Detailed Report on Ten Days Workshop on
"Research Methodology for Social Science: Emerging Trends and Counter Measures"
20-29 November, 2019
Organised by DRTC, Indian Statistical Institute, Bengaluru
Sponsored by Indian Council of Social Science Research

Prof. M Krishnamurthy

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Acknowledgements

The Indian Council of Social Science Research (ICSSR), recognizing the value of these kinds of the workshop has been gracious to sanction the financial assistance to conduct the workshop on Research Methodology, and the course director takes this opportunity to thank ICSSR authorities, experts and others. It is very heartening to note here that this the first kind of workshop organized in the Indian statistical Institute focusing on scholarly communication in social science.

Indian Statistical Institute, Bangalore has been encouraging the faculty to undertake research project of this kind. We thank Dr. C R E Raja, Centre Head, Bangalore for his co-operation and encouragement in the successful completion of this workshop. We also profusely thank all authorities of the Institute for the timely help in the process and conduct the workshop.

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Dr. M Krishnamurthy
Course Director

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A ten days research methodology workshop (national level) was organized on the theme "Research Methodology: Emerging Trends and Counter Measures' in Social Sciences Humanities' at Documentation Research and Training Center, Indian Statistical Institute, Bangalore from 20th to 29th November, 2019 in collaboration with Indian Council of Social Science Research (ICSSR), New Delhi. The primary aim of organizing such a workshop was to equip doctoral scholars (belonging to social sciences) to achieve the same. In tune with the primary aim objectives of the workshop were devised as:

a) To provide knowledge on Research Methodologies and design aspects.

b) To provide hands on training on data analysis tools such as mean, mode, factor analysis and application of Statistical Packages for Social Science (SPSS)

c)To get knowledge to the participants to   how to write scientific manuscripts writings   and review process.

d) To provide a comprehensive review of sources and characteristics of constraints typically found in construction of research design;

e)To review current trends and practices and researches in regards to constraint modelling;

f) To understand Social and Human Elements of Information Security

g)To discuss current issues, recent developments and their impact, and future challenges.

In order to have a true national representation in the workshop participants (30 applicants and including local applicants) were selected through recommendations on the applications received till the last date, i.e September 30th , 2019 (650 applications) by the local advisory committee of selection. Out of 650 applications 3o finally selected and who have successfully completed the ten days workshop on said theme. These out station participants hailed from different institutes like Delhi University, Utkal University, Tata Institute of Social Science, Maharaja Sayajirao University, Osmania University, Central University of Kerala, Manoramaian Sundanar University and Central University of Tamil Nadu(List Enclosed).

The resource persons were selected on the basis of their subject expertise and approved from ICSSR. There were fifteen resource persons (5-Outside State, 3-with in state , and 7-local resource persons) supported by ICSSR. As per the schedule, workshop began on 20th November, 2019 sharp at 9.30 a.m with a welcome address by Dr. M.Krishnamurthy, Course Director, where he made the participants aware about theme of the workshop, and the rationale behind it in social context.

Day -1 [Inaugural session]

The workshop opened with a formal Inaugural session at 10.00 am. The workshop was inaugurated by Prof. Vinay Kumar Srivastav, Director Anthropology Research Institute, and Director-General, RRRLF, Kolkata the gracious guests Hon'ble Prof. T D Kemparaju, Vice-Chancellor, Bangalore North University. Prof. C R E Raja, Head, Indian Statistical Institute, Bangalore Centre, Prof. M Krishnamurthy, Course Director by lighting the lamp. It was more cordial being accompanied by Heads of various departments, research scholars, students of Indian statistical Institute and participants.

Course Director Prof. M Krishnamurthy, heartily welcomed all the guests, participants, faculty members and students for the ten day workshop. highlighted the overview of the workshop with core aims, objectives, design and areas. He has explained the design of the workshop to participants and assured them of a learning experience provided in this workshop through both theory and practical sessions surely equip the researchers to carry out successful research works and overcome potential challenges.

Prof. Vinay Kumar Srivastava Director Anthropology Research Institute, and Director-General, RRRLF, Kolkata spoke about the importance of the research and stressed the need of the hour, and also he told survey research is very poor which things to included and excluded it is not thematic. In article writing abstract should be provided with 6 to 7 words before introduction.

Prof. T D Kemparaju, Vice-Chancellor, Bangalore North University stressed the need for quality in research, the ill effects of plagiarism. The opportunities available for the researchers, new areas where the research needs to be done. Research is a function of thinking which, ever idea comes to the mind, seeing is a mechanical activity but observation is a concise sensing.

Prof. C R E Raja, Head, Indian Statistical Institute, Bangalore Centre, reiterated importance of the research considering the value issues in research emphasized on more important with universal values and testing the reality in real life. He also wished all the participants happy stay at Indian statistical institute campus.

The inaugural function concluded with vote of thanks by Pranati. She extended her expression of gratitude to all partners who contributed for the realization of the workshop.

Ten Days Workshop on Research Methodology for Social Science: Emerging Trends and Counter Measures

20-29 November, 2019

Sponsored by Indian Council of Social Science Research (ICSSR) New Delhi

Organized by DRTC
Indian Statistical Institute, Bangalore

Group photo session with dignitaries after the inaugural

High Tea served after the inaugural function

Day - 1 [1st session]

The first technical session of the workshop was deliberated by erstwhile Prof. V. Krishnamurthy, PES University, Bangalore on "Research Problem, the Purpose of the Research, Deductive process, Problem statement". The Professor also elucidated the general features of research which included possibility, feasibility, interesting, novel and ethical. Further, he explained to the participants the basic aspects of research, types of research on the basis of various parameters, importance, and its characteristics. He also opened an insight about the importance and procedure of conducting quality doctoral research. He pointed out that the quest for understanding social reality and human behaviour is at the root of methodological concerns.

Prof. V Krishnamurthy, Informed consent to the participants must understand their role in the research and must agree to participate. Individuals who take part in research should not be harmed in any manner. Research practices must at all times be transparent, honest, consistent and beneficial. A good problem statement begins by introducing the broad area and then gradually leads the reader to the more narrow questions.

Day - 1 [2nd session]

Dr.Vinay Kumar Srivastava explained in detail the importance of Research. He asked the participants to be clear about the concepts of Qualitative and Quantitative research. He gave the references to a wide range of authors who have contributed immensely to Research Methodology. The research is a question of why and which deals with process, chronological order, how it should be done. He also mentioned that the research means popular, folk, local people's way of finding answers different from scientific research. He stressed the importance of research and it should have value do not fabricate or plagiarism. Considering value issues in research more important dealing with universal values and testing reality. Later there was a discussion session with the candidates in which all the doubts of the trainees pertaining to research were clarified. Reflections on Field Work Vinay Kumar Srivastava. Once it is agreed that a society should be studied as a whole for contextualizing a specific problem, fieldwork for the ethnographer becomes an experience of undergoing navigation in a different culture, with a different set of people. In such situations an episodic narration of encounters with respondents and the actions they carry out 'naturally' is a matter of anthropological reflexivity which an ethnographer should undertake in order to identify the impediments in the process of doing fieldwork, to describe the strategies.

Day - 1 [3rd session]

Prof. T D Kemparaju, Professor and Vice-Chancellor, Bangalore North University, spoke in depth about the various types of Research. When research, it can be used as an online tool for journals, books, and websites. You can also use those online tools for reference format. These tools are being used in a more write-up especially for an experienced researcher which helped me a lot. Technology research led many changes that brought researchers in a new course, in terms of the approaches. Apart from this change is they can easily adapt to the changes and challenges in others like medicine. Wherein you can use and combine information Technology Research to quickly perform which have never been done before. Using, MaxStat, and Simplot, are just some of the tools used in modern-day research. The beneficial outcomes of these changes should be drawn-out extensively. He further pointed out that information technology research turns out to be progressively more astute and connected due to the fast and innovative advancements. Some of these include system innovation distributed computing future web, hardware technology, framework designing, programming building, data, and graphics design research topics. Interconnected research, allow the pooling of the assets and to make another, more unpredictable work that offers more usefulness and execution basically in the whole area of the research.

Day - 1 [4th session]

The 4th session was conducted by the Prof. Krishna Kumar from, PES University. Prof. Krishna Kumar briefed about the various softwares that are being used in Research. He also explained about the descriptive statistics and inferential statistics, the meaning of significance level and confidence level, null hypothesis and alternative hypothesis, importance of Statistical Package for the Social Sciences, and it's used by various kinds of researchers for complex statistical data analysis. Research scholars use SPSS to analyze survey data and mine text data so that they can get the most out of their research. AMOS and the uses of various softwares like Mendeley software, Cretal and Liseral software and E-Views software. Later, he clarified all the doubts of the participants.

Day - 2 [5th & 6th session]

Prof. Ningamma Betsur, University of Mysore, briefed quantities research and qualitative research importance in the research methodology. Qualitative research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Qualitative Research is also used to uncover trends in thought and opinions, and dive deeper into the problem. Qualitative data collection methods vary using unstructured or semi-structured techniques. Some common methods include focus groups (group discussions), individual interviews, and participation/observations. The sample size is typically small, and respondents are selected to fulfill a given quota. Quantitative Research is used to quantify the problem by way of generating numerical data or data that can be transformed into usable statistics. It is used to quantify attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population.

Day - 2 [7th session]

Mr. Subhash Reddy, Librarian, PES University, focused on various aspects of e-resources. Digital technology is much easier, faster and more comfortable to apply stored intelligence. The information collected through the ages needs to be used for further research; Reform of society and overall development. Electronic resources are easily accessible in remote areas. Electronic resources solve storage problems and control the flow of information. Electronic information sources are becoming increasingly important to the academic community. He further described the advent of technology.

Day - 2 [8th session]

Prof. Kunhman, former Professor, TISS, Mumbai and visiting Professor ISEC on the topic " How to structure Thesis, Language to be used and tools of Analysis."   Prof. Kunhaman spoke in-depth about how a thesis should be written. He also explained that the introduction should be written to the thesis and not to the theme of the thesis. He then explained the different styles of writing, plagiarism and the different aspects of publishing a paper. He also explained that the nature of research can be divided into two groups: descriptive and analytical. Descriptive research usually involves surveys and studies that aim to identify the facts. In other words, descriptive research mainly deals with the description of the state of affairs as it is at present, and there is no control over variables in descriptive research.

Day - 3 [9th & 10th session]

Dr. Ashok D Hanjagi, Professor, Department of Geography, Bangalore University, is spoken on geographic Information System (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data. GIS applications are tools that allow users to create interactive queries (user-created searches), analyze spatial information, edit data in maps, and present the results of all these operations. Hundreds of thousands of organizations in virtually every field are using GIS to make maps that communicate, perform analysis, share information, and solve complex problems around the world. This is changing the way the world works.GIS technology applies geographic science with tools for understanding and collaboration. It helps people reach a common goal: to gain actionable intelligence from all types of data.GIS integrates many different kinds of data layers using spatial location. Most data has a geographic component. GIS data includes imagery, features, and base maps linked to spreadsheets and tables. Spatial analysis lets you evaluate suitability and capability, estimate and predict, interpret and understand, and much more, lending new perspectives to your insight and decision-making.

Day - 3 [11th & 12th session]

The 11th Session Prof.R.S.Deshpande set the tone of the class by motivating the trainees who were seated in the last rows, to occupy the front rows. Later, Prof. Deshpande asked the participants randomly to give him their research topics. Then started to correct and modify the topics of the participants based on the standard norms of research methodology. He also enlightened the participants about the need for the title to be crispy and apt. The Professor also discussed the process of identification of research gaps. Later, he enlightened the methodological traits one needs to follow in research namely "Positivism" and "Interpretivism." He stressed that positivism was the crust of Research. He also coined two new words namely "AROHA" (which stands for Approach, Review, Objectives, Hypothesis, Analysis) and "AVAROHA" (Algorithm, Variables, Arrangement, Results, Objectivity, Humanistic) which needs to be followed while doing Research.

Later, Prof Deshpande, shared his knowledge pertaining to the typologies and features of hypotheses, research design, which should be avoided while writing a research paper and thesis.

Day - 4 [13th & 14th session]

Prof. Venkatesh Kumar started the session by explaining the importance of language in thesis writing which was followed by explaining the difference between discovery and invention. Research is neither discovery nor an invention rather, it fills the gap between discovery and invention. He also emphasized to articulate objectives in a focused, rationale and specific manner. He explained how science and common-sense lead to knowledge development through subjective and objective approaches. This was followed by the description of the process of research:

(i) Formulating the problem

(ii) Reviewing related literature

(iii) Developing / Utilizing a Theoretical Framework

(iv) Identifying the research variables

(v) Formulating hypotheses

(vi) Selecting a research design

(vii) Specifying the population

(viii) Operationalizing & measuring research variables

(ix) Conducting pilot study and making revisions

(x) Selecting the sample

(xi) Collecting the data

(xii) Organizing the data for analysis

(xiii) Analysing the data

(xiv) Interpreting the results and

(xv) Communicating the findings.

All these components of the process of research were described in detail. Also, an interrelationship among the Problem statement, Literature Review, Theoretical Framework, and Hypotheses was amplified. Prof Venkatesh Kumar also accounted for the criteria for Formulating / Evaluating hypotheses, as these hypotheses explain the relationship between different variables. He also elucidated about the 'PAPA' Research and its stages: Pure, Applied, Policymaking and Action Research. This was followed by the tips for these writing in which pointed out that small, concise and clear sentences should be articulated. He emphasized that just like an editor, the researcher should read his/her thesis again and again after writing. The session ended with an enlightening discussion between the resource person and the participants. Participants took group photo with Prof. Venkatesh Kumar for their memory.

Day - 4 [15th & 16th session]

Prof. K. B. Rangappa, Department of Studies in Economics, Davangere University, enlightened on Applications of t test in Social Science Research. He stated t test was introduced in 1908 by William Sealy Gosset and it was introduced for quality control in a private company. Gosset, being an employee of a private company and did not have the liberty to publish articles in his name, adopted the pen name 'Student' and published the article under this name. Therefore, the name student t test. Prof. Rangappa explained on Impact of Biometric System in Fair Price Shops on Offtake of Food-Grains by Rural Households: An Empirical Study in Hadadi GP of Davanagere Dist. Further, he analysed the impact of the introduction of the biometric system in fair price shops on the offtake of food grains by rural households.

He also gave the lecture on the application of ANOVA in social science research and its importance. The ANOVA technique was first developed by Ronald A. Fisher, a British Scientist in 1923. To test the significance of the difference in the variance between the samples and to test the significance of the difference in the mean values between three or more than three sample groups.

Day - 5 [Field work]

Field Visit to Indian Institute of Transdisciplinary Research in The Philosophy of Ramanuja on 24-11-2019

On 24.11.2019, all the participants along with the Course Director, left the ISI campus at 8 am to visit the Indian Institute of Trans-Disciplinary Research in the Philosophy of Ramanuja at Melukote, Nagamangala Taluk, Mandya. At 11 am we reached the destination. The in-charge of the Transdisciplinary Research center Shri. Ananth Alwar cordially welcomed all the participants and gave an introduction about Indian Culture and he explained the importance of the traditional way of learning. He later showed all the trainees PPT presentation about "Knowledge Tree Software", which encompassed the Vedic knowledge and its branches. He also introduced his Organization named "Samskriti Foundation", established in 1999 and which was engaged in Preservation, Revival and Propagation of the Indian Knowledge systems and Cultural and Scientific Heritage of India. He also explained that the said foundation was legally recognized by the Ministry of Home Affairs as a Research Organization and was eligible to receive Foreign Funding granted under the Foreign Contribution Regulation Act (FCRA). He also added that the said Organization was recognized by Credibility Alliance as "Credible NGO". Later, he showed the trainees some of the Major Projects that were successfully completed. He also displayed various books bought out by the said Organization which

includes "A unique Kannada translation of Srimad Bhagavatam", "A Mini Encyclopedic Dictionary of Yoga", "Bibliography of Manuscripts", "A unique Kannada translation of Valmiki Ramayana", "Translation of works of Haridasa from Kannada to Tamil", etc. He also elaborated on the various Seminars/Conferences that were conducted by the said foundation.

Later, he requested the trainees to ask queries. All the trainees actively participated in the discussion. To a question about the Vedas, he replied that there were 4 Vedas and these were sub bifurcated as Samhita, Brahmana, Aranyaka, and Upanishads. He explained that Upanishads were concerned about Vedantas and dealt with Spirituality and the eternal world while the remaining three dealt with the present Mortal world. He further explained that it was for this reason that Upanishads were considered as "Jnanakhanda" while the other three were considered as "Karmakhanda." He later stressed the importance of "Shruti" or Oral tradition that has been given to us by our forefathers. He was a pain while explaining that the Tradition and culture of India are being eroded. He suggested that to preserve this Vast cultural heritage, we need to inculcate the same among the young children and participants should take the right step forward. A mother should imbibe our rich cultural heritage to her children which at present was not being done. He also stressed that Sanskrit should be learned by all and that research in Sanskrit needs "Interdisciplinary knowledge" for example Bharadwaja Maharshi's "Vimanashastra" deals with the Science of Aeroplanes which involves the

disciplines of Science and Sanskrit. Stressing the importance of Sanskrit, he said that "Sanskrit was the Mother of all Languages" and therefore one should learn Sanskrit. He also explained the concept of "Unity in Diversity and Diversity in Unity." After a fruitful discussion, all the trainees went to have darshan of Lord Cheluvanarayana Swamy.

Day - 6 [16th & 17th session]

Dr. Arun Vishwanathan, Associate Professor, Security Studies, School of National Security Studies, Central University of Gujarat, Gandhinagar. Spoke on the topic "Use of Online Research Databases and Reference software in Social Science Research" for 2 sessions. He started his presentation by highlighting the importance of E-Book databases like EBSCO, ProQuest, Taylor and Francis ONLINE, Cambridge Core, JSTOR, Oxford University Press, Sci-Hub, and DOAJ. He then explained how to find the relevant stuff in these E-Book databases. Among these Databases, he said that Mendeley and Zotero were free while Ref Works and EndNote were paid ones. He then explained the importance of Reference Management tools which include building a database for articles/thesis, organizing the database, ease of inserting references and ease of changing between reference styles. He then Practically illustrated the use of Zotero. He called all the participants one by one and asked them to have Hands-on experience on Zotero. All the participants actively participated. He then emphasized the need to Publish articles and books. He also explained how one should plan a Research publication and explained the different parts of a Research Manuscript. He then elaborated practically about the use of Citations and provided Hands-on experience in using citations and bibliography in Zotero. The final talk was about Plagiarism, use of Turnitin software, use of Grammarly software and the websites www.beallslit.weebly.com

and DOAJ which dealt with the list of Predatory Journals. He explained that academic dishonesty is not a new phenomenon and there is no agreement on why plagiarism is so prevalent in the academic world. It is widely accepted as online plagiarism. Really much due to the easy availability of information. The exponential growth in scholarly publications makes it difficult for faculty and instructors to locate sources of plagiarism. Google is the most popular search engine today and an effective tool for detecting plagiarism on the Internet.

Prof. Krishna Bhatta, Observer, ICSSR was witnessed on that day.

Day - 6 [18th & 19th session]

Prof. Boby John, Professor, Indian Statistical Institute spoke about factor analysis and cluster analysis. He firstly explained the importance of factor analysis. Stating that it is a data reduction technique and that it relates to a large number of correlated variables that can be reduced to a manageable number of uncorrelated or independent factors. He then provided hands-on experience to all the candidates by practically finding out the Factor Analysis for one example. All the trainees understood the practical aspects of Factor Analysis using SPSS. The last session of the day was about "Cluster Analysis." Prof. Boby John explained the meaning of cluster analysis stating that it was a technique used to reduce the number of rows. He also added that it was a Technique to classify objects or cases into relatively Homogenous groups called clusters. It was simply a Grouping of Respondents based on some common traits. He then provided Hands-on experience to all the candidates by practically finding out the cluster Analysis for one example. All the trainees understood the practical aspects of cluster analysis using SPSS. At the end of the fruitful session.

Day - 7 [20th & 21st session]

Prof. B Ramesh Babu, Professor (Retd) University of Madras, Chennai. The resource person started the session by quoting G.Marx who had said "Searching the literature must not become an END in itself or a convenient way to avoid the blank page." He then explained the meaning of Literature Review as the works one consults in order to understand and investigate the research problem. It is an integral part of the research. Further, he said documentation of a comprehensive review of the published and unpublished work from secondary sources of data in the areas of specific interest to the research. It is a survey of Research articles, books, and other information. Later, he stressed the importance of the literature review in which he stated that Literature Review can be a process to identify gaps in Research. This can be a justification for a Research proposal for more in-depth investigation. It also surveys scholarly sources relevant to a particular issue and provides a description, summary and critical evaluation of each work. It is also used to know the Effective evaluation of selected documents on a research topic. Without this step, one won't know if one's problem has been solved or what related research is already underway. He then explained the steps in performing the review. He then went into an in-depth discussion about why one should write a Literature Review and how Literature Review helps a person. He explained the 3 stages at which Review needs to be done namely at the stage of Early Review, at the stage of doing the research and at the stage of Preparation of Final Report. He later explained the sources of Literature Review namely Primary and Secondary. He later stated that the Organization of Literature Review was "Funnel Shaped" which included Broader topics narrowed down to subtopics and further narrowed down to the specific area. Finally, he explained the process of Writing final proposals and the importance of Referencing. His next topic was about "Impact of Research on Quality Information: Points to ponder over
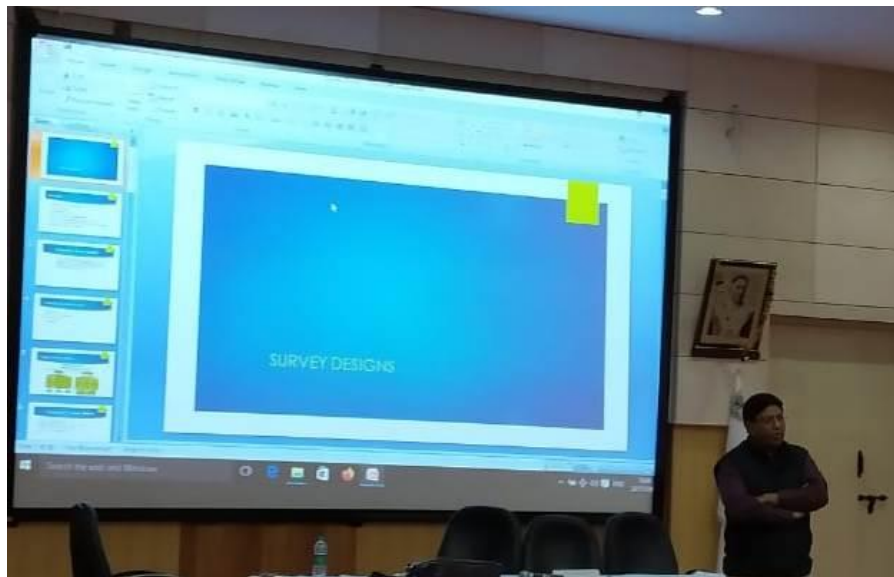
towards Visibility in Scientific Writing."   He began his lecture by quoting a quote of Robert A Day which goes "Good scientific writing is not a matter of life or death. It is much more serious than that." He also quoted Melissa McCreery "Small changes and small steps can create massive impact." He then explained in detail what was Scientific writing for which he said that it was a technical form of writing that is designed to communicate scientific information to other scientists. He also explained in depth about the Process of Publishing Scientific paper, Plagiarism, UGC Anti Plagiarism policy 2018, Sections of Scientific paper. He concluded his Lecture by explaining the areas of Impact of effective Scientific writing. In the end, there was a discussion session with the trainees in which the Resource Person answered all the queries.

Day - 7 [21st & 22nd session]

Prof. K Saxena spoke about "Sampling Techniques" in the first session and "Survey Methods" in the second session. The Professor first gave an introduction about Descriptive Statistics and Inferential Statistics and said that for both of these, Sampling was very important. He later explained the need for why the Researcher goes for sampling instead of collecting data from the whole of the population for which he gave the answer as Limitations of Time and Money. He then explained the various types of Research namely Exploratory Research, Empirical Research and Scientific Research. He then explained the meaning of Sampling as the procedure of drawing samples and Sampling Frame as the list of all the elements in the Finite population. He then explained the stages in selecting sampling namely defining target population, selecting sampling frame, determining whether Probability or Non-Probability sampling methods needs to be used, the procedure for selecting sampling unit, determining the sample

size, selecting actual sampling units and conducting fieldwork. He then explained Quantitative and Qualitative Sampling methods and explained different types of Quantitative methods like Simple Random sampling, Systematic sampling, Stratified Random sampling, and Cluster sampling. He also explained the types of Non-Random Sampling methods like Convenience sampling, Purposive sampling, Quota sampling, and Snowball sampling. He also explained the difference between Longitudinal and cross-sectional methods of collecting sampling and the ethical consideration in data collection. After tea break, he explained "Survey Designs" in which he quoted Uma Sekaran's theory of determining the size of the sample which he said lied between 30 to 500. He also explained in-depth about the Survey instruments, types of Survey, Errors in Survey Design and the Importance of Pilot testing. Finally, there was a discussion session in which he answered all the queries of the trainees.
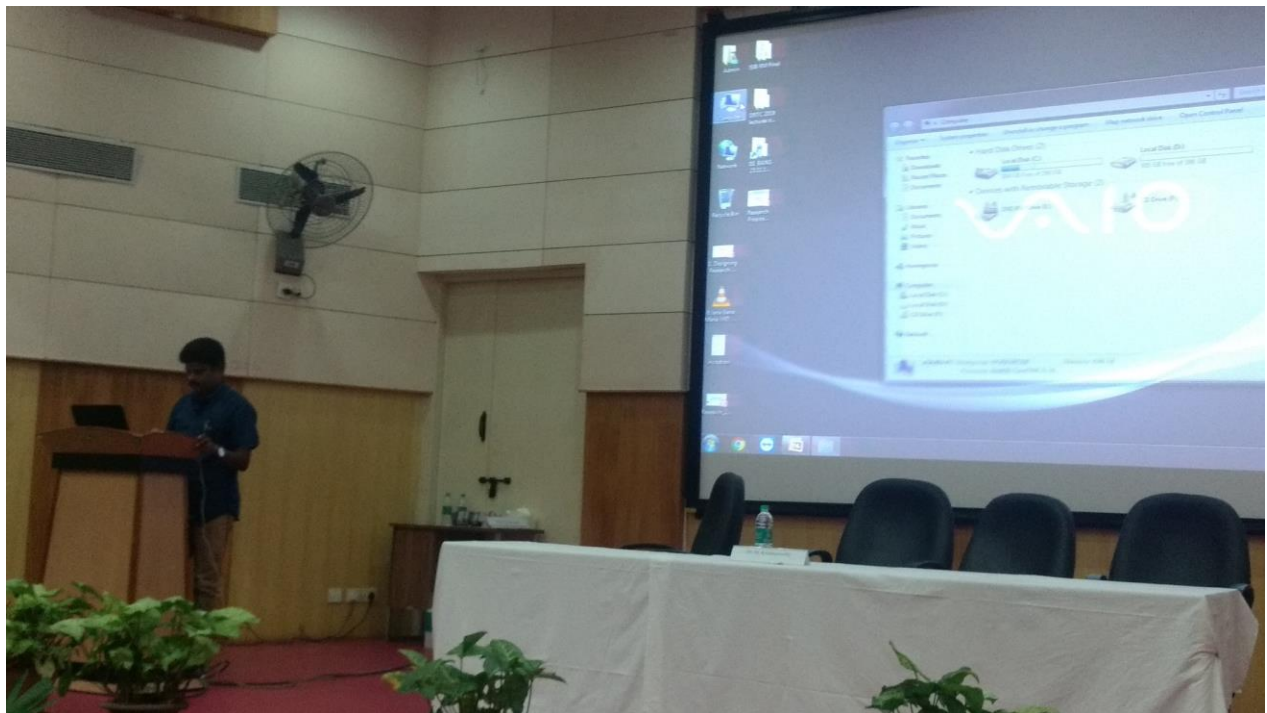
Day - 8 [23rd & 24th session]

Dr. Ramesha, Professor, Department of Library and Information Science, Bangalore University, started his presentation by presenting the "India Skills Report 2019", in which he emphasized that only 47% of the total Graduates and Post Graduates are employable. He added that Businesses R&D around the world are reporting a skills shortage epidemic that is hindering the growth prospects of the nations. He also discussed the main Highlights of The Global Competitiveness Report 2019, which was released by the World Economic Forum. He said that by 2030, India is going to experience the young population. He added that all the E-Resources were available on the internet like E-Journals, E-Standards, E-Directories, etc. and that 95% of Web of Science journals were in digital form only. He emphasized that users could access these e-journals from Home itself. He then explained the Searching tools like Search Engines, Meta Search Engines, Directories, Scholarly Communication Directories, Subject Gateways. He also explained the different Web browsers. He later explained the ten steps in Planning for Effective Searching and also the meaning of different Domains. He

provided Hands-on experience on "Advanced Search" option in Google and the features of Google Scholar, BASE Search, Kidrex, Scholarpedia, Entity cube, Sindice, WolframAlpha, facilities, dogpile, ixquick, yippi, iQwki, Roadissn, journal seek, load, oajse, oalib, scoarnet, scholarship, Bentham, highwire, Stanford, NISCAIR, archive.org, JURN, Open book publishers, open humanities press, khan academy, Brittanica, lexico, Grammarly, Taylor and Francis, emerald insight, EBSCOhost, sage, SSRN, NBER, Zenodo, semantic scholar, eric, ideas, ISEC, Impactstory.org, Academia.edu. He then discussed in-depth about Predatory publishing issues. He also explained some tips to help identify potential predatory publishers. He then explained the players of Scholarly Communication and the contents that have to be included in Scholarly articles and the style of citations.

Day - 8 [25th & 26th session-Computer Lab]

Dr. Rajashekar, Associate Scientist, ISI, provided hands-on experience on "Linux and Latex." He demonstrated practically the features of Linux. He said that like Windows, Linux was also an Operating System but unlike Windows, Linux was an Open-source software. There were many versions of Linux. This OS could be used for Document creation, Formatting of Thesis, etc. Latex software was similar to MS word. But to execute the document, certain commands need to be typed. Later, Dr. Rajashekar explained the various commands used in Linux. He further provided hands-on experience on "Kile" software and made the trainees create and type a document using Kile software.

Day - 9 [Library visit]

There was a Library Visit to the Library situated in the Indian Statistical Institute Campus. Before taking the participants to the Library, Prof. M Krishnamurthy explained the importance of the Library and how one has to effectively use the resources available at the Library. He then showed the powerpoint presentations of the various libraries he had visited around the world. It was literally "A virtual tour around the world" for all the participants. Prof. M Krishnamurthy spoke about the Libraries at Vienna, Toronto, Paris, France, Scotland, Chicago, Illinois, Washington, Stockholm, London, Tokyo, Berlin, Hongkong, Barcelona, Sydney, Singapore, Korea, Seoul, Delhi, Calcutta, Bengaluru, and Chennai. After this, the participants were taken to the ISI Library and were guided by the Professor about the various books. The Professor himself personally explained the details of various books that were available in the Library.

Day - 9 [27th & 28th session]

Prof. T Ramakrishna, Head, MCI Chair Head, IoES Chair, NLSIU started his Lecture by asking questions about "Reflective Thinking" and "Hypothesis" for which the participants replied satisfactorily. He gave a brief introduction about the features and various types of Intellectual Property like geographical indications, integrated circuits, Technical Know-how, Business secrets, Semiconductor Layout Design, Design, Plant variety, Traditional knowledge, Inventions, Trademarks, Patents, Copyrights, Technology. He explained about SDO meaning Standard Development Organizations. He also explained that Intellectual Property was an Intangible property. He said that except Jharkhand, almost all the states have GIs. He clearly differentiated between Discovery and Invention and added that only Invention gets protected under the law. Explaining about Patents he said that Patent is something which is an Invention, which has Utility and which is Non-Obviousness. He added that Copyrights were given to Books, Movies, Drama, Films, Music and many more. He said that the Copyright Act protects the expression over ideas. Copyright work is protected for the author's life plus 60 years after his death. For Pseudonymous authors, he said that the right is only up to 60 years after publication. He concluded his speech by telling in-depth about the Infringement of Intellectual Property attracts penal provisions and also stressed the importance of Section 82 of the Copyright Act which dealt with exemptions from Infringement.

Day - 10 [29th & 30th session]

Prof. A Y Asundi, Bangalore University on the topic "Research Literacy: Trends and Tools and Scientific Paper Writing." The main topics in which he explained in depth were the advent of literacies and thesis, Research and Literacy, Types of Research, Research Literacy, Research Literacy concepts, Six Research Literacies, Common questions, Reference Management tools, Training Researchers. Speaking about Literacies, he said that there were different types of literacies like Information literacy, computer literacy, internet, and web literacy, digital literacy, media literacy, health literacy, financial literacy, and Research Literacy. He explained that Research Literacy was defined as "Knowledge, skills, attitudes, and beliefs required to engage with and in Research." He added that the 6 types of Literacies were ORCID number, Validated, Current Research Profile, Metrics, Open Access, Data Management, and Impact Management. He then explained the concept of Plagiarism and explained the differences between Plagiarism and Copyright. He further explained the Aspects of the style of Scientific papers which included Fundamentals of Scientific style considerations, strategy for efficiently writing

scientific research papers, components of writing paper. He then explained the contents of Scientific and Technical subject matter, Development tools, Delivery tools.   He concluded his lecture by telling about the General Principles on Grammatic Style.

Lunch Session @ 10th day

Day - 10 [Quizz session]

"Learning gives Creativity, Creativity leads to thinking, Thinking provides knowledge, Knowledge makes us Great…. Quiz competitions are always interesting and informative, which. provide excitement among the students and also make them aware of current affairs.

There was a quiz competition conducted by Mr. Subash Reddy B, Librarian, PES University, Bangalore.

The winner of this Quiz competition was

1. Ms. Suparna B T Naik, Karnataka University, Dharavad.

2. Mr. Yousuf, Central University, Kerala and

3. Mr. Vishwanath, Central University, Karnataka

Day - 10 [Valedictory]

The Valedictory Ceremony of the Ten days workshop on "Research Methodology for Social Science: Emerging Trends and Counter Measures" 20-29 November 2019 was held on November

29, 2019 at 4.00 P.M at the Institute's auditorium to distribute the Certificates on their successful completion of the research methodology course.

The course is sponsored by the Indian Council of Social Science Research, (ICSSR) New Delhi.

Prof. Kunhaman, Former Professor, TISS, Mumbai was the Chief Guest of the function and the dignitary Prof. A Y Asundi, Professor & Director of IT, Bangalore University, Bangalore graced the function as Guest of Honour. Prof. M Krishnamurthy Course Director presided over the ceremony. Participants, ISI Faculty, administrative officials, attended the function.

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With these remarks, Prof. Kunhaman discussed research in social science and its impact on society and its specificity. He said that there are four criteria through which any society is studied i.e. heterogeneity, stratification, hierarchy and externality. Most of the societies are heterogeneous and stratified in nature, but Indian society has all the four characters making it all the more difficult to study. All these elements interact and overlap in Indian society generating cumulative domination and discrimination as against the dispersed discrimination in other countries. All these aspects make it difficult for the researchers to study any phenomenon of Indian society. Hence, the task for Social Science researchers in India is more challenging.

The Certificates to all the eligible participants were distributed during this occasion.

The programme was ended with vote of thanks delivered by Prof. M Krishnamurthy Course Director.