

HMC 4307 COMMUNICATION RESEARCH METHODOLOGY MARKING SCHEME PAPER 1

Question 1

- Independent variable: Number of books at home
- Dependent variable : Primary school children reading ability
- Moderating variable: parents literacy

An independent variable X, is the variable you have control over, what you can choose and manipulate. It is usually what you think will affect the dependent variable. In some cases, you may not be able to manipulate the independent variable. It may be something that is already there and is fixed, something you would like to evaluate with respect to how it affects something else, the dependent variable like color, kind, time.

A dependent variable Y, is what you measure in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. It is called dependent because it "depends" on the independent variable. In a scientific experiment, you cannot have a dependent variable without an independent variable.

A moderating variable is a variable that neutralizes the cause and effect relationship between an independent and a dependent variable.

Research topics: the impact of book access on child reading ability/ Home book access and child reaching ability etc

Research objectives:

- To find out the impact of parent literacy on child reading ability
- To establish the number of books required for a child to read at home in order to improve their reading ability
- To establish the types of books required for a child to read at home in order to improve their reading ability etc

Research hypothesis

- Parents literacy levels do not influence a child's reading ability
- A child needs to read fifty books at home in order to improve their reading ability
- A child is required to read story books at home in order to improve their reading ability

b) Primary and secondary data: Primary data is data that is collected by a researcher from first-hand sources, using methods like surveys, interviews, or experiments. It is collected with the research project in mind, directly from primary sources. Secondary data is data gathered from studies, surveys, or experiments that have been run by other people or for other research.

- Basic and applied research: Also called as pure or fundamental research, is one that focuses on advancing scientific knowledge for the complete understanding of a topic or certain natural phenomenon, primarily in natural sciences. In a nutshell, when knowledge is acquired for the sake of knowledge it is called basic research. Applied Research can be defined as research that encompasses real life application of the natural science. It is directed towards providing a solution to the specific practical problems and develop innovative technology.

- Data presentation and data analysis: data presentation is showcasing or displaying your data to your readers for easier interpretation eg. Through pictures, charts and graphs. Data analysis is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making
- Probability and non probability sampling: A probability sampling method is any method of sampling that utilizes some form of random selection. In order to have a random selection method, you must set up some process or procedure that assures that the different units in your population have equal probabilities of being chosen. Humans have long practiced various forms of random selection. The difference between non-probability and probability sampling is that non-probability sampling does not involve random selection and probability sampling does.
- Sample and Population: sample is the group of individuals who actually participate in your study. These are the individuals who you end up interviewing (e.g., in a qualitative study) or who actually complete your survey (e.g., in a quantitative study). your population is the broader group of people to whom you intend to generalize the results of your study. Your sample will always be a subset of your population.

Question 2

Ethical guidelines governing social research

- Fabrication is making up data or results and recording or reporting them.
- Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Researchers who manipulate their data in ways that deceive others are violating both the basic values and widely accepted professional standards of science.
- Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
- Research misconduct does not include honest error or differences of opinion
- Plagiarism: using the ideas or words of another person without giving appropriate credit
- Self-Plagiarism: The verbatim copying or reuse of one's own research (IEEE Policy statement)
- Both types of plagiarism are considered to be unacceptable practice in scientific literature
- Duplicate publication/submission of research findings; failure to inform the editor of related papers that the author has under consideration or "in press"
- Unrevealed conflicts of interest that could affect the interpretation of the findings
- Misrepresentation of research findings - use of selective or fraudulent data to support a hypothesis or claim

Importance of a research proposal.

- It provides the respondents with a systematic plan of action to follow so as to avoid time consuming operations that are likely to be wasteful and costly.
- The proposal can be useful in soliciting for funds
- It acts as a basis for evaluating the research problem and the final report.
- It is a communication document that relays the project to other people such as policy makers, donors, and management
- It is a guide to the researcher that defines the boundary of the research process.

- It is a contract document and proposals are always binding.

Characteristics of research

- Research is systematic
- Research is objective
- Research is empirical
- Research requires verification of results
- Research offers probabilistic thinking

Question 3

Background information, Statement of the problem, Research objectives, Research questions, Justification of the study, Significance of the study, Scope and limitation of the study, Literature Review, Theoretical framework, Conceptual framework, Research Methodology, Research Design, Target population, Sampling frame, Sampling procedure, Sample size, Data collection procedure, Data presentation and analysis, Ethical considerations

Question 4

- Simple random sampling
- Systematic sampling
- Stratified sampling
- Cluster random sampling
- Multistage random sampling

Question 5

- Interviews
Focus group discussions
Questionnaires
Observation
- Based on explanation
- Based on explanation
- Only one variable can be manipulated and tested. It is possible to test more than one, but such experiments and their statistical analysis tend to be cumbersome and difficult.
 - The tested subjects must be randomly assigned to either control or experimental groups
 - The sample groups must be assigned randomly.
 - There must be a viable control group.
 - Ethics observed
- Magic bullet theory
Social learning theory

**HMC 4307 COMMUNICATION RESEARCH METHODOLOGY MARKING SCHEME
PAPER 2**

Question 1

- a) The research process.
- Identify the problem
 - Review the Literature
 - Clarify and justify the Problem
 - Define the Population
 - Develop the Instrumentation Plan
 - Collect Data
 - Analyze the Data
 - Present findings
- b) Ethics
- Fabrication is making up data or results and recording or reporting them.
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- c) Focus Group Discussion over interview
- When dealing with a large sample (saves on time and energy)
 - When dealing with a sensitive topic as it encourages people to open up
 - When you want to learn from the banter/talk between people
 - Explore needs, thoughts and feelings
- d) Functions of the literature review
- Acknowledge the contributions of other people in your area of interest e.g. citations. When citing studies make use of one name preferably the surname and the year of publication of a book.
 - Used to describe what has been done by other people in related area.
 - Used to identify the gaps in existing knowledge with regards the topic of interest. Your study should contribute to the widening of frontiers of knowledge in your topic of interest.
 - Used in order to avoid the duplication of study.
 - Helps the researcher to develop familiarity in the area of study particularly on variables and the way they are related.
 - Provides support to major issues in the study. It can help to confirm or reject some of the questions raised in the study.
 - Helps to show continuity of the previous work that has been done and the present study.
- f) Mixed methods research, quantitative and qualitative

Question 2

- a) Impact/ influence of cigarette smoking on academic performance
- b) X variable - cigarette smoking
Y variable- academic performance
- c) Non probability sampling eg. Convenience, snowball
- d) Observation
Face to face interviews
Questionnaires

Question 3

- a) Mailed Questionnaires advantages
 - Confidentiality/anonymity
 - No interview bias
 - Can be filled at one's own free time

Mailed Questionnaires disadvantages

- Possibility of question misinterpretation
- Low return rate

Telephone Interviews advantages

- Research can be gathered quickly because phone interviews are immediate.
- Most people have telephones, so you have an ample audience for gathering a representative sample.
- A telephone interview has a personal touch, so it can lead to valuable brand-building benefits if the interviewer conducts the survey in a professional and skilled way.
- Telephone interviewing can be quite cost effective as opposed to other methods such as in person.

Telephone Interviews disadvantages

- Sometimes telephone calls are perceived as telemarketing and thus negatively received by potential respondents.
- It can be challenging to design an effective phone survey because the questions need to be short and precise for easy comprehension.
- Timing must be carefully considered, both the time of day that the call is conducted as well as the length of the actual interview

b)

- A case study can be defined as an intensive study about a person, a group of people or a unit, which is aimed to generalize over several units'. A case study has also been described as an intensive, systematic investigation of a single individual, group,

community or some other unit in which the researcher examines in-depth data relating to several variables.

- A research population is individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming.
- A sampling frame is a list of all the items in your population. It's a complete list of everyone or everything you want to study.

Question 4

- Convenience Sampling
- Consecutive Sampling
- Quota Sampling
- Judgmental Sampling
- Snowball Sampling

Question 5

a)

- Developing and testing adequacy of research instruments
- Assessing the feasibility of a (full-scale) study/survey
- Designing a research protocol
- Assessing whether the research protocol is realistic and workable
- Establishing whether the sampling frame and technique are effective
- Assessing the likely success of proposed recruitment approaches
- Identifying logistical problems which might occur using proposed methods
- Estimating variability in outcomes to help determining sample size
- Collecting preliminary data
- Determining what resources (finance, staff) are needed for a planned study
- Assessing the proposed data analysis techniques to uncover potential problems
- Developing a research question and research plan
- Training a researcher in as many elements of the research process as possible
- Convincing funding bodies that the research team is competent and knowledgeable and that the main study is worth supporting
- Convincing funding bodies that the main study is feasible and worth funding

b)

- Advancing knowledge
- Solve existing problems
- Helps in policy formulation
- Future projections