

AUM SRI SAI RAM



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed to be University)

Department of Humanities and Social Sciences

Prasanthi Nilayam

Faculty Development Program

on

**ACADEMIC ETHICS, SCIENTIFIC WRITING,
and UNIT-LEVEL DATA**

25th – 29th October 2023

Academic Ethics, Scientific Writing, and Unit–Level Data

ABOUT THE FDP

Department of Humanities and Social Sciences, (DHSS), Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam organized a 5-day Faculty Development Programme (FDP) on “Academic Ethics, Scientific Writing, and Unit-Level Data” from October 25th – 29th, 2023. This FDP has been delivered in two significant segments that are of great relevance in the present social science research domain. In the first segment, participants were ably guided on topics like ethics in academic communication, scientific writing, and techniques of research publication followed by issues in secondary research. The participants were also acquainted with the elements of survey research.

In the second segment, the scholars discussed various large-scale survey datasets like NFHS, IHDS, and NSSO that are freely available on public platforms. The FDP specifically trained the researchers to handle large-scale complex health survey datasets (i.e., NFHS) for detailed analysis. It covered obtaining the publicly available NFHS dataset, managing the data, and conducting basic data analysis to draw useful insights. The widely used statistical software Stata was used for data management and data analysis. The FDP has guided participants in importing NFHS data to Stata, data management, data manipulation, reshaping datasets, and introduced them to svyset and regression analysis.

The FDP Resource Persons were:

1. Prof. Abhishek Singh, Professor, International Institute of Population Sciences, Mumbai.
2. Dr. Ashish Singh, Associate Professor, Shailesh J. Mehta School of Management, I.I.T. Bombay
3. Dr. Kaushalendra Kumar, Assistant Professor, International Institute of Population Sciences, Mumbai
4. Dr. Ajit Kumar Kannaujiya, Monitoring and Evaluation Lead, Karnataka Health Promotion Trust (KHPT), Bengaluru
5. Dr. Debarshi Dey, Head of Bio-Statistics and Data Management, MorphoSys, Munich, Germany

Day 1 - Session 1 – Inaugural Session

Date: 25-10-2023 (Wednesday)

Venue: Multi-Media Learning Centre, Sri Sathya Sai Institute of Higher Learning (SSSIHL), Prasanthi Nilayam.

Introduction

With the divine blessings of Bhagawan Sri Sathya Sai Baba, the revered Founder Chancellor of Sri Sathya Sai Institute of Higher Learning (SSSIHL), a Faculty Development Programme on "Academic Ethics, Scientific Writing, and Unit-Level Data" commenced in a spiritually enriched atmosphere. The event kicked off at 9:30 AM with Vedic chanting and the ceremonial lighting of the lamp.

Welcome Address

Dr. G Raghavender Raju, the Head of the Department of Humanities and Social Sciences at SSSIHL, extended a warm welcome to all attendees. In his address, since the majority of the participants were new to SSSIHL, he provided an intuitive overview of the institution's genesis, emphasizing the significance of the modern Gurukula system that SSSIHL adopts, and articulated its visionary mission. He also gave a broad overview of the various aspects which would be discussed during the Faculty Development Programme.

Inaugural Address

Following the welcome address, Dr. M R Geetha Bala, the Dean of Humanities and Social Sciences, Language & Literature at SSSIHL, delivered the inaugural address. Dr. Bala highlighted the pivotal role of the Faculty Development Programme and underscored its significance in enriching the research landscape. She stressed the importance of fostering a culture of continuous learning and development among the faculty.

Keynote Address

The event's proceedings continued with a keynote address by Prof. Abhishek Singh, a distinguished professor at the International Institute of Population Sciences in Mumbai. Prof. Singh shared his expertise on the best practices in the research process, the vital role of literature review in Ph.D. research, the significance of research databases, and various research methodologies. His observations provided valuable guidance for the participants in enhancing their research capabilities.

Special Invited Lecture

Following the keynote address, Prof. R Prabhakara Rao, a senior professor in the Department of Humanities and Social Sciences at SSSIHL, discussed the crucial role of research, emphasizing its transformative impact on academia and society. He explored the motivations for conducting research,

distinguished academic and industry research, highlighted the significance of statistics in research, addressed the importance of various data types, and underscored the relevance of social research. Prof. Rao also emphasized the value of regional and local studies in understanding specific contexts and challenges. His comprehensive lecture provided a well-rounded perspective on the research landscape, offering guidance and inspiration to the audience.

This report provides a summary of the significant proceedings during the inauguration of the Faculty Development Programme.

Day 1 - Session 2 - Ethics in Academic Communication

Date: 25-10-2023 (Wednesday)

The afternoon session of the day, which started at 2:00 PM, was conducted by Dr. Ashish Singh, an Associate Professor at the Shailesh J. Mehta School of Management, I.I.T. Bombay. Dr. Singh addressed the critical topic of "Ethical Issues in Academic Communication," covering a range of issues that researchers commonly encounter in their academic endeavors. The key points of his presentation included discussions on Questionable Practices, Plagiarism, Questionable Citation Practices, Authorship Issues, and Conflicts of Interest. Dr. Singh's presentation provided valuable wisdom into ethical standards and expectations in academic communication, equipping participants with essential education for maintaining integrity in their research and publications.

Day 2 - Session 3 – Scientific Writing and Publication

Date: 26-10-2023 (Thursday)

The second day of the Faculty Development Programme on "Academic Ethics, Scientific Writing, and Unit-Level Data" commenced at 9:30 AM with a session led by Dr. Ashish Singh. The topic of his presentation was "Scientific Writing and Publications," which proved to be a vital aspect of the academic journey. Dr. Singh's comprehensive presentation covered various elements of scientific writing, including the communication process, common barriers to effective writing, types of scientific literature, considerations for editors and reviewers, reasons for paper rejection in journals, guidelines for scientific writing, the key characteristics of good scientific writing, and the structural outline of a research publication. This encompassed sections such as Introduction, Review of Literature, Methods, Results, Discussion, and Conclusions. Dr. Singh's presentation equipped participants with essential acumen and strategies for successful scientific communication and publication.

Day 2 - Session 4 – Issues with Secondary Research

Date: 26-10-2023 (Thursday)

The afternoon session on Day 2, which began at 2:00 PM, was a continuation of Dr. Ashish Singh's informative presentations. Dr. Singh addressed the topic of "Issues with Secondary Research" and

provided valuable cognition into theoretical paradigms related to research, including Positivism and Interpretivist perspectives. In his presentation, he delved into qualitative research, the flow chart of the research process, and the significance of secondary data research. Dr. Singh also covered the advantages and disadvantages of utilizing secondary data, discussed the evaluation of issues related to secondary data, and highlighted sources of both internal and external secondary data. The session culminated with a practical exercise where participants completed a questionnaire, evaluated by Dr. Singh, reinforcing their understanding of data analysis and practical application. This session enhanced participants' data management and analysis skills.

Day 3 - Session 5 – Elements of Survey Research

Date: 27-10-2023 (Friday)

The third day of the Faculty Development Programme on "Academic Ethics, Scientific Writing, and Unit-Level Data" commenced at 9:30 AM, featuring another comprehensive session led by Dr. Ashish Singh. In this session, Dr. Singh explored the topic of "Elements of Survey Research and Instrument Design," providing participants with a comprehensive understanding of survey research methodologies. His presentation included the definition of survey research, the characteristics of effective surveys, a discussion on key issues encountered in survey research, an examination of categories of survey errors, and an overview of survey approaches.

Furthermore, Dr. Singh shared valuable thoughts on questionnaire design, emphasizing the importance of constructing questions, the types of questions to ask, and guidelines for question formulation. He also discussed the significance of pretesting and revising questionnaires to enhance their quality and the best questioning sequence to optimize survey data collection. Dr. Singh's session equipped participants with the essential knowledge and tools necessary for effective survey research and instrument design, contributing to their research skills and academic capabilities.

Day 3 - Session 6 – Data Entry, Coding, Cleaning and Editing

Date: 27-10-2023 (Friday)

The afternoon session on Day 3, started at 2:00 PM and continued with Dr. Ashish Singh's presentation. He focused on "Data Entry, Coding, Cleaning, and Editing," guiding participants through the stages of data analysis. Dr. Singh covered the transformation of raw data into intelligence through error checking and discussed data file terminology, code construction, and coding schemes. His comprehensive presentation offered a thorough understanding of the process of data entry, coding, cleaning, and editing which is essential to ensure the accuracy and reliability of the research dataset.

Day 4 - Session 7 – Introduction to large-scale surveys in India: NFHS – IHDS – NSSO

Date: 28-10-2023 (Saturday)

The fourth day of the Faculty Development Programme on "Academic Ethics, Scientific Writing, and Unit-Level Data" began at 9:30 AM with an enlightening session led by Dr. Abhishek Singh, a Professor at the International Institute of Population Sciences, Mumbai. In this session, Dr. Singh provided valuable insight into large-scale household surveys in India, detailing their origins and significance. He focused on key surveys such as the National Family Health Survey (NFHS) and its connection to Sustainable Development Goals (SDGs). Dr. Singh discussed various aspects of the NFHS survey, including the number of households and women surveyed in different rounds, as well as the ethical considerations surrounding blood collection for laboratory testing of HIV/AIDS. He also shed light on the India Human Development Survey (IHDS) and the history of the National Sample Surveys (NSS), offering a comprehensive understanding of these essential data collection efforts in India. Dr. Abhishek Singh's presentation enriched participants with valuable proficiency in large-scale household surveys, their relevance, and their role in shaping India's demographic and development landscape.

Following Dr. Abhishek Singh's enriching presentation, Dr. Ajit Kumar Kannaujiya, Monitoring and Evaluation Lead at Karnataka Health Promotion Trust (KHPT) in Bengaluru, conducted the next session. Dr. Kannaujiya's presentation focused on the practical and statistical applications of the STATA software in survey research, providing participants with an awareness of using this powerful tool for data analysis and interpretation.

Day 4 - Session 8 – Data Analysis using STATA - Introduction to svyset

Date: 28-10-2023 (Saturday)

The afternoon session on Day 4, commenced at 2:00 PM and was led by Dr. Kaushalendra Kumar, an Assistant Professor at the International Institute of Population Sciences, Mumbai. Dr. Kumar introduced the participants to the STATA software, providing an overview of its features and functionalities. He specifically highlighted the application of STATA in descriptive research related to survey research. To facilitate hands-on learning, data files were shared with the Faculty Development Programme participants, and a real-time practical demonstration of STATA was conducted in parallel, allowing participants to actively engage with the software and gain practical experience. Dr. Kumar's session enabled participants to explore the practical aspects of utilizing STATA for survey data analysis using svyset database, enhancing their research and data analysis skills.

Day 5 - Session 9 – Statistical Analysis

Date: 29-10-2023 (Sunday)

The fifth day of the Faculty Development Programme on "Academic Ethics, Scientific Writing, and Unit-Level Data" began at 9:30 AM with an illuminating session conducted by Dr. Abhishek Singh, a Professor at the International Institute of Population Sciences, Mumbai. In this session, Dr. Singh provided clarity into critical aspects of statistical analysis. He initiated an introduction to the basics of

regression analysis, elucidating the concept of linear regression and illustrating the measurement of the strength of linear relationships through practical examples. Dr. Singh then expanded the discussion to cover the complexities of Multiple Linear Regression, offering participants a comprehensive understanding of this essential statistical technique. Dr. Abhishek Singh's session enhanced the participants' learning and proficiency in statistical analysis, equipping them with valuable skills for their academic and research pursuits.

Day 5 - Session 10 – Valedictory Session

Date: 29-10-2023 (Sunday)

The concluding session of the Faculty Development Programme, commenced at 2:00 PM, featuring an educational presentation by Dr. Debarshi Dey, Head of Bio-Statistics and Data Management at MorphoSys in Munich, Germany. Dr. Dey's erudite presentation focused on "Basic Concepts in Statistics and Sample Size Calculation."

During his presentation, Dr. Dey covered fundamental statistical principles and sample size calculation considerations, illustrating key concepts through practical examples. He emphasized the importance of framing scientific questions, designing studies, and selecting the appropriate statistical approach. Dr. Dey also demystified fundamental statistical concepts, including Confidence Intervals, P-values, Power, and levels of significance. Participants gained a good understanding of how to use online tools for sample size calculations and the importance of accurate assumptions in this process. Dr. Dey further explained when to use z-scores and t-scores, as well as the selection of appropriate statistical tests for different scenarios. The session concluded with a discussion of formulas for calculating Confidence Intervals.

Dr. Debarshi Dey's presentation provided a comprehensive overview of essential statistical concepts and techniques, equipping participants with valuable knowledge for conducting research, designing studies, and performing sample size calculations effectively. His thought-provoking remarks marked a fitting conclusion to the Faculty Development Programme.

CONCLUDING REMARKS

In conclusion, the Faculty Development Programme, spanning five highly informative days, enriched participants with an array of knowledge, skills, and abilities, crucial for academic and research excellence. Distinguished speakers, including Dr. Abhishek Singh, Dr. Kaushalendra Kumar, Dr. Debarshi Dey, Dr. Ashish Singh, and Dr. Ajit Kumar Kannaujiya, illuminated various facets of academic ethics, scientific writing, survey research, and statistical analysis. They covered topics ranging from the intricacies of survey research to the practical applications of statistical tools like STATA and sample size calculations. Through practical demonstrations and compelling presentations, participants gained a comprehensive understanding of these crucial subjects, fostering their ability to engage in ethical, robust, and effective research endeavors. The FDP, with its diverse content, equipped attendees with a well-rounded skillset, contributing to their growth as educators and researchers.