospital-based project team wants to make sure that the observation instrument they developed has a high degree of reliability. They should

- A. Test it in a variety of settings both within and outside the hospital.
- B. Have several researchers use it within a specified timeframe and place, with the same subjects and see if similar results are achieved.
- C. Ask a team of expert researchers to validate that the instrument is measuring what it's supposed to measure
- D. Test it in the hospital setting only

8. Which of the following phrases would be found in a report of a qualitative study?

- A. "The hypothesis of this study is?"
- B. "Pain was measured using the Abbott pain scale?"
- C. "The control group received no instructions?"
- D. "Participants were asked to relate their experiences and perceptions of pain?"

9. A research team measured ambient noise levels inpatient rooms, patients' stress levels, and the duration of visits by family and friends. They found that high ambient noise was associated with high patient stress and short family visits.

This is an example of which type of study?

- A. Correlational

- B. Retrospective
- C. Experimental
- D. Quasi experimental

10. The sampling method where each member is recommended by one (1) or two (2) study population members or key informants is called:

- A. Snowballing
- B. Selective sampling
- C. Random sampling
- D. Convenient sampling

Scenario: Backache after duty hours has become common among staff nurse assigned in the stroke unit. A group of nurses decided to make a prospective study.

11. A prospective study would involve a nurse who suffered from backache:

- A. Anytime before or after the start of the study
- B. Assigned to stroke unit on day of study the study begins
- C. Assigned previous to the study
- D. No particular period

12. Which of the following is a characteristic of a quantitative method?

- A. Text based or/uses words
- B. Can be valid and reliable
- C. Uses unstructured questions
- D. More in-depth information sought

13. Observation of human behavior includes all EXCEPT;

- A. Participant observation
- B. Oral questioning
- C. Non-participant observation
- D. Used to cross-check information from interviews

14. Unstructured-in-depth interviewing includes all EXCEPT;

- A. Used for focus group discussions
- B. Requires more skill
- C. Uses pre – categorized questions
- C. Questions may change as interview proceeds

15. Analysis of qualitative data include all EXCEPT;

- A. Counting frequencies
- B. Opinions of respondents on a certain issue;
- C. Reasons for a certain behaviour
- D. Descriptions of practices or perceptions

TRUE & FALSE

INSTRUCTIONS: For the following statements write "T" if the statement is true or "F" if the statement is false. Eg 1 - T

16. A testable hypothesis is one that: consist of variables that are manipulated
T/F
17. Ethical acceptability of a research considers how acceptable, the research is to those being studied.
T/F
18. Studies aim at measuring confounding variables
T/F
19. Objectives predict the expected results or outcomes of the study.
T/F
20. It's possible to have a study about people's opinions
T/F
21. The primary purpose of literature is to interpret previous research finding
T/F
22. External validity means that the results can be only be generalised to the healthcare setting where the study was carried out.
T/F
23. In phenomological studies data is not comparable
T/F
24. A 5th year student included new questions following pre-testing of the study, this approach is not done in research
T/F
25. The purpose of a longitudinal study is to examine development at the same time
T/F

Total – 25 marks

QUESTION 2

2.5. Differential between multi – and one stage cluster sampling (4 marks)

2.6 Compare and contrast experimental and quasi-experimental research designs (6 marks)

2.7 A. Explain the differences between directional and non-directional and give examples (4 marks)

B. Differentiate between silo and synthesis or integrated literature review (6 marks)

2.5 Zinhle decides to use open – ended questions for her study what could be three (3) challenges she could face (3 marks)

2.6. Explain why open-ended questions are highly flexible (2 marks)

Total – 25 marks

QUESTION 3

3.1 As a principal investigator you plan to train the researchers for data collection.
Discuss what particular aspects or activities of the research team could be pre-tested to ensure smooth running of the study (5 marks)

3.2 You are a principal investigator tasked to determine the effects of dolutegavir among a certain group of adolescents over a period of 6 years.

a. Determine the type of study process you will follow (1 mark)

b. Describe how you would go about the study (2 marks)

c. What could be three (3) challenges you could face when conducting this study (3 marks)

3.3 A colleague is developing a questionnaire but is not sure what he should consider when sequencing the questions. What advice would you give him? (5marks)

3.4 Explain the advantages you would have if you were given the opportunity to use available information as your source of data in a study (4 marks)

Scenario: The Tuskegee Syphilis Study which ran for 40 years (1932 – 1972) six hundred (600) low-income African-American males, 400 of whom were infected with syphilis, were monitored for 40 years. They were provided free medical examinations but were not told about their disease or the study. This was in spite that a proven cure (penicillin) became available in the 1950s, the study continued until 1972 with participants being denied treatment.

A. Explain two (2) ethical principles that were violated (4 marks)

B. What is an independent variable (1 mark)

Total – 25 marks

GRAND TOTAL – 75 MARKS