

**A DETAILED REPORT ON TEN DAYS RESEARCH METHODOLOGY COURSE
SPONSORED BY INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH (ICSSR), NEW DELHI
ORGANISED BY INSTITUTE OF COMMERCE, NIRMA UNIVERSITY
AHMEDABAD (GUJRAT)**

SEPTEMBER 04TH, 2023 TO SEPTEMBER 14TH, 2023

Submitted By:
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Day 1: September 4, 2023

Session: 1

Name of the Resource Person: Prof. G. Soral (Former Professor and Head)

Department of Accountancy and statistics, Mohanlal Sukhadia University, Udaipur Rajasthan

Time: 11:45am to 01:15pm and 02:00pm to 03:30pm

Topic: Research Strategy (Quantitative and Qualitative Research Design)

This Lecture taught me about the fundamentals of the quantitative and qualitative research design which helps in collect and analyse the data on time to complete the research within time limit.

Learning Highlights:

- a) I learned that quantitative research often involves large sample sizes, structured data collection methods (surveys, experiments) and statistical analysis while Qualitative research uses open-ended questions, interviews, focus groups, or observations to gather data.
- b) We discovered that researchers often combine both approaches, using qualitative methods to inform the development of quantitative surveys or to interpret quantitative results.
- c) In Probability and non Probability understand that probability method ensures each element in the population has an equal chance of being selected while non probability method is useful for hard-to-reach populations but may introduce sampling bias.
- d) In Measurement of scale recognized that the choice of scale impacts the types of analyses and statistical tests that can be performed.
- e) The last topic of the session was univariate, bivariate, and multivariate analysis, in this topic i gain practical knowledge for conducting these analysis and explored common statistical measures used in these all three analysis.

Day 1: September 4, 2023

Session: 2

Name of the Resource Person: Dr. Mithesh Kumar Pandya (Scientist, Information and Library Network)

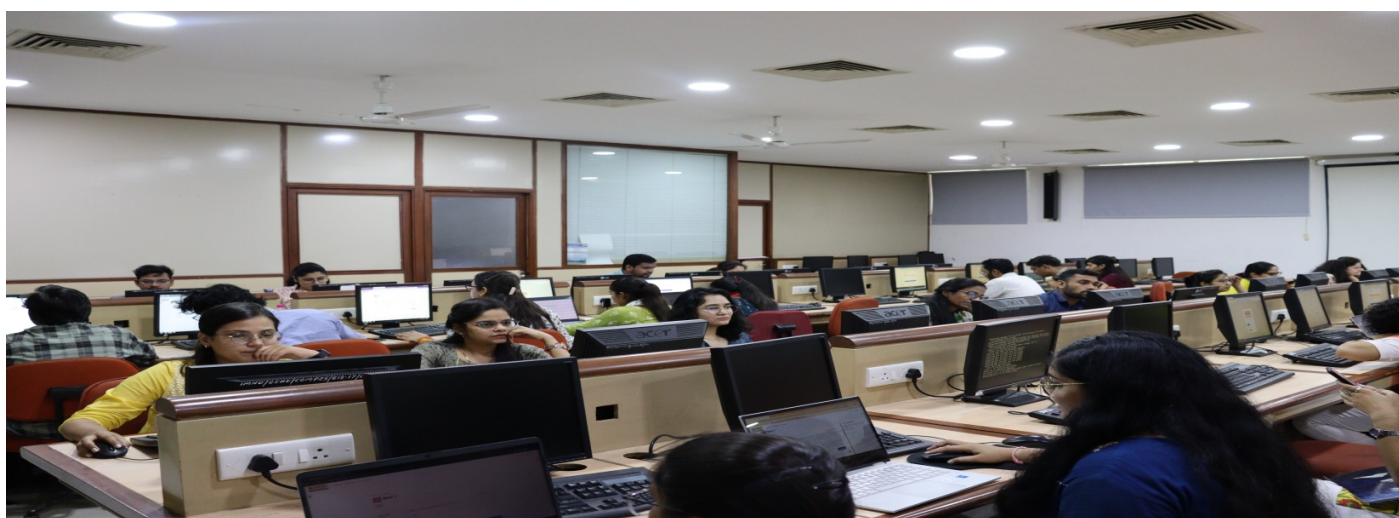
Time: 03:45pm to 05:15pm

Topic: Library and E-library Training

This Lecture taught me about the application of zotero explored the basic interface and menu options.

Learning Highlights:

- a) Learned how to add references manually by entering bibliographic details.
- b) Discovered the Zotero Connector browser extension for capturing references from websites.
- c) Imported references from existing documents and PDFs.
- d) Utilized tags to add additional metadata for easier search and retrieval.
- e) Moved and reorganized references within collections as my research progressed.
- f) Explored the citation styles and formatting options available in Zotero.



Day 2 : September 5, 2023

Session: 1

Name of the Resource Person: Dhaval Maheta (Professor)

Department of Business and Industrial Management, Veer Narmad South Gujarat University, Surat Gujarat

Time: 10:30am to 01:15pm and 02:00pm to 03:30pm

Topic: Use of data in social science I and Hypothesis testing

This Lecture taught me about the understanding of primary and secondary data which helps in collecting data and the hypothesis testing helps in analyse the data on time to complete the research within time limit.

Learning Highlights:

- a) Its helps in understanding the difference between primary and secondary data.
- b) Gain insights the reasons why a researcher would favour one form of data over another.
- c) In social science research, give instances of Primary and secondary data sources.
- d) It define hypothesis testing and its use in drawing conclusions from data.
- e) Understanding about the alternate hypothesis and the null hypothesis.
- f) It describe how a significance level affects the results of hypothesis testing.
- g) Express the idea of p-values and how they are interpreted.
- h) Recognise the key area and how it relates to choices made during hypothesis testing.

Session: 2

Name of the Resource Person: Prashant Joshi (Assistant Vice President, Centre for Monitoring Indian Economy)

Time: 03:45pm to 05:15pm

Topic: Use of data in social science II (CMIE data collection from PROWESS)

This Lecture taught me about the uses of Prowess application for collecting data from different companies in one place.

Learning Highlights:

- a) Understanding the function and value of prowess in economic and financial analysis is helpful.
- b) It explains the Prowess database's structure, including the datasets that are available.
- c) It shows how to use Prowess to access particular economic or financial data.
- d) It goes through how to calculate and evaluate important financial ratios.
- e) Learn how to use Prowess to analyse a dataset that is particular to a given industry.



Day 3 : September 6, 2023

Session: 1

Name of the Resource Person: Dr. Atman Singh (Assistant Professor)

Department of Economics, St. Xavier's College, Ahmedabad Gujarat

Time: 10:00am to 01:15pm

Topic: Quantitative tools (Problems in Regression)

This Lecture taught me about the understanding of the fundamentals of quantitative tools, how to use these tools in our research for getting accurate results with the help of SPSS.

Learning Highlights:

- a) With the help of this session reviewed the fundamental concepts of regression analysis, including dependent and independent variables.
- b) Gain insights of SLRM, OLS and Blue which means Simple learning regression model, ordinary least square model and based linear unbiased estimator.
- c) The concept of heteroscedasticity and homoscedasticity is much clear with the help of this session.
- d) Gaining more knowledge about the types of data and uses of that data in our research i.e. Panel data, cross sectional data and time series data.
- e) Understanding the meaning of outliers and two type of method to represent the outliers i.e. graphical method method for visualization and Breusch–Pagan test for heteroskedasticity in a linear regression model.
- f) Explore the concept of multicollinearity in regression analysis and understood how multicollinearity can affect the interpretation of regression coefficients and standard errors also know about VIF (Variance inflation factor) how it measures the multicollinearity in model.
- g) Explored methods to detect autocorrelation with the help of durbin waston method.



Day 3 : September 6, 2023

Session: 2

Name of the Resource Person: Dr. Mithesh Shah (Associate Professor)

Sardar vallabhbhai Vanijya Mahavidyalaya, Ahmedabad

Time: 02:00pm to 03:30pm

Topic: Quantitative tools (Logistic Regression)

This Lecture taught me about the understanding of the fundamentals of quantitative tools i.e. logistic regression, in this regression model we learn about the logit, probit and tobit model.

Learning Highlights:

- a) Explore the fundamental concepts of logistic regression and its application to binary classification problems.
- b) Compared logistic regression to linear regression, noting the differences in the dependent variable (binary in logistic regression) and the logistic function.
- c) Focused on binary logit models, where the dependent variable has two categories (e.g., yes/no, 1/0) and Understood the logit model equation and how it relates to the logistic regression model.
- d) Understood the probit model equation and how it models the cumulative distribution function (CDF) of the standard normal distribution.
- e) Learned about the Tobit model equation, which combines a linear regression model with a truncated normal distribution for censored observations and Understood how the Tobit model handles both observed and censored values.



Day 4 : September 7, 2023

Session: 1

Name of the Resource Person: Dr. Keyur Kumar Nayak (Director)

Garware Institute of Career Education and Development, Mumbai Maharashtra

Time: 10:00am to 01:15pm and 02:00pm to 03:30pm

Topic: Quantitative tools (Use of smart PLS4 for structural equation model)

This Lecture taught me about the understanding of Smart PLS software for how to use in making structural equation model.

Learning Highlights:

- a) SmartPLS primarily focuses on PLS-SEM, a variance-based approach to SEM. PLS-SEM is known for its flexibility and suitability for complex models, small sample sizes, and exploratory research.
- b) SmartPLS allows to specify both reflective and formative measurement models, accommodating a wide range of research scenarios.
- c) SmartPLS supports moderation and mediation analysis, it enabling to examine how variables interact and mediate effects.
- d) SmartPLS supports multigroup analysis, which is useful for comparing model parameters across different subgroups within data.
- e) SmartPLS utilizes bootstrapping as the default method for estimating standard errors and confidence intervals. Bootstrapping is particularly helpful when dealing with non-normal data or small sample sizes.
- f) SmartPLS provides various goodness-of-fit measures to assess the overall model fit. The software allows to perform leave-one-out cross-validation to assess the predictive accuracy of your model.
- g) SmartPLS can automatically generate path models based on specified latent variables and measurement indicators. This can save time when building initial models.



Day 5 : September 8, 2023

Name of the Resource Person: Dr. H.K. dangi (Professor, Department of Commerce, University of Delhi)

Time: 10:00am to 01:15pm and 02:00pm to 03:30pm

Topic: Quantitative analysis (Use of Nvivo for literature review, Bibliometric analysis and content analysis)

This Lecture taught me about the understanding of Nvivo software for how to use in literature review, Bibliometric analysis and content analysis.

Learning Highlights:

- a) NVivo allow to import and organize a wide range of document types, including PDFs, Word documents, and web content, making it easy to manage your literature sources in one place.
- b) NVivo offers powerful search and query functionalities to locate specific keywords, themes, or authors within your literature.
- c) Create nodes (categories) to categorize and classify literature based on themes, authors, publication years, or any other criteria relevant to your research.
- d) NVivo provides visualization tools, such as word clouds and concept maps, to help in visualize key themes and relationships within your literature, making it easier to identify trends and patterns.
- e) NVivo supports network analysis to explore collaboration networks, citation networks, and co-citation patterns. It can create visualizations like social network diagrams to identify influential authors and research clusters.
- f) Use NVivo's query tools to perform advanced bibliometric analyses, such as identifying highly cited papers, analyzing citation trends over time, and comparing the impact of different journals or researcher.
- g) NVivo supports thematic content analysis by allowing you to code and analyze text data based on thematic categories, making it easier to identify recurring themes and sub-themes.
- h) NVivo enables to compare coded data across different documents or sources, facilitating comparative content analysis.



Day 6 : September 9, 2023

Name of the Resource Person: Dr. C.P. Gupta (Professor of Practice)

Lal Bahadur Shastri Institute of Management, Delhi)

Time: 09:30am to 12:45pm and 01:30pm to 03:30pm

Topic: Quantitative analysis (Pooled regression and panel data analysis with STATA)

This Lecture taught me about the understanding of Nvivo software for how to use in Pooled regression, panel data analysis.

Learning Highlights:

- a) Stata supports various data formats, including Excel, CSV, and text files. It can easily import and manage your panel data.
- b) With the help of Stata we can perform various statistical procedures, including basic descriptive statistics, hypothesis testing, regression analysis, ANOVA, and more.
- c) Stata is particularly well-suited for panel data analysis, allowing users to work with balanced and unbalanced panel datasets, estimate fixed and random effects models, and conduct tests for serial correlation and heteroskedasticity.
- d) Stata will provide simple regression output with regression coefficients, R-squared, standard errors, t-statistics, and other relevant statistics. Look for coefficients like coef and the R-squared value to interpret the results.
- e) Stata will provide multiple regression output with coefficients for each independent variable, the R-squared value, standard errors, t-statistics, and other relevant statistics. Interpret the coefficients to assess the impact of each independent variable on the dependent variable.
- f) In Stata, when working with statistical analysis and regression models, you often encounter terms like estimator, estimate, and estimation.
- g) In Stata, use specific commands to specify the estimation you want to perform After running an estimation command, Stata generates output that includes parameter estimates, standard errors, t-statistics, p-values, goodness-of-fit statistics, and other relevant information.



Topic: Field Visit

In the field visit we are visited several places like Adalaj Stepwell, Akshardham Temple, Sabarmati Ashram, Atal Bridge and Law Garden with purpose of gaining some insights on sustainability.

Learning Highlights:

- a) Adalaj Stepwell or Rudabai Stepwell is a stepwell located in the small town of Adalaj, close to Gandhinagar city in the Indian state of Gujarat. It was built in 1498 in the memory of Rana Veer Singh by his wife, Queen Rudadevi. It was built in 1499 to hold water, provide refuge to travelers and local people, and offer spiritual sustenance.
- b) Swaminarayan Akshardham in Gandhinagar, Gujarat, India is a large Hindu temple complex inspired by Yogiji Maharaj the fourth spiritual successor of Swaminarayan, and created by Pramukh Swami Maharaj, the fifth spiritual successor of Swaminarayan according to the BAPS denomination of Swaminarayan Hinduism.
- c) Sabarmati Ashram, also known as Gandhi Ashram, is a historic site located in Ahmedabad, Gujarat, India. It holds great significance in the Indian independence movement as it was the residence of Mahatma Gandhi, the leader of the Indian independence struggle, from 1917 to 1930. It explore several buildings and museums that preserve the life and teachings of Mahatma Gandhi. The ashram premises include his living quarters, Hriday Kunj, and Vinoba Kutir, a hut used by Vinoba Bhave, a prominent disciple of Gandhi.
- d) The "Atal Bridge" in Ahmedabad, India, is likely a reference to the "Sardar Vallabhbhai Patel Bridge," commonly known as the "Sardar Bridge" or "Ellis Bridge." This bridge is an important river crossing in Ahmedabad, Gujarat. It serves as a vital transportation link, connecting different parts of Ahmedabad and facilitating the flow of traffic and people across the river. The Sardar Bridge holds historical and cultural significance in Ahmedabad and is named after Sardar Vallabhbhai Patel, a prominent leader in India's struggle for independence.



Day 08 : September 11, 2023

Session: 1

Name of the Resource Person: Prof. Amit Shankar (Assistant Professor, IIM Visakhapatnam)

Time: 10:00am to 01:15pm

Topic: Academic Writing (Structure of article, Introduction, Literature review)

This Lecture taught me about the understanding of how to write a research paper for publication.

Learning Highlights:

- a) How to familiarizing myself with the basic components of an academic article, including the abstract, introduction, literature review, methodology, results, discussion, conclusion, and references.
- b) First we learn that to pay attention to crafting a clear and concise title that reflects the main focus of the research. The abstract was written to summarize the key findings and contributions of the study.
- c) After crafting the title and abstract structured the introduction to provide context for the study, establish the research problem, and present the research questions or hypotheses. we also included a brief literature review to demonstrate the gap in knowledge.
- d) Later organized the literature review section chronologically, thematically, or by methodology, depending on the nature of the research.
- e) In the methodology section, we described the research design, data collection methods, and data analysis techniques in sufficient detail to allow for replication.
- f) Understand how to presented the research findings clearly using tables, figures, and descriptive text. I made sure to refer back to the research questions or hypotheses and provided statistical or qualitative evidence to support the findings.
- g) In the discussion section, interpreted the results, addressed research questions, and related findings to the existing literature.
- h) In conclusion summarized the main findings, their implications, and the overall contribution of the research. I avoided introducing new information in this section.
- i) In the last part of the paper ensured that all sources cited in the article were properly formatted according to the chosen citation style.



Day 08 : September 11, 2023

Session: 2

Name of the Resource Person: Prof. Udai Paliwal (Director)

Institute of Commerce, Nirma University, Ahmedabad Gujrat

Time: 02:00pm to 03:30pm

Topic: Academic Writing (Ethics in academic writing, Plagiarism and its prevention, Citation styles)

This Lecture taught me about the understanding of when we are write a research paper for publication what ethical consideration we are consider in our mind for write a good research paper.

Learning Highlights:

- a) With the help of case studies we learned about how to read a research paper and finding mistakes in the paper and rectify them.
- b) We get insights of the fundamental principles of ethics, academic integrity, including honesty, transparency, and accountability in research and writing.
- c) I learned to recognize different forms of plagiarism, such as direct copying, paraphrasing without attribution, and self-plagiarism. Understood the severe consequences of plagiarism on one's academic and professional reputation.
- d) Understanding of giving credit to the original authors by properly attributing their work when quoting, paraphrasing, or summarizing.
- e) Recognized that recycling my own work without proper citation is considered self-plagiarism and can also be unethical. I learned to distinguish between instances where self-citation is appropriate and where it's not.
- f) Familiarized myself with various citation styles such as APA, MLA, Chicago, and IEEE.
- g) Explored citation management tools like EndNote, Zotero, or Mendeley. These tools helped me organize and format citations efficiently.



Day 9 : September 12, 2023

Session: 1

Name of the Resource Person: Prof. Udai Paliwal (Director, Institute of Commerce, Nirma University)

Time: 10:00am to 11:30am

Topic: Library and E-resources II (Search strategies for identifying the right journal)

This Lecture taught me about the understanding of how to identify the right journal as per your research paper for publication.

Learning Highlights:

- a) How to find the good journal with help of visiting websites of various good category journal.
- b) Provide us a various websites links for finding good journal.
- c) How to reviewed the author guidelines provided by the journal I intended to submit to. These guidelines often include specific formatting and structural requirements that need to be followed.
- d) I carefully proofread and edited the article for grammar, spelling, and formatting errors.
- e) Explore plagiarism detection tools Turnitin to check the work before submission, ensuring there were no unintentional instances of plagiarism.

Session: 2

Name of the Resource Person: Dr.Sumita Shroff (Assitant Professor Institute of Commerce, Nirma University)

Time: 11:45am to 01:30pm

Topic: Library and E-resources III (Use of AI in literature search)

This Lecture taught me about the understanding of how to use AI in your research to make a good and accurate research paper for the publication and also taught about various extensions we can use for our research.

Learning Highlights:

- a) Hands on various chrome extensions like Grammarly, Trinkai.ai, Chatgpt for google, Monica, Quillbot, Scholarcy etc. which helps us on writing a good research paper without any grammatical mistakes and AI helps in to make consistency of the research paper.
- b) Create various Ids like Google Scholar, Scopus, orcid, researcher id, IRNIS, Elsevier etc. for the recognition our research work from all over the world which helps in enchacing our carrier in future.
- c) Learned about the research gate and SSRN for upload our working papers to get opportunities meet with our research who is also interested in our research area.
- d) Create an account in trinka.ai and learned about the uses of the website to develop the good research paper.
- e) Understand the how can we take help from chatgpt to enhance the quality of our research paper with out wholly depend on it.

Day 10 : September 13, 2023

Name of the Resource Person: Dr. Heena Thanki (Associate Professor)

Shree Jairam Patel Institute of Business Management and Computer Application, Gandhinagar Gujrat

Time: 10:00am to 01:30pm

Topic: Journal submission and review revision, importance of revision, response to reviewer's comments, process of acceptance to publication.

This Lecture taught me about the understanding of how to submit a paper to journal and when it comes back to revision what is its importance and lastly the process of acceptance of our article to publication.

Learning Highlights:

- a) In this session we are leaning about how to submit our manuscript to the journal for publication.
- b) Understand the process of review revision of the manuscript is submitted.
- c) Learned about if the article is back for revision than how can i revise it according to the comments.
- d) We have understand the various importance of the revision of our article had submitted to the journal.
- e) Getting insights to the some tips and tricks on how to response on reviewer's comments.
- f) We are also get some useful knowledge on how to use mendeley software for referencing.
- g) I the last we are getting indepth knowledge of review process i.e. from submission of manuscript to the accepted or rejected of manuscript by the editor.



Day 11 : September 14, 2023

Session: 1

Name of the Resource Person:

1. Prof. Nityesh Bhatt (Professor, Institute of Management, Nirma University)
2. Prof. Ritesh Patel (Assistant Professor, Institute of Management, Nirma University)

Time: 10:00am to 01:30pm

Topic: Paper Presentation

In this session we are giving presentation on different proposed topic by making a research proposal with the help of understandings which we are learned in this workshop in front of the technical resource persons, they advice us how can we improve this topic and publish in it in renowned journal.



Session: 2

Name of the Resource Person:

1. Mr. K. K. Patel (Vice President, Nirma University, Ahmedabad Gujarat)
2. Dr. P. N. Tekwani (Director, Research and Innovation, Nirma University, Ahmedabad Gujarat)

Time: 02:00pm to 03:00pm

Topic: Valedictory and Certificate distribution

In the last session of the workshop we are enriched with the thoughtful insights of Mr. K. K. Patel and Dr. P. N. Tekwani on how networking with researchers can help in our research area and paper publication.

