

BT406 – RESEARCH

METHODOLOGY AND

SKILL

ENHANCEMENT

FINAL TERM MOST IMPORTANT QUESTIONS

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GROUP LINK: <https://chat.whatsapp.com/BjC6W0jZx8o9yaC2lSh1Gu>

1. What is linear negative and positive relationship?

A linear relationship refers to a relationship between two variables where the change in one variable results in a proportional change in the other. It can be positive or negative:

1. Linear Positive Relationship

- As one variable increases, the other also increases.
- The slope of the line is upward (positive).
- Example: The more hours you study, the higher your test score tends to be.

2. Linear Negative Relationship

- As one variable increases, the other decreases.
- The slope of the line is downward (negative).
- Example: The more hours you spend watching TV, the lower your test score may be.

These relationships are often measured by correlation coefficients (r):

- **+1** = perfect positive linear relationship
- **-1** = perfect negative linear relationship
- **0** = no linear relationship.

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2. What are disadvantages of personal interview?

Here are the main disadvantages of personal interviews:

1. **Time-Consuming:** Conducting and scheduling interviews takes a lot of time, especially with many participants.
2. **Costly:** Requires travel, interviewer wages, and sometimes venue arrangements, making it expensive.
3. **Interviewer Bias:** The interviewer's tone, behavior, or opinions can influence the respondent's answers.
4. **Limited Sample Size:** Due to time and cost, fewer people can be interviewed compared to surveys.
5. **Lack of Anonymity:** Respondents may not feel comfortable sharing honest answers face-to-face, especially on sensitive topics.
6. **Recording Issues:** Misunderstanding or misrecording of responses can lead to inaccurate data.
7. **Training Needed:** Interviewers must be well-trained to avoid leading questions and maintain neutrality.

3. What is Realist Ethnography and Critical Ethnography?

Realist Ethnography is a traditional form of ethnographic research that aims to objectively describe a culture or social group from an outsider's perspective. In this approach, the researcher strives to remain neutral and detached, minimizing personal bias and influence. The findings are usually presented in a factual, third-person narrative that reflects the observed behaviors, customs, and beliefs as accurately as possible. The goal is to give readers a clear, unfiltered understanding of the community being studied, as if the researcher is simply reporting what is seen and heard without interpretation. This method values accuracy, neutrality, and the portrayal of cultural realities as they appear to the researcher.

Critical Ethnography, on the other hand, is a more interpretive and politically engaged form of research that challenges traditional power structures and gives voice to marginalized communities. In this approach, the researcher does not claim objectivity but instead acknowledges their role in shaping the research. Critical ethnographers aim to uncover hidden power dynamics, inequalities, and injustices within the culture or group being studied. This method often involves advocacy, with the intent to not just understand a community but to promote social change. It emphasizes reflexivity, ethical responsibility, and the importance of representing suppressed perspectives.

4. What is case study?

A case study is a detailed, in-depth investigation of a single individual, group, event, or situation over a period of time. It is commonly used in social sciences, psychology, business, and education to explore complex issues in real-life contexts. Case studies allow researchers to gather rich, qualitative data using various methods such as interviews, observations, and document analysis. The goal is to gain a deep understanding of the subject, explore causes and effects, and sometimes develop theories or solutions. Unlike large-scale surveys, a case study focuses on depth rather than breadth.

5. What points should be kept in mind while presenting a table?

When presenting a table, the following points should be kept in mind:

1. **Clear Title:** The table should have a concise and descriptive title that explains its content.
2. **Proper Labeling:** Rows and columns must be clearly labeled to show what the data represents.

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3. **Simplicity:** Avoid overcrowding the table with too much data; keep it neat and easy to read.
4. **Units of Measurement:** Always mention the units (e.g., %, kg, years) used in the table.
5. **Consistent Formatting:** Use uniform font, spacing, and alignment for a professional appearance.
6. **Numbering:** If multiple tables are used, number them (e.g., Table 1, Table 2) for easy reference.
7. **Source Mentioned:** If data is taken from another source, cite it below the table.
8. **Logical Order:** Arrange the data in a meaningful sequence (e.g., ascending, chronological).
9. **Avoid Repetition:** Do not repeat the same data in rows and columns.
10. **Highlight Key Data (if needed):** Use bold or shading to draw attention to important values, but avoid overdoing it.

6. What is focus group discussion and purpose?

A Focus Group Discussion (FGD) is a qualitative research method where a small group of people (usually 6–12) discusses a specific topic guided by a moderator. The participants are selected based on shared characteristics relevant to the study, such as age, profession, or experience.

Purpose of FGD:

- To gather in-depth insights into people's attitudes, opinions, beliefs, and experiences.
- To explore reasons behind behaviors and preferences that are difficult to capture through surveys.
- To generate ideas, test new concepts, or understand community needs.
- To observe group dynamics and how opinions are influenced by discussion.
- Often used in social research, marketing, education, and health studies for problem exploration and decision-making support.

7. What are limitations of FGD (Focused Group Discussion)?

Here are the main limitations of Focus Group Discussion (FGD):

1. **Group Influence:** Participants may be influenced by dominant voices or peer pressure, leading to biased or less honest responses.
2. **Limited Generalizability:** Findings from a small group can't be applied to the larger population without caution.
3. **Moderator Bias:** The skill and neutrality of the moderator can affect the quality and direction of the discussion.
4. **Lack of Depth from Individuals:** Unlike one-on-one interviews, individuals may not fully express personal views in a group setting.
5. **Sensitive Topics Are Challenging:** Participants may feel uncomfortable sharing personal or sensitive information in front of others.
6. **Data Analysis is Complex:** The qualitative nature of discussions makes transcription, coding, and interpretation time-consuming and subjective.
7. **Logistical Challenges:** Arranging time, venue, and participation can be difficult and costly.

8. What is Anonymity?

Anonymity refers to a condition in which a person's identity is kept completely unknown or undisclosed. In research and surveys, anonymity means that the participants' names or identifying details are not collected or linked to their responses. This ensures that individual responses cannot be traced back to specific people.

The purpose of anonymity is to protect participants' privacy, encourage honest and open responses, and reduce fear of judgment or consequences. It is especially important in sensitive studies involving personal, social, or ethical topics.

9. Briefly explain Qualitative Research?

Qualitative research is a type of research that focuses on understanding human behavior, experiences, and social phenomena through non-numerical data. It involves methods like interviews, focus groups, observations, and content analysis to gather rich, detailed information. Instead of measuring how many or how much, qualitative research explores the **"why" and "how"** of a topic. It is flexible, interpretive, and aims to provide deep insights into people's thoughts, emotions, and interactions within their natural settings.

10. Write short note on Quantitative Research.

Quantitative Research is a systematic investigation that collects and analyzes numerical data to identify patterns, relationships, or test hypotheses. It uses tools like surveys, experiments, and statistical analysis to produce measurable and generalizable results. This research focuses on **"how many" or "how much"**, aiming for objectivity, precision, and replicability. It is commonly used to quantify behaviors, opinions, or variables and often presents findings through charts, graphs, and numbers.

11. What is validity?

Validity refers to the extent to which a research method or instrument measures what it is intended to measure. It indicates how accurate and trustworthy the results or conclusions are. High validity means the findings truly reflect the concept or phenomenon being studied, without being distorted by errors or biases.

12. What are two types of grounded theory?

The two main types of Grounded Theory are:

1. Glaserian Grounded Theory

- Developed by Barney Glaser.
- Emphasizes allowing theory to emerge naturally from the data without forcing preconceived ideas.
- Focuses on discovery through constant comparison and open coding.

2. Straussian Grounded Theory

- Developed by Anselm Strauss and Juliet Corbin.
- More structured and systematic, with detailed coding procedures (open, axial, and selective coding).
- Allows more researcher involvement in interpreting data and developing theory.

13. Differentiate between reference and bibliography.

Reference and **Bibliography** both list sources used in research, but they differ:

- **Reference**
 - Includes only the sources that are directly cited or quoted in the text.
 - Allows readers to find the exact sources you referred to.
 - Usually appears at the end of the document as a “References” or “Works Cited” list.
- **Bibliography**
 - Includes all sources consulted during research, whether cited in the text or not.
 - Provides a broader reading list related to the topic.
 - Appears as a “Bibliography” section and can be longer than the references.

14. What is Nominal Scale?

A Nominal Scale is the simplest level of measurement used to categorize data without any quantitative value or order. It labels or names variables into distinct groups or categories that are mutually exclusive. Examples include gender (male, female), blood type (A, B, AB, O), or colors (red, blue, green). Numbers can be used as labels but don't indicate any ranking or measurement—just different categories.

15. What is Survey and Field interview?

Survey is a research method that collects information from a large group of people using structured questionnaires or forms. It aims to gather data about opinions, behaviors, or characteristics, often using multiple-choice or rating questions. Surveys can be done in person, by phone, online, or by mail.

Field Interview is a type of data collection done face-to-face in the participant's natural environment (field). It involves direct, often informal or semi-structured conversations to gather detailed, context-rich information. Unlike surveys, field interviews allow flexibility to explore topics more deeply based on responses.

16. What is sample selection?

Sample selection is the process of choosing a subset of individuals, items, or data from a larger population to participate in a study or research. The goal is to select a representative group that accurately reflects the characteristics of the whole population, allowing researchers to make valid generalizations or conclusions without studying everyone. Proper sample selection helps ensure the reliability and validity of research results.

17. What is external validity?

External validity refers to the extent to which the results of a study can be generalized or applied to settings, people, times, or situations beyond the specific conditions of the original research. It answers the question: **“Can the findings be applied to the real world or other groups?”** High external validity means the study's conclusions are relevant and useful outside the experimental context.

18. What is narrative research and phenomenology?

Narrative Research

Narrative research is a qualitative method that focuses on studying and interpreting the stories people tell about their lives or experiences. It aims to understand how individuals make sense of events by examining their personal narratives, often through interviews, diaries, or written accounts. The researcher analyzes these stories to explore meaning, identity, and cultural context.

Phenomenology

Phenomenology is a qualitative research approach that explores the lived experiences of individuals regarding a particular phenomenon. It seeks to understand the essence and meaning of those experiences from the participants' perspectives. Researchers gather deep, detailed descriptions through interviews and reflect on them to capture the core nature of the experience.

19. What are three types of control?

The three common types of control are:

1. Feedforward Control

- Focuses on preventing problems before they occur by anticipating and planning ahead.
- **Example:** Training employees before new technology is introduced.

2. Concurrent Control

- Takes place during the actual process or activity to monitor ongoing performance and make real-time adjustments.
- **Example:** Supervisors watching production lines to fix errors immediately.

3. Feedback Control

- Happens after a process is completed by evaluating outcomes and using the information to improve future performance.
- **Example:** Reviewing customer feedback after product delivery to improve quality.

20. What validity problems occur with secondary data?

Validity problems with secondary data include:

1. **Accuracy Issues:** The data may contain errors or inaccuracies because the original collectors might have made mistakes or used unreliable methods.
2. **Lack of Relevance:** Secondary data might not perfectly fit the new research question or context, leading to misleading conclusions.
3. **Bias in Data Collection:** The original data might reflect the biases or agendas of the first researchers or institutions.
4. **Outdated Information:** The data may be old and no longer reflect current realities.
5. **Incomplete Data:** Important variables or details needed for the new study might be missing.
6. **Lack of Control:** Researchers cannot control how secondary data was collected, limiting the ability to verify its validity.

21. What is unstructured and semi structured data?

Unstructured Data

- Data that has no predefined format or organization.
- It's often text-heavy and difficult to search or analyze using traditional methods.
- Examples: emails, videos, social media posts, photos, audio recordings.

Semi-Structured Data

- Data that doesn't fit into strict tables but has some organizational elements like tags or markers.
- Easier to analyze than unstructured data because it includes labels or metadata.
- Examples: XML files, JSON files, emails with headers.

22. What are challenges with case study?

Challenges with case studies include:

1. **Limited Generalizability:** Results from a single case or small number of cases may not apply broadly to other contexts.
2. **Time-Consuming:** Collecting and analyzing detailed data can take a lot of time.
3. **Researcher Bias:** Close involvement with the case can lead to subjective interpretations.
4. **Complex Data Management:** Handling large amounts of qualitative data can be difficult.
5. **Difficulty in Replication:** Unique cases make it hard for other researchers to replicate the study.
6. **Access Issues:** Gaining permission and access to certain cases or participants may be challenging.

23. Define index and scale.

Index

An index is a composite measure that combines multiple indicators or variables into a single score to represent a broader concept. It usually involves adding or summing different items without weighting them. For example, a poverty index might sum various poverty-related factors.

Scale

A scale also combines multiple items but assigns different weights or scores to each item based on their intensity or importance. It measures the degree or intensity of a concept, often using ordered responses (like Likert scales). For example, a satisfaction scale measures how satisfied someone is, with varying levels from "very dissatisfied" to "very satisfied."

24. Pertaining theory evidences, what questions come in the mind of researcher?

When dealing with theory evidence, a researcher typically asks questions like:

- Is the evidence relevant and sufficient to support the theory?
- How well does the evidence explain or predict the phenomenon?
- Are there alternative explanations for the evidence?
- What are the strengths and limitations of the evidence?
- Is the evidence collected systematically and objectively?
- Does the evidence come from reliable and valid sources?

- How does the evidence relate to existing theories or knowledge?
- Can the evidence be generalized beyond the specific context?

25. Explain main body of research model and write its parts.

The main body of a research model represents the core structure or framework that guides the research process. It shows how different variables or concepts are related and helps to explain or predict outcomes.

Parts of the Main Body of a Research Model:

- **Variables/ Constructs:** These are the key elements or factors studied. They can be independent (cause), dependent (effect), or intervening variables.
- **Relationships/ Hypotheses:** Indicate how variables are connected, usually shown by arrows or lines representing cause-effect or associations.
- **Assumptions:** The underlying beliefs or conditions accepted as true for the model to hold.
- **Boundary Conditions:** Limits or scope where the model applies, such as specific populations or settings.
- **Context/ Environment:** External factors or background conditions influencing the variables and relationships.

26. Define research proposal and its sections.

Research Proposal is a detailed plan or blueprint for a research project. It outlines what the researcher intends to study, why it's important, and how the study will be conducted. The proposal helps get approval, funding, or guidance before starting the actual research.

Common Sections of a Research Proposal:

- **Title:** Clear and concise statement of the research topic.
- **Introduction:** Background information and rationale for the study.
- **Problem Statement:** Specific issue or gap the research aims to address.
- **Objectives:** Goals or questions the research intends to answer.
- **Literature Review:** Summary of existing research related to the topic.
- **Research Methodology:** Detailed plan of how the research will be carried out (design, sample, data collection, analysis).
- **Significance of the Study:** Importance and potential impact of the research.
- **Timeline:** Estimated schedule for completing the research.
- **Budget (if applicable):** Expected costs and resources required.
- **References:** List of sources cited in the proposal.

27. What are challenges of implementing case study?

Challenges of implementing a case study include:

1. **Access and Permission:** Gaining entry to the site or participants can be difficult due to privacy or organizational restrictions.
2. **Time-Intensive:** Collecting detailed data and conducting thorough analysis takes a lot of time.
3. **Researcher Bias:** Close involvement may affect objectivity and lead to subjective interpretations.

4. **Complex Data Management:** Handling and organizing large amounts of qualitative data is challenging.
5. **Generalizability Issues:** Findings from one case may not apply to other contexts or populations.
6. **Ethical Concerns:** Protecting participant confidentiality and managing sensitive information can be complicated.
7. **Resource Constraints:** Requires sufficient funding, manpower, and tools which may not always be available.

28. Write note on validity in experiment.

Validity in Experiment refers to how well an experiment measures what it is intended to measure and how confidently we can trust its results. It ensures that the conclusions drawn are accurate and meaningful. There are two main types of validity in experiments:

1. Internal Validity

- The extent to which the experiment accurately shows a cause-and-effect relationship between variables without being influenced by other factors.
- High internal validity means the results are due to the independent variable, not external influences.

2. External Validity

- The extent to which the experimental findings can be generalized to other settings, populations, or times outside the study conditions.

29. What is participant and non-participant observation?

Participant Observation

In participant observation, the researcher actively engages and takes part in the daily activities of the group or setting being studied. This involvement helps the researcher gain an insider's perspective and a deeper understanding of behaviors and social interactions.

Non-Participant Observation

In non-participant observation, the researcher observes the subjects without becoming involved in their activities. The researcher remains a detached outsider, simply watching and recording behaviors without influencing the situation.

30. What is report writing?

Report writing is the process of creating a structured document that presents information clearly and systematically about a particular topic, research, or investigation. It communicates findings, analysis, and recommendations to a specific audience. Reports are often used in academic, business, scientific, and technical fields to inform decisions or share results.

31. What are types of phenomenology?

The main types of phenomenology are:

1. Descriptive Phenomenology

- Founded by Edmund Husserl.
- Focuses on describing the essence of lived experiences by setting aside biases (called “bracketing”).

- Aims to capture how things appear to consciousness.

2. Interpretive (Hermeneutic) Phenomenology

- Developed by Martin Heidegger and others.
- Emphasizes interpreting and understanding the meaning of experiences within their context.
- Recognizes the researcher's role in interpreting data, not just describing.

3. Transcendental Phenomenology

- A variation of descriptive phenomenology focusing on reaching pure consciousness by removing all preconceived notions.

4. Existential Phenomenology

- Focuses on human existence and the lived experience in relation to themes like freedom, choice, and authenticity.

32. What is importance of concept in research with examples?

Importance of Concept in Research:

Concepts are the basic building blocks of research. They represent abstract ideas or phenomena that researchers want to study, explain, or measure. Concepts help to clearly define what is being investigated, guide the development of research questions, and form the foundation for theories and hypotheses.

- **Clarity:** Concepts provide clear definitions that help avoid confusion and ensure everyone understands what is being studied.
- **Focus:** They narrow down broad topics into specific areas for investigation.
- **Measurement:** Concepts allow researchers to identify variables and how to measure them.
- **Theory Building:** Concepts link together to form theories that explain relationships between phenomena.

Example:

In a study on stress, the concept of “**stress**” must be clearly defined—whether it means physical tension, emotional strain, or a combination. This helps decide how to measure it (e.g., through questionnaires, physiological indicators) and how it relates to other concepts like “coping” or “work performance.”

33. What is role of hypothesis in research methods?

The role of hypothesis in research methods is to provide a clear, testable statement or prediction about the relationship between variables. It guides the entire research process by:

1. **Focusing the Study:** Helps narrow down the research to specific questions or problems.
2. **Guiding Data Collection:** Determines what data needs to be gathered to test the hypothesis.
3. **Providing Direction for Analysis:** Helps decide which statistical or analytical methods to use.
4. **Facilitating Interpretation:** Offers a basis to confirm or reject assumptions and draw conclusions.
5. **Advancing Knowledge:** By testing hypotheses, research can support or challenge existing theories, leading to new insights.

34. What is historiography?

Historiography is the study of how history is written and interpreted. It examines the methods, sources, and perspectives historians use to understand and present past events. Historiography looks at the different ways historical narratives are constructed, the biases involved, and how interpretations change over time. Essentially, it's the history of history-writing.

35. Differentiate between cross sectional studies and longitudinal studies?

Cross-Sectional Study:

A cross-sectional study examines a population or a particular phenomenon at a single point in time. It provides a snapshot that helps researchers understand the current status or compare different groups within the population. This type of study is useful for identifying prevalence, patterns, or relationships among variables quickly and with less cost. However, because data is collected only once, it cannot establish cause-and-effect relationships or show how things change over time.

Longitudinal Study:

A longitudinal study involves observing the same subjects repeatedly over an extended period. This approach allows researchers to track changes, developments, or trends within individuals or groups, making it valuable for understanding cause-and-effect and the dynamics of behavior or conditions. Although longitudinal studies provide rich and detailed data, they are often costly, time-consuming, and face challenges like participant dropout, which can affect the results.

36. Differentiate between dependent and independent variable.

The **independent variable** is the factor that the researcher changes or controls to observe its effect, often considered the cause in a study. In contrast, the **dependent variable** is the outcome or response that is measured to see how it is affected by changes in the independent variable. For example, if a study examines how different amounts of study time influence exam scores, the study time is the independent variable, while the exam scores are the dependent variable, as they depend on how much time was spent studying.

37. Differentiate between exploratory and descriptive research.

Exploratory research is conducted to investigate a problem or topic that is not well understood. It aims to gather preliminary information, generate ideas, and identify variables or hypotheses for further study. It is flexible and open-ended, often using qualitative methods like interviews or focus groups to explore new insights.

Descriptive research, on the other hand, aims to accurately describe characteristics, behaviors, or situations of a population or phenomenon. It focuses on “what” rather than “why” or “how,” often using structured methods like surveys or observations to collect quantifiable data. Descriptive research provides a detailed snapshot but does not explore causes or relationships deeply.

Disclaimer:

For best results, it is advised NOT to rely on this file only. Go through video lectures, handouts and other sources as well.

Regards,

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