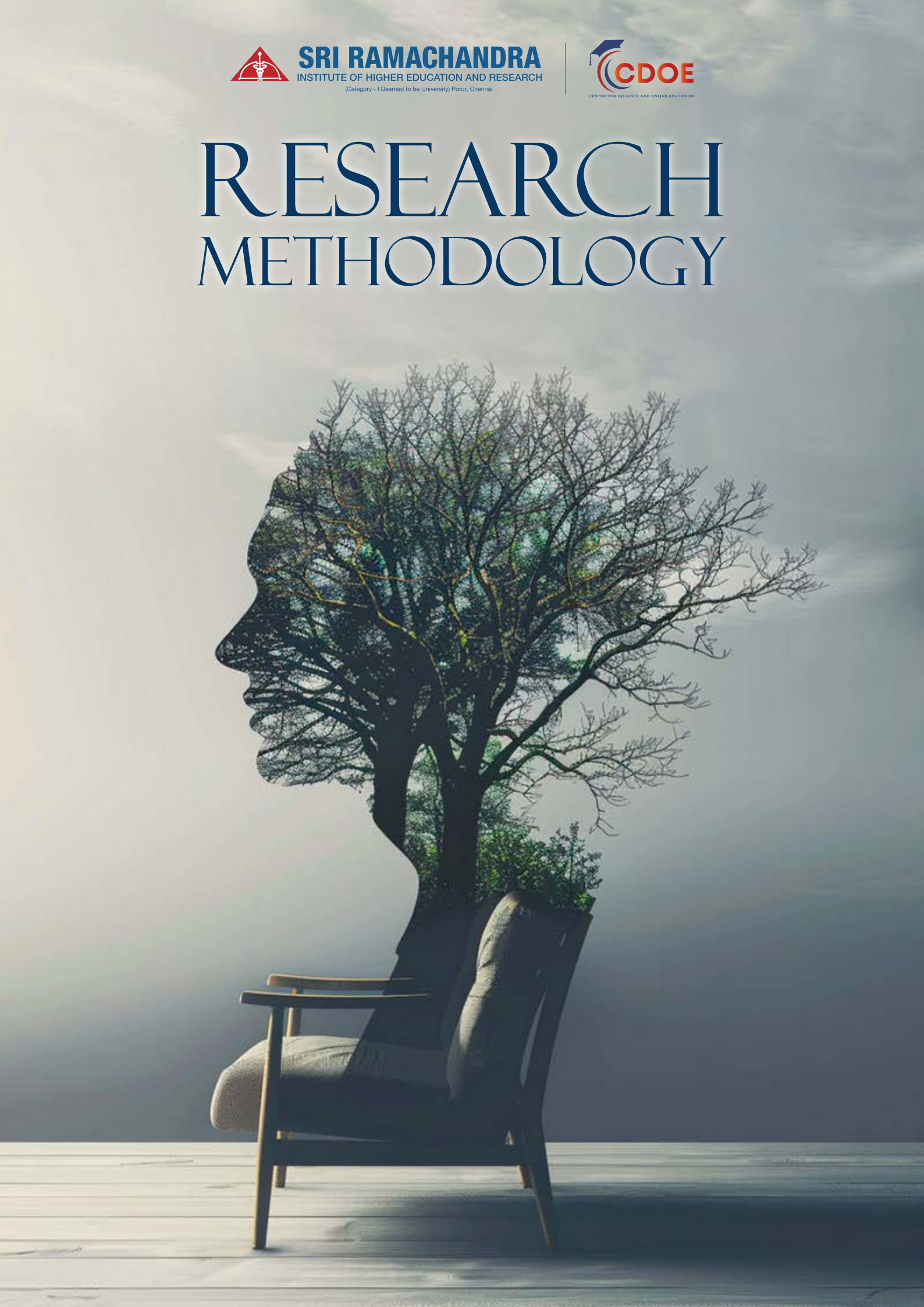
SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai.

CDOE
CENTER FOR DISTANCE AND ONLINE EDUCATION

RESEARCH METHODOLOGY



Research Methodology

Dr. K. Ranjini
&
Ms. G. Aishvarya

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CHANCELLOR

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Dr. Uma Sekar
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Student's Guidelines

The course is divided into modules. Each module is categorised into subtopics. The pedagogy used to design this course is to enable the student to acquire the concepts with ease by using the following elements.

- **Videos & PPT:** Online videos and respective ppts provided for all the modules to understand the concepts given by the SRIHER Subject Matter Experts.
- **Self-Learning Material:** Self-learning materials provided for all the modules for the learners to learn independently, at their own pace.
- **Live Lectures:** At the end of each module 1 hour live lecture will be given by SRIHER Subject Matter Experts.
- **Demo Videos:** Demo videos will help learners to actualise concepts, ideas, principles, strategies, and best practices for the respective modules.
- **E-References:** A list of online sources including academic e-Books and journal articles, you-tube videos that provides reliable and accurate information on each topic.
- **Discussion Forum:** Learners can engage in conversations, share ideas, and discuss topics with the Subject Matter Experts.
- **Blogs:** Platforms for learners to share knowledge, experiences, and resources related to the course.
- **Self-Assessment:** These include a set of "True" or "False" statements, fill-in-the blanks and multiple choice questions to be answered at the end of each topic.
- **Hands-on / Field Projects:** Interactive experiential learning and on-the-field projects will be assigned to learners to fully understand the subject and train them to be industry ready.
- **Real time scenarios / Case studies / Activities / Use cases / Caselets:** These instances of the real happenings reinforce that concepts, principles, and strategies mentioned in the theory part of the subject.
- **Final Assessment:** Learners who successfully secure a score of 50% or above in the final proctored exam will be awarded a course completion certificate.

Author's Profile

Dr. K. Ranjini is currently serving as an Assistant Professor at Sri Ramachandra Institute of Higher Education. Her academic achievements include a Bachelor's degree in Psychology from Thiruvalluvar University, a Master's degree in Clinical Psychology from CMR University, Bangalore, and a Ph.D. in Psychology from Lincoln University, Malaysia. She is also registered under the National Council of Allied Health Professionals (NCAHP), further validating her professional expertise.

She is a Consultant Psychologist and Assistant Professor of Psychology with over four years of experience spanning clinical, academic, and educational settings. She specializes in working with children, adolescents, families, and couples, providing psychological assessments, counseling, and therapeutic interventions for a range of emotional and behavioral challenges such as anxiety, depression, relationship issues, and academic stress.

As an Assistant Professor, Dr. Ranjini has taught core psychology subjects, mentored students, and guided research projects. She has actively contributed to the field through research publications and presentations at international conferences. Her work reflects her dedication to promoting mental health awareness and psychological well-being.

Author's Profile

Ms. G. Aishvarya is a dedicated academician with a strong foundation in psychology and human resource management, she holds a Master's degree in Applied Psychology with a specialisation in Organisational Behaviour from Women's Christian College, Chennai, and a Bachelor's degree in Psychology from PSG College of Arts and Science, Coimbatore. She is currently working as an Assistant Professor at Sri Ramachandra Institute of Higher Education and Research.

She worked as a career counsellor in the Naan Mudhalvan program under the Tamil Nadu Skill Development Corporation, guiding students towards informed career choices. Her professional journey includes internships in child psychology, forensic psychology, and human resources, equipping her with hands-on experience in psychological assessment, intervention strategies, recruitment, training, and employee wellbeing programs.

She holds an Internationally Accredited Certificate in Geriatric Counselling from the Indian Council for Professional Education Mission (ICPEM), demonstrating her expertise in counselling for the elderly. Additionally, she has completed NPTEL SWAYAM online certification courses in consumer psychology and human behaviour. Her research interests lie in workplace psychology, employee motivation, stress management, and forensic psychology. She is passionate about mentoring students, fostering a research- driven academic environment, and integrating psychological theories with real-world applications.

Course Description

In this fast-paced world, everybody is searching for knowledge that is unknown to them. Research methodology uses specific techniques or methods to study the unknown and provides possible solutions. "A methodical approach to addressing the research topic is known as research methodology."

Researchers must be aware of the assumptions that underlie different approaches and the standards by which they can determine which methods and techniques will be most effective for a given problem and which ones will not.

Research methodology provides a fundamental understanding of various subjects. More importantly, it equips you to plan research projects, analyse data, critically assess results, and use evidence-based practices in various fields, such as business, sociology, and medicine. This practical aspect of the course will keep you engaged and excited about the possibilities of applying your learning in real-world scenarios.

The following are some psychology-related topics where research methodology is beneficial.

1. Cognitive Psychology: Recognising experimental techniques for memory, learning, and perception research.
2. Clinical Psychology: Researching mental health conditions, cures, and treatments
3. Social psychology: The study of group dynamics, attitudes, and human behaviour through research.
4. Educational Psychology: By conducting research and developing studies on student performance and learning strategies.
5. Behavioural Science: Investigating human behaviour using both qualitative and quantitative methods

This intellectual stimulation and challenge are key benefits of the course that keep you engaged and motivated. It enables you to solve problems effectively, evaluate data, identify knowledge gaps, and contribute to the field by testing theories and generating new ideas. This intellectual stimulation and challenge are key benefits of the course that keep you engaged and motivated.

Research methodology is essential because it provides methodical ways to examine human emotions, ideas, and actions. It guarantees scientific accuracy and produces trustworthy and legitimate results. Psychologists examine mental processes, identify trends, and formulate theories using various techniques, including surveys, experiments, case studies, and observations.

The primary advantage is the research methodology's capacity to reduce biases and ensure fairness through empirical evidence. While correlational studies examine links between variables, experimental research establishes cause-and-effect relationships. Longitudinal studies provide insights into human development by monitoring behavioural changes across time.

Research techniques in clinical psychology aid in the diagnosis, evaluation of treatment, and design of therapeutic interventions for mental illnesses. Research has confirmed evidence-based practices, including cognitive-behavioural therapy (CBT).

Ethical standards protect participants' rights and uphold research integrity by establishing informed consent and confidentiality. By facilitating precise data interpretation, statistical analysis further enhances psychological research.

Research methodology guarantees that psychology is a legitimate scientific field that advances knowledge and care for mental health issues. This role in advancing knowledge should inspire and motivate you to delve deeper into the course and contribute to the field of psychology.

This course offers four credits and consists of 13 units, each carefully designed to provide an in-depth understanding of research methodology.

MODULE 1: FOUNDATIONS OF RESEARCH

Foundations of Research: Scientific Method and its goals; Research Process; Criteria of good research; Research problem; Criteria for selecting the problem; Variables; Defining the research problem; Hypotheses; Types of Hypotheses; Testing of Hypotheses and their limitations.

MODULE 2: APPROACHES OF RESEARCH DESIGN

Research Design Approaches: Quantitative research designs: Exploratory research, survey research, Experimental research; Research design: Meaning, purpose and principles, Simple randomized designs, Factorial designs; Qualitative research designs: Conceptualizing

Research questions, issues of paradigm, Designing samples, Theoretical sampling, N=1 design, Time series design, Mixed method research, Contrasting qualitative with quantitative approach in research process.

MODULE 3: SAMPLING METHODS AND DATA COLLECTION IN RESEARCH

Sampling Methods and Data Collection in Research: Quantitative Sampling and methods of data collection: probability (VS) Non probability methods; Determination of sample size;

Qualitative method of collecting data: What is qualitative data? Various methods of collecting qualitative data: Participant observation, Interviewing, Focus groups, Life history and oral history, Documents, Diaries, Photographs, Films and videos, Conversations, Texts, and Case studies.

MODULE 4: REGRESSION ANALYSIS AND NON-PARAMETRIC STATISTICS METHODS IN QUANTITATIVE DATA ANALYSIS

Quantitative Analysis: Data analysis and report Writing; Parametric statistics: One way and Two-way ANOVA, Critical ratio, Student 't'-test, Product moment correlation, Regression analysis; Non-parametric: Mann U Whitney test, Kruskall Wallis test, Wilcoxon test, Freidman's test, statistics-Chi square test, Rank order correlation.

MODULE 5: QUALITATIVE ANALYSIS AND REPORT WRITING IN RESEARCH

Qualitative Analysis: Different traditions of qualitative data analysis; thematic analysis, Narrative analysis, Discourse analysis, Content analysis, Usage of software for qualitative analysis.

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MODULE 3

Sampling Methods and Data Collection in Research

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Unit 2: Data Collection

Unit Structure

- Aim
- Instructional objective
- Learning outcome
- 3.2.1 What Is Qualitative Data
- Self-Assessment Questions
- 3.2.2 Various Methods of Collecting Qualitative Data
- Self-Assessment Questions
- 3.2.3 Collection of Secondary Data
- Self-Assessment Questions
- 3.2.4 Ethical Considerations in Data Collection
- Self-Assessment Questions
- Summary
- Terminal Questions
- Answer Keys
- Activity
- Glossary
- Textbook References
- Keywords

Aim

To equip learners with the knowledge and critical understanding of secondary data sources, their advantages and limitations, and the ethical principles involved in data collection and usage for research.

Instructional Objective

This unit is designed to:

- Define secondary data and distinguish it from primary data with reference to its purpose, origin, and usage.

- Identify and categorise various sources of secondary data such as published documents, internet sources, organisational records, and social media content.
- Evaluate the advantages and limitations of secondary data in terms of reliability, relevance, cost-effectiveness, and accessibility.
- Explain the ethical considerations in the use of secondary data, including copyright, consent, privacy, and responsible data sharing.
- Apply ethical research practices in selecting, citing, and utilising secondary data in academic and social research projects.

Learning Outcome

After completing this section, the learner will be able to:

Clearly define secondary data and explain its role in qualitative and mixed-methods research.

Differentiate between various types and sources of secondary data (published, unpublished, digital, media-based, etc.).

Assess the suitability of secondary data for specific research problems by considering the context, quality, and relevance. Demonstrate awareness of ethical issues by justifying proper citation practices, respecting data privacy, and adhering to institutional guidelines.

Integrate secondary data responsibly into research by applying critical thinking and ethical standards throughout the data collection and analysis process.

Introduction

Data collection refers to a structured approach to acquiring observations or measurements. Regardless of whether your research is for business, government, or academic reasons, data collection enables you to obtain first-hand knowledge and unique insights related to your research issue.

Although the techniques and objectives may vary across different domains, the fundamental process of data collection is predominantly similar. Prior to initiating data collection, you must take into account:

- The goal of the research
- The kind of data you plan to gather
- The techniques and procedures you will implement to collect, manage, and analyse the data

Definition

Data collection refers to the systematic process of gathering relevant information to answer research questions, test hypotheses, and evaluate outcomes. It is a critical stage in research methodology because the accuracy and reliability of the study depend on the quality of data collected.

According to C R Kothari, "Data are facts, figures, and other relevant materials, past and present, serving as bases for study and analysis." Without data, research has no foundation; thus, the method of collecting data determines the credibility of the findings.

4.2.1 What is Qualitative Data?

Definition

Qualitative data refers to non-numerical information that captures concepts, opinions, experiences, behaviors, and emotions. It focuses on understanding meanings, attributes, characteristics, symbols, and descriptions rather than measurements or quantities.

Qualitative data provides insights into the problem, helps develop ideas, and uncovers trends in thought and opinions. It is descriptive and conceptual, often dealing with the "why" and "how" of a phenomenon.

C R Kothari

Characteristics of Qualitative Data

1. Descriptive and narrative in nature.
2. Focused on subjective assessment of attitudes, opinions, and behavior.
3. Non-quantifiable—does not deal with numbers or statistical analysis directly.
4. Data is collected in natural settings rather than controlled environments.
5. Rich in contextual details and in-depth exploration.

Aspect	Qualitative Data	Quantitative Data
Nature of Data	Descriptive, narrative, textual	Numerical, statistical
Focus	Explores meanings, feelings, experiences	Measures quantities, frequencies, percentages
Data Collection Tools	Interviews, Focus Groups, Observations, Open-ended Questions	Surveys, Questionnaires, Experiments, Tests
Data Type	Words, images, symbols	Numbers, figures
Analysis	Thematic analysis, content analysis	Statistical analysis, mathematical calculations
Example	Interviewing teachers about classroom challenges	Measuring student scores in a math test
Outcome	In-depth understanding, patterns, themes	Numerical results, graphs, charts
Environment	Natural settings	Controlled environments

Table. 1 Comparison between Qualitative and Quantitative Data

Self- Assessment Questions

1. Qualitative data refers to ____ information that captures concepts, opinions, and experiences.
2. According to C R Kothari, qualitative data is ____ and conceptual in nature.
3. Qualitative data is collected in ____ settings rather than controlled environments.
4. One of the characteristics of qualitative data is that it is ____ and narrative in nature.
5. Qualitative data focuses on the subjective assessment of attitudes, opinions, and ____

4.2.2 Various Methods of Collecting Qualitative Data

Qualitative research is primarily exploratory and seeks to understand underlying reasons, opinions, emotions, and motivations. It deals with non-numerical data to provide depth and detail in understanding a phenomenon. Unlike quantitative research, qualitative methods do not attempt to measure but rather describe, interpret, and give meaning to social and psychological realities.

According to C.R. Kothari, qualitative data collection methods are instrumental in capturing the richness and complexity of human behavior, emotions, and experiences. These methods are suited when researchers aim to comprehend the 'why' and 'how' behind certain behaviors, allowing a detailed exploration of meanings individuals or groups attach to social phenomena.

Definition of Primary Data

Primary data refers to information that is directly collected by the researcher for the first time for a specific research objective. It is fresh, original, and tailored to the study at hand. This data is crucial for studies aiming at current, first-hand information, particularly in qualitative research where depth and context matter.

For instance, if a researcher is studying the impact of social media on teenagers' self-esteem, conducting interviews with teenagers directly would generate primary data. It ensures relevance and timeliness, helping to answer the research question precisely.

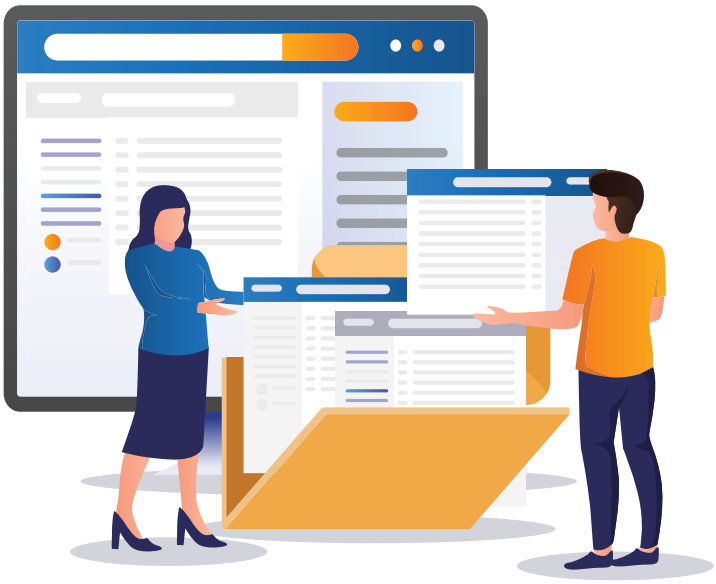
Characteristics of Primary Data

The key features that distinguish primary data in qualitative research include:

1. Originality: Data is collected afresh and is original in nature.
2. Specific Purpose: The data serves the specific objectives of the study.
3. Control: The researcher has control over the data collection process.
4. Real-time Collection: Data is gathered at the time of occurrence.

These characteristics make primary data invaluable for qualitative research, offering authenticity and context that secondary data cannot provide.

Methods of Collecting Primary Data



C.R. Kothari identifies several important methods of qualitative data collection. Each method is chosen based on the nature of the research problem, objectives, and the context of the study.

Observation Method

Observation involves systematically watching and recording behaviors, events, or situations without necessarily interacting with the subjects. It allows the researcher to gather first-hand, real-time data in natural settings.

Types of Observation

1. Participant Observation: The researcher becomes part of the group or community being studied and observes the happenings as an insider. This helps in getting a first-hand understanding of people's behavior.
   Example: A researcher joins a rural community to understand local farming practices.
2. Non-Participant Observation: The researcher observes the group or situation without becoming involved. The observer maintains distance but carefully records actions, interactions, and reactions.
   Example: Watching children play in a school playground from a classroom window.
3. Controlled Observation: This is done under controlled conditions, often in a laboratory or experimental setup, where the researcher manipulates variables and observes the outcomes.
   Example: Observing people's behavior in a simulated shopping environment.
4. Uncontrolled (Naturalistic) Observation: Observation takes place in the natural environment where the researcher does not manipulate any variables but observes naturally occurring behaviors.
   Example: Observing street vendors' interaction with customers in a market.

Merits

1. Provides direct and real-world data.
2. Useful in studying phenomena that respondents might be unwilling to discuss.

Limitations

1. Observer bias may affect data validity.
2. Time-consuming and requires skilled observation.

Interview Method

Interviews are the most widely used qualitative method involving direct, face-to-face or virtual communication between the researcher and respondents. It helps explore beliefs, emotions, experiences, and opinions in depth.

Types of Interviews

1. Structured Interview: Follows a fixed set of questions. Example: Survey-like formal interviews for demographic studies.
2. Unstructured Interview Conversational with flexible questions, allowing the respondent to narrate experiences freely. Example: Exploring personal experiences of domestic violence survivors.
3. Semi-Structured Interview: A combination of both, where key questions guide the interview but room is given for probing deeper. Example: Interviewing teachers about inclusive classroom practices.

Techniques

1. Individual (In-depth) Interviews: One-on-one conversation focusing on the individual's experiences and perspectives.
2. Group Interviews: Multiple participants are interviewed simultaneously.
3. Key Informant Interviews: Conducted with individuals who have specialized knowledge or insight into the subject matter.

Merits

1. Enables clarification of responses.
2. Provides detailed and rich qualitative data.

Limitations

1. Interviewer bias may influence the responses.
2. Requires trained interviewers and can be time-intensive.

Focus Group Discussions (FGDs)

A Focus Group Discussion is a qualitative method where a small group of people (6-12 participants) discuss a specific topic guided by a facilitator. FGDs are used to explore people's perceptions, opinions, beliefs, and attitudes.

Features

- Interactive discussion encourages diverse views.
- The moderator plays a crucial role in maintaining the focus of the discussion.

Merits

- Provides insights into group dynamics.
- Generates a range of ideas and opinions in a short period.

Limitations

1. Dominant participants may influence group opinion.
2. Data analysis is complex due to group dynamics.

Content Analysis

Content analysis is a qualitative method that involves systematically examining communication materials (text, speech, media, documents) to interpret patterns, themes, or meanings.

Sources Analyzed

1. Newspapers
2. Books
3. Diaries
4. Social media posts
5. Advertisements
6. Speeches

Process

1. Coding the data into themes or categories.
2. Analyzing the frequency and context of the themes.

Merits

1. Useful in studying historical or archival materials.
2. Enables the analysis of communication trends.

Limitations

1. Subjective interpretations may affect validity.
2. Time-consuming and requires skilled analysis.

Case Study Method

The case study method is an in-depth study of a single individual, group, organization, or event. It provides detailed information about a particular case within its real-life context.

Example: Studying the life of a child with autism to understand their learning challenges

Types of Case Studies

1. Exploratory: To explore new areas where little information is available
2. Explanatory: To understand causes and effects.
3. Descriptive: Provides a detailed description of the subject.

Merits

1. Provides detailed and rich descriptive data.
2. Helps in understanding complex phenomena.

Limitations

1. Findings may not be generalized.
2. Researcher bias can influence the study.

Projective Techniques

Projective techniques are psychological tools designed to uncover underlying, often subconscious thoughts, feelings, or motivations by projecting them onto ambiguous stimuli. Projective techniques are psychological methods where respondents project their subconscious feelings or thoughts onto ambiguous stimuli.

Common Techniques

1. Thematic Apperception Test (TAT)
2. Word Association Test
3. Sentence Completion Test
4. Picture Interpretation

Uses

Primarily used in psychological studies and marketing research to uncover hidden motives.

Merits

- Helps reveal deep-seated feelings and attitudes.
- Respondents may disclose information they are unaware of.

Limitations

- Interpretation is highly subjective.
- Requires expertise and training to administer.

Diaries and Journals

Diaries and journals are qualitative data sources where individuals record their personal experiences, thoughts, and feelings regularly. Diaries and journals provide a personal, reflective, and ongoing record of thoughts, feelings, and experiences of individuals over a period.

Advantages

- Provides longitudinal data over a period.
- Gives access to private reflections.

Limitations

- Entries may be incomplete or biased.
- May lack consistency if participants fail to record regularly.

Ethnographic Method

Ethnography involves the detailed and systematic study of people and cultures. The researcher immerses themselves in the group's environment for an extended period.

Process

- Observing daily life, rituals, and customs.
- Recording cultural norms and practices.

Merits

1. Provides a deep understanding of social and cultural contexts.
2. Useful for studying marginalized or lesser-known groups.

Limitations

3. Time-intensive and demands immersion.
4. Researcher bias may affect interpretation.

Oral Histories and Life Histories

This method involves collecting personal narratives and experiences of individuals about past events, often through interviews.

Uses

1. Preserving the memories and experiences of individuals.
2. Understanding historical or social phenomena from a personal perspective.

Merits

3. Captures rich and detailed accounts.
4. Preserves history from the point of view of participants.

Limitations

5. Subjective and may contain memory lapses.
6. Difficult to verify the accuracy of accounts.

Document Analysis

7. Document analysis involves studying existing documents (public records, personal documents, official reports) to gather qualitative data.

Types of Documents

8. Government reports
9. Policy documents
10. Personal letters
11. Meeting minutes

Merits

12. Non-reactive data source (data already exists).
13. Provides historical and contextual information.

Limitations

14. Documents may be incomplete or biased.
15. Limited availability of relevant documents.

Real-Time Discussion

You're a researcher tasked with observing teacher-student interactions in a school for a month. The principal gave permission, but the students haven't been informed.

- *Should you inform the students you're observing them? Why or why not?*
- *What ethical issues arise in this situation?*
- *How would this impact the naturalness of the data you collect?*

Merits of Qualitative Data Collection Methods

1. Provides a comprehensive understanding of complex human behavior.
2. Useful in exploring new areas where little is known.
3. Flexible and adaptable methods that can be modified during research.

Limitations of Qualitative Data Collection Methods

4. Time-consuming and labor-intensive.
5. Data analysis is complex and subjective.
6. Small sample sizes may limit generalizability.
7. Researcher's bias may influence findings.

Suitability of Primary Data Collection

8. Primary data collection is suitable for:
9. Exploratory and experimental research
10. Studies requiring updated and original data
11. Small scale studies where specific information is needed

Below is a chart representing the main qualitative data collection methods along with their subtypes:

Method	Types/Subtypes	Key Features
Observation	Participant, Non-Participant, Controlled, Uncontrolled	Direct study of behavior in a natural or controlled setting
Interview	Structured, Unstructured, Semi-Structured, In-depth, Group, Key Informant	Verbal communication to collect detailed information
Focus Group Discussions (FGD)	6-12 Participants	Interactive group discussions guided by a facilitator
Content Analysis	Documents, Media, Texts	Systematic analysis of communication materials
Case Study	Exploratory, Explanatory, Descriptive	In-depth study of a single unit or case
Projective Techniques	TAT, Word Association, Sentence Completion, Picture Interpretation	Revealing subconscious thoughts and feelings
Diaries and Journals	Personal writings	Recording daily experiences and emotions

Table.2 Qualitative Data Collection Methods Chart

Self-Assessment Questions

6. Which of the following is NOT a characteristic of primary data?
   a) Originality
   b) Secondary source
   c) Specific purpose
   d) Real-time collection

7. In which qualitative method does the researcher become part of the group being observed?
   a) Controlled Observation
   b) Non-Participant Observation
   c) Participant Observation
   d) Naturalistic Observation

8. Which method is best suited for exploring subconscious feelings through ambiguous stimuli?
   a) Case Study Method
   b) Content Analysis
   c) Projective Techniques
   d) Focus Group Discussions

9. What is a key advantage of Focus Group Discussions (FGDs)?
   a) Ensures privacy of respondents
   b) Eliminates group influence
   c) Encourages diverse views and quick idea generation
   d) Provides only numerical data

10. Which of the following is NOT typically analyzed in content analysis?
    a) Advertisements
    b) Personal diaries
    c) Laboratory test results
    d) Social media posts

4.2.3 Collection of Secondary Data

Definition of Secondary Data

Secondary data is essentially second-hand information. It is data collected by someone else, often for purposes other than the current research problem but still useful for the researcher. Secondary data can be both quantitative (numerical) or qualitative (descriptive) in nature. Researchers utilize such data to gain preliminary insights, develop hypotheses, support findings, or supplement primary data. It often provides the necessary context or background for a research problem.

Secondary data may also include statistical data, archived materials, documentary evidence, and content from digital and social media platforms. Due to the rising influence of digital technology, secondary data sources have expanded significantly, including social media analytics, blogs, and discussion forums

Characteristics of Secondary Data

- Pre-Existing Nature: Secondary data is already available before the research begins.
- Multiple Purposes: Originally collected for various reasons—policy-making, academic research, business analysis, etc.
- Broad Scope: Encompasses a wide range of topics and time periods, sometimes spanning several decades.
- Variable Quality: Accuracy, reliability, and completeness may vary depending on the source.
- Non-intrusive: Since the data is already collected, researchers do not interact directly with participants, avoiding ethical concerns related to participant harm.

Caselet

Using YouTube Comments for Behavioural Research

Topic: Secondary Data – Internet Content

Context: A digital sociology researcher wanted to understand public perception of mental health videos on YouTube.

What Was Done: Analysed 800 user comments from popular mental health awareness videos.

Tools Used: Manual thematic coding and basic sentiment analysis.

Findings: Users shared personal struggles, support messages, and misinformation.

Ethical Highlight: Though comments were public, researcher anonymised usernames and didn't publish verbatim quotes without paraphrasing.

Relevance: Demonstrates how **digital platforms** can be rich sources of secondary qualitative data—*with ethical care*.

Sources of Secondary Data

C R Kothari classifies secondary data into the following broad sources:

1. Published Sources

Examples:

1. Books and journals
2. Government publications (Census data, reports)
3. Research reports
4. Newspapers, magazines
5. International publications (UN, WHO reports)

2. Unpublished Sources

Examples:

- Company records
- Diaries and autobiographies
- Personal letters and emails
- Theses and dissertations
- Unpublished research work in universities and colleges

3. Official and Semi-official Records

Examples:

- Census data
- Court records

- Educational statistics
- Health department records

4. Internet and Digital Databases

Examples:

- Online journal databases (JSTOR, Scopus)
- Websites of organizations
- Digital libraries and e-repositories
- Open data portals

5. Commercial Data Sources

Examples:

- Market research reports
- Industry white papers
- Company annual reports
- Financial data repositories like Bloomberg or Reuters

6. Media Archives and Audio-Visual Sources

Examples:

- Documentaries, TV programs, films
- Archived audio/video interviews
- Radio broadcasts

7. Social Media and User-Generated Content

1. Social networking sites (Facebook, Twitter, LinkedIn)
2. Blogs, vlogs, forums, and online communities
3. Online reviews and testimonials

Note: It is crucial for researchers to evaluate the authenticity, credibility, and relevance of these sources before using them.

Advantages of Secondary Data

- Cost-Effective: Saves time and money
- Availability: Large datasets available easily
- Benchmarking: Helps compare findings with existing data
- Useful for longitudinal studies

Limitations of Secondary Data

- Relevance Issues: Data may not be perfectly suitable for the research objectives
- Accuracy Concerns: Reliability of the source may be questionable

- Outdated Information: May not reflect the latest developments
- Lack of Control: Researcher cannot verify how the data was originally collected

3.8.4 Ethical Considerations in Data Collection

- Proper Citation and Referencing: Researchers must always cite secondary data sources accurately to avoid plagiarism.
- Data Usage Permissions: Some secondary data, especially proprietary or subscription-based, require official permissions or licenses.
- Adherence to Copyright Laws: Digital sources, images, videos, and reports may be copyrighted; their use should align with fair-use policies.
- Anonymization of Data: If secondary data includes identifiable information, researchers must ensure the privacy of individuals is protected.
- Transparency: The methodology section of research reports should mention the use of secondary data and any limitations associated with it.
- Compliance with Institutional and Legal Standards: Follow data protection regulations such as GDPR or equivalent local rules when handling secondary data.

Self-Assessment Questions- True/False

11. Observation in qualitative research always requires the researcher to interact directly with the participants.

True / False

12. Semi-structured interviews allow the researcher to ask additional probing questions beyond the prepared list.

True / False

13. Focus Group Discussions (FGDs) are typically conducted with one or two participants to maintain confidentiality.

True / False

14. Content analysis is used only for analyzing visual materials like images and videos.
True / False

15. Projective techniques help uncover hidden emotions, motives, or thoughts that participants may not express directly.
True / False

Conclusion

The collection of data, both primary and secondary, forms the backbone of any research process. Primary data provides specific, up-to-date, and highly relevant information tailored to the research objectives, but it requires significant resources. Secondary data offers ease of access and cost advantages but may suffer from relevance and reliability issues.

Case Study based on qualitative data collection

Case Study: Understanding the Impact of Social Media on Adolescent Self-Esteem

Background: In recent years, social media has become an integral part of teenagers' lives. Concerns have been raised about how excessive use of social media platforms like Instagram, Facebook, and Snapchat might affect their self-esteem and body image. This case study explores how qualitative data collection methods helped understand this social phenomenon.

Research Objective: To explore the perceptions and experiences of adolescents regarding the impact of social media on their self-esteem.

Method of Data Collection: The researcher employed semi-structured interviews and focus group discussions (FGDs) as qualitative data collection methods.

Sample: 10 adolescents (age 15-18 years) from a CBSE school were selected.

Both boys and girls from different socio-economic backgrounds participated.

Procedure

1. Semi-Structured Interviews

Conducted face-to-face interviews with 5 students.

Key questions included:

1. How many hours do you spend on social media daily?
2. How do you feel when you see pictures or posts of your friends?
3. Do you compare yourself with people you follow on social media?
4. Has social media ever made you feel inferior or left out?

2. Focus Group Discussion (FGD)

Conducted one FGD with 5 students.

Topics discussed:

1. Peer pressure and competition on social media.
2. Effects of likes, comments, and followers on their self-worth.
3. Positive and negative experiences related to social media.

Findings

1. Majority of participants admitted to comparing themselves with others online.
2. Many students reported feeling low self-esteem, especially when comparing their looks or lifestyle with influencers or peers.
3. Some students expressed that positive feedback (likes/comments) boosted their confidence temporarily.
4. A few students acknowledged that social media sometimes motivated them positively (fitness, learning, hobbies).

Conclusion

The case study revealed that while social media provides opportunities for connection and learning, it also significantly impacts adolescents' self-esteem and emotional well-being. Qualitative methods like interviews and FGDs helped uncover deep personal experiences, emotions, and perceptions that would not have been captured through quantitative methods alone.

Summary

- Data collection is a crucial step in research methodology, enabling researchers to gather accurate and reliable information to answer research questions, test hypotheses, and evaluate outcomes. C.R. Kothari defines data as the foundation of research, emphasizing its role in providing facts, figures, and relevant materials for analysis.
- Qualitative data refers to non-numerical information that captures human emotions, behaviors, experiences, and perceptions. It is descriptive, narrative, and rich in context, offering deep insights into social phenomena. Unlike quantitative data that focuses on numbers and statistical analysis, qualitative data emphasizes the "why" and "how" of behavior, making it ideal for understanding complex social and psychological realities.
- It is Subjective assessment of attitudes, emotions, and experiences, Non-quantifiable and collected in natural settings, Rich in context, providing detailed exploration.
- While qualitative data focuses on words, symbols, and thematic analysis, quantitative data deals with numbers, statistical tools, and mathematical calculations.
- Primary data is original and collected directly by the researcher to serve specific research objectives. It offers fresh, authentic insights and is essential in qualitative studies where context and first-hand experiences are critical.
- Secondary data may also include statistical data, archived materials, documentary evidence, and content from digital and social media platforms. Due to the rising influence of digital

technology, secondary data sources have expanded significantly, including social media analytics, blogs, and discussion forums.

Terminal Questions

1. Define qualitative data and explain its significance in psychological research
2. Discuss the characteristics of primary data in qualitative research with suitable examples.
3. Explain the observation method of qualitative data collection. Differentiate between participant and non-participant observation with examples.
4. Elaborate on the interview method in qualitative data collection. Compare structured and unstructured interviews.
5. What is a Focus Group Discussion (FGD)? Describe its features, merits, and limitations in qualitative research.

Answer Keys –Self assessment Questions

Question No	Answers
1	Descriptive
2	**subjective**
3	**natural**
4	**rich**
5	**behaviour**
6	**b**
7	**c**
8	**c**
9	**c**
10	**c**
11	**false**
12	**true**
13	**false**
14	**false**
15	**true**

Activity

Title: Designing a Qualitative Data Collection Plan

Instruction: Choose any social issue (example: Impact of social media on teenagers, Teachers' experiences with inclusive education, or Parental involvement in children's academics). Prepare a qualitative data collection plan including:

- The research objective
- Type of qualitative data required
- Selection of appropriate method(s) (Observation, Interview, or FGD)
- Justification for the chosen method
- A sample set of 5 interview questions or observation checklist points
- **Submission**: Submit a 2-3 page report.

Glossary

1. Qualitative Data – Non-numerical information capturing feelings, thoughts, and experiences.
2. Primary Data – First-hand data collected directly by the researcher for a specific study.
3. Observation Method – A technique involving systematic watching of behaviors or events in their natural setting.
4. Participant Observation – A form of observation where the researcher actively participates in the group being studied.
5. Non-Participant Observation – The researcher observes without direct involvement.
6. Structured Interview – A formal interview with a pre-determined set of questions.
7. Unstructured Interview – Flexible, open-ended interviews allowing respondents to share freely.
8. Semi-Structured Interview – Interviews that combine fixed questions with flexibility for probing deeper.
9. Focus Group Discussion (FGD) – A moderated group discussion used to explore collective opinions and experiences.
10. Thematic Analysis – A method of analyzing qualitative data by identifying themes and patterns.

Textbook References

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Keywords

- Methods of collective qualitative data
- Collection of primary data
- Collection of secondary data
- Ethical considerations in data collection

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai.

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