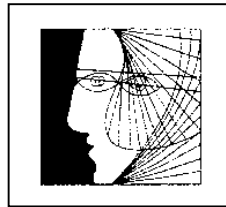


WORKSHOP REPORT

Qualitative and Quantitative Research in Social Sciences: Methods and Data Analysis

22nd to 29th July 2018



Organized by
Jnana Prabodhini's Institute of Psychology,
Pune, Maharashtra

Partially Funded by
Indian Council of Social Science Research (ICCSR)
Western Regional Centre
Mumbai

Report

Qualitative and Quantitative Research in Social Sciences: Methods and Data Analysis

(22nd July to 29th July 2018)

Jnana Prabodhini's Institute of Psychology based at Pune, Maharashtra, organized and conducted eight days workshop on **Qualitative and Quantitative Research in Social Sciences: Methods and Data Analysis during** 22nd July to 29th July 2018 at Jnana Prabodhini's Institute of Psychology, Pune. This workshop was planned for PhD. students, research scholars and faculty from diverse fields of social sciences. The main feature of this workshop was blending knowledge of qualitative research methods along with quantitative.

Objectives of the workshop were-

- To offer insight into every step of qualitative research, data collection methods, process, and approaches to qualitative data analysis.
- To make researchers aware of ethical issues and methodological challenges with qualitative research.
- To guide on the use of qualitative approach along with a quantitative approach (mixed methods) in research
- To facilitate thinking regarding using an appropriate statistical technique for different research questions.
- To provide an opportunity to practice quantitative data analysis through the advanced statistical package.
- To inculcate the skills for quantitative and qualitative data analytics.

Participants

Total twenty-five participants from various fields of social science like Clinical psychology, Yoga, Economics, Geography, Education, Social Work, Industrial psychology, Sports psychology, Counseling psychology attended the workshop. Out of 25 participants, 10 participants completed their Ph.D./MPhil, 7 were pursuing PhD. and others were working as research assistants/research associates.

Faculty

1. Prof. Subrata Rath-Indian Statistical Institute, Pune
2. Prof. P.H. Lodhi , Former Head, Savitribai Phule Pune University, Pune
3. Prof. Sujata Sriram, School of Human Ecology, Tata Institute of Social Sciences, Mumbai
4. Dr. Sanjay Mehendale- Director Research, P.D. Hinduja Hospital, Ex-Additional Director General, ICMR, New Delhi
5. Dr. Anagha Lavalekar, Head, Jnana Prabodhini's Institute of Psychology
6. Prof. Anjali Radkar -Gokhale Institute of Politics and Economics, Pune
7. Dr. Sunita Kulkarni, Director, The Granny Cloud,
8. Dr. Subha Ranganathan, Assistant Professor, Indian Institute of Technology Hyderabad
9. Dr. Neelam Oswal, Clinical Psychologist, Adjunct Professor, Savitribai Phule Pune University
10. Dr. Meenakshi Gokhale, Assistant Professor, SP College. Pune

Methodology

Various methods were used in the workshop like- group discussions, presentations, paired and group tasks etc. Using these techniques, practical knowledge about qualitative and quantitative analysis was provided through hands-on training sessions by the resource persons. PPT's, worksheets, website links and reading material in hard and soft copies were distributed/shared during the workshop.

In the workshop, one to one individual interaction was encouraged. Queries and difficulties of participants in data analysis were solved by the experts. Participants took a keen interest in practical sessions to acquire hands-on experience of data analysis.

Workshop content

Day wise details are given below-

Session No.	Timings	Topics	Resource Persons	Content in brief
Day one 22nd July 2018 (Sunday)				
Inauguration			In the beginning, a small inaugural function took place in the presence of Dr. Vanita Patwardhan, Prof. Subrata Rath, Dr Anagha Lavalekar, Head, JPIP. Dr. Lavalekar emphasized on the objectives behind the workshop.	
Session 1	10.30 to 11.30	Steps in Research process- Overview	Dr. Anagha Lavalekar	<ul style="list-style-type: none"> • Purposes of research • Steps in research • Problem identification • Literature review • Selection of research design, sample selection, data collection tools and techniques • Data collection • Data analysis, interpretations and discussion • Implications, Conclusions, and Recommendations
Session 2	11.30 to 1.30	Testing assumptions and types of correlations	Prof. Subrata Rath	<ul style="list-style-type: none"> • Testing assumptions- assumption of normality, Homogeneity of variance • Types of errors • Quantifying the relationship- positive, negative linear relationship • Types of correlation- bivariate and partial
Session 3	2.15 to 3.30	Regression analysis	Prof. Subrata Rath	<ul style="list-style-type: none"> • Basic assumptions for regression • Regression tree model • Simple regression-when and how to calculate
Session 4	3.30 to 6.00	Multiple Regression analysis	Prof. Subrata Rath	<ul style="list-style-type: none"> • Multiple regression-basic concepts, checking assumption and calculations using software • Principles behind logistic regression, steps in calculations

Session No.	Timings	Topics	Resource Persons	Content in brief
Day two 23rd July 2018 (Monday)				
Session 5	10.30 to 12.00	Data cleaning and Descriptive statistics	Prof. Anjali Radkar	<ul style="list-style-type: none"> • What is Data cleaning • Importance of data screening • Descriptive statistics -Mean, Median, Mode, SD, Variance
Session 6	12 to 1.30	Comparing means	Prof. Anjali Radkar	<ul style="list-style-type: none"> • Assumptions of Parametric and Non-parametric test • Independent and dependent t-test • One way ANOVA
Session 7	2.15 to 3.30	Introduction of statistical package	Prof. Anjali Radkar	<ul style="list-style-type: none"> • Introduction of a statistical package- Data entry, coding & data transfer, • Syntax editor , saving file and retrieving a file
Session 8	3.30 to 5.00	Hands-on training	Dr. Meenakshi Gokhale	<ul style="list-style-type: none"> • Exploring data with graph • Descriptive statistics using SPSS
Day three 24th July 2018 (Tuesday)				
Session 9	10.30 to 12.00	Analysis of Variance (ANOVA)- Purpose, steps and limitations	Prof. P.H. Lodhi	<ul style="list-style-type: none"> • Concept of variability • What is the analysis of variance? • Assumptions underlying t and ANOVA • Why and how to calculate ANOVA • Types of ANOVA • Independent groups ANOVA or Between subjects ANOVA • Repeated measures ANOVA • Mixed ANOVA
Session 10	12.00 to 1.30	Multivariate Analysis of Variance (MANOVA)	Prof. P.H. Lodhi	<ul style="list-style-type: none"> • Multivariate Analysis of Variance- Purpose, steps and limitations • Guidelines to choose post hoc test • Factorial ANOVA
Session 11	2.15 to 3.30	Hands-on training	Dr. Meenakshi Gokhale	<ul style="list-style-type: none"> • Application of the above statistics on SPSS • Assumptions of ANOVA and MANOVA
Session 12	3.30 to 5.30	Hands-on training	Dr. Meenakshi Gokhale	<ul style="list-style-type: none"> • Application of ANOVA-between subjects, repeated measures, mixed ANOVA using SPSS

Session No.	Timings	Topics	Resource Persons	Content in brief
Day Four 25th July 2018 (Wednesday)				
Session 13	10.30 to 12.00	Analysis of Covariance (ANCOVA)	Prof. Prabhu Lodhi	<ul style="list-style-type: none"> • Meaning of Analysis of covariance (ANCOVA) • Assumptions of ANCOVA • How to conduct ANCOVA • Interpretation of ANCOVA
Session 14	12 to 1.30	Multivariate Analysis	Prof. Prabhu Lodhi	<ul style="list-style-type: none"> • Multivariate Analysis of Covariance (MANCOVA) • Assumptions, concepts, calculations, and interpretation of MANCOVA • Reporting MANCOVA
Session 15	2.00 to 3.30	Effect size- why and how to calculate	Prof. Prabhu Lodhi	<ul style="list-style-type: none"> • The concept of Effect size • Statistical vs Practical Significance • Need the measures of Effect Size • Types of Effect Sizes
Day Five 26th July 2018 (Thursday)				
Session 17	10.30 to 12.00	Characteristics of qualitative research	Prof. Sujata Sriram	<ul style="list-style-type: none"> • Basic factors of qualitative research protocols • Features of Qualitative Data • Types of Qualitative Methods • Biographical Study, Case Study, Ethnography-Grounded theory, Historiography, Phenomenology • Definition of Terms- Key Informant, Field Setting, Purposive Sampling, Purposeful sampling, Saturation, Thick description, Transferability • Strategies of Qualitative research
Session 18	12 to 1.30	Data collection methods in qualitative research-1	Prof. Sujata Sriram	<ul style="list-style-type: none"> • Types of data collection methods • Uses of in-depth interviews • Types of interview questions • Require skills for interviewing

Session No.	Timings	Topics	Resource Persons	Content in brief
Session 19	2.15 to 3.30	Data collection methods in qualitative research-2	Prof. Sujata Sriram	<ul style="list-style-type: none"> Steps in the focus group process Uses focus group discussion Do's and don'ts
Session 20	3.30 to 5.30	Data collection methods in qualitative research-3&4	Prof. Sujata Sriram	<ul style="list-style-type: none"> Kinds of observation in research Observations participatory Methods Strengths and weaknesses of an observation method Field notes-Importance and use
Day Six 27th July 2018 (Friday)				
Session 21	10.30 to 12.00	Qualitative data analysis- Grounded theory	Prof. Sujata Sriram	<ul style="list-style-type: none"> What is Grounded theory Codes and categories from the data What to look for when you are coding? Techniques to identify themes and codes Types of coding -Descriptive coding, Analytical coding
Session 22	12 to 1.30	Qualitative data analysis- phenomenology and techniques	Prof. Sujata Sriram	<ul style="list-style-type: none"> What is phenomenology analysis? How to do phenomenology analysis Steps to follow while analysis
Session 23	2.00 to 3.30	Qualitative data analysis- Thematic analysis	Prof. Sujata Sriram	<ul style="list-style-type: none"> What is thematic analysis Stages of thematic analysis <ol style="list-style-type: none"> 1. Familiarize yourself with the data 2. Generate initial codes 3. Search for themes 4. Review themes 5. Define and name themes 6. Report writing
Session 24	3.30 to 5.00	Qualitative data analysis- Thematic analysis	Prof. Sujata Sriram	<ul style="list-style-type: none"> Thematic network analysis Techniques to identify themes Hands-on training of coding and thematic analysis

Session No.	Timings	Topics	Resource Persons	Content in brief
Day Seven 28th July 2018 (Saturday)				
Session 25	10.30 to 12.00	Sampling in Qualitative research	Dr. Sunita Kulkarni	<ul style="list-style-type: none"> • When to decide about sample • How to decide sample size in qualitative research • Approaches to sampling • Challenges related to sampling Strategies • Software for qualitative analysis- ATLAS , SQUAD, MAXQDA, Hyper RESEARCH etc.
Session 26	12 to 1.30	Case study method	Dr. Subha Ranganathan	<ul style="list-style-type: none"> • What is a 'case' • How to develop case study questions • Key features of case studies • Types of case studies • Procedure for case studies • Selection of cases • Aspects studied in case studies • Writing up case studies • Ethics of case study research • Limitations of case studies
Session 27	2.15 to 3.30	Methodological challenges in Qualitative Research	Dr. Subha Ranganathan	<p>Methodological challenges-stepwise</p> <ul style="list-style-type: none"> • Defining the research problem • Sampling • Data collection • Data Analysis <p>Methodological Challenges method-wise</p> <ul style="list-style-type: none"> • Challenges in Ethnography • Challenges in Case Study Research • Challenges in Focus Groups Discussions
Session 28	3.30 to 5.00	Ethical issues with qualitative research Hands-on training	Dr. Subha Ranganathan	<ul style="list-style-type: none"> • Ethical issues with qualitative research • Informed consent • Ethics in online research • Ethics of writing

Session No.	Timings	Topics	Resource Persons	Content in brief
Day Eight 29th July 2018 (Sunday)				
Session 25	10.30 to 12.00	The Journey of my Research	Dr. Neelam Oswal	<ul style="list-style-type: none"> The Journey of a researcher (on Mindfulness) was step by step narrated by Dr. Neelam Oswal
Session 26	12 to 1.30	Mixed research methods: When & How	Dr. Sanjay Mehendale	<ul style="list-style-type: none"> The concept of mixed method research When to use Mixed research methods Challenges for a Mixed Methods Researcher Concurrent mixed study designs Sequential mixed study designs Methodological considerations during mixed methods studies
	1.30 to 2.30 to	Valedictory	Dr. Sanjay Mehendale	<ul style="list-style-type: none"> Valedictory and certificates distribution by Dr. Sanjay Mehendale

Feedback from participants

Last day feedbacks were collected from participants in the format given by ICSSR. Participants allotted ratings for resource persons on the ten dimensions (time, subject knowledge, ability to interact, and explain presentation quality etc.) Table of average rating (out of 10) given to resource persons is given below.

Sr. No.	Resource persons	Avg. out of 10
1	Dr. Anagha Lavalekar	8.91
2	Prof. Subrata Rath	8.59
3	Prof. Anjali Radkar	8.41
4	Prof. P.H. Lodhi	8.95
5	Dr. Meenakshi Gokhale	9.02
6	Prof. Sujata Sriram	9.16
7	Prof. Sunita Kulkarni	8.48
8	Dr. Subha Ranganathan	8.77
9	Dr. Neelam Oswal	9.24
10	Dr. Sanjay Mehendale	9.05

Feedback from participants on Parameters by ICSSR

As per the 16 parameters which are given by ICSSR for workshop following ratings were noted. The feedback is given by participants which are out of 10. The rating shows that the quality of workshop was excellent.

Sr. No.	Parameters	10 (High) to 1 (Low) scale
1	Relevance of the Course	9.29
2	Applicability of the course for present job	9.15
3	Extent of coverage of the course content	8.29
4	Learning values in terms of:	
	* Concepts	8.79
	*Knowledge	8.79
	*Analytical abilities	8.86
	*Broadening perspectives	9.21
5	Appreciating and implementing experimental methodology wherever applicable	8.71
6	Improving use of appropriate audio visual technology	8.14
7	Effectiveness of program delivery/ communication	8.71
8	Competence of resource persons	9.07
9	Effectiveness of skill development	8.29
10	Relevance and usefulness of the reading materials	8.50
11	Duration of the program	7.86
12	Scope of implementation	9.08
13	Keeping abreast of the latest development in your discipline/subject	8.71
14	Research orientation	8.71
15	Use of innovative and participative learning methods	7.92
16	Any other aspects of impact on professional orientation and development	8.38

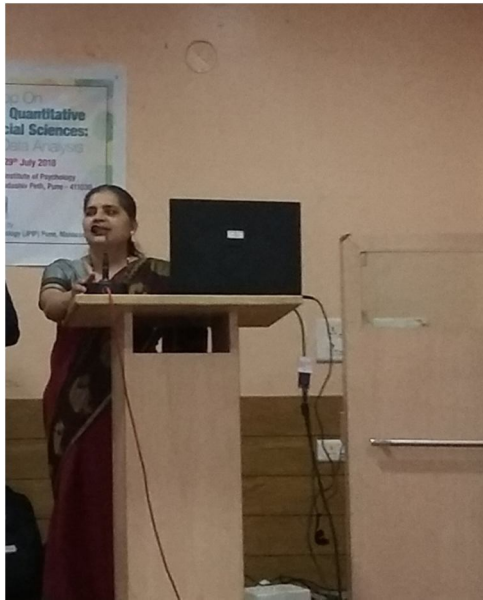
Thus the workshop seems to have benefited the researchers in a satisfactory manner. It indicates that participants gained conceptual as well as practical knowledge about qualitative and quantitative analysis. Qualitative feedback indicates that the workshop will definitely help them to progress in their research and publications as well.

JPIP intends to arrange this activity on a yearly regular basis so as to reach out to many scholars and help them construct their own way of obtaining and disseminating the knowledge gained.

Dr. Anagha Lavalekar
Head
Jnana Prabodhini's Institute of Psychology

Dr. Pranita Jagtap
Coordinator of workshop
Research Associate (JPIP)

Appendix 1- Photos



Dr. Anagha Lavalekar



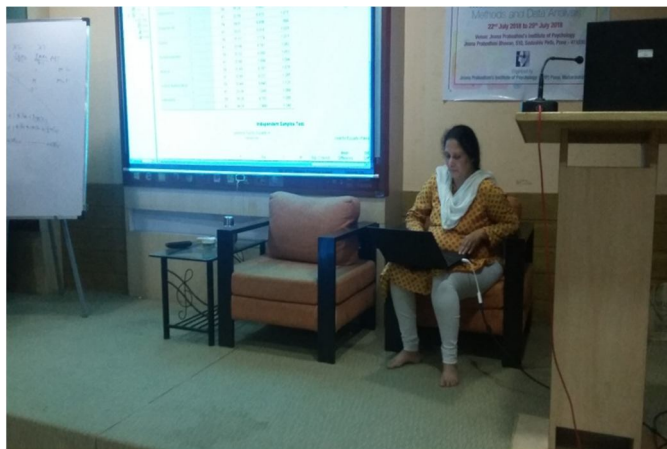
Prof. Subrata Rath



Prof. P.H. Lodhi



Dr. Meenakshi Goghale-Hands on training session



Presentations by Participants



Prof. Sujata Sriram, Tata Institute of Social Sciences, Mumbai



Dr. Sunita Kulkarni



Dr. Neelam Oswal



Dr. Sanjay Mehendale



Certificates distribution by Dr. Sanjay Mehendale

Appendix 2- Workshop Schedule

Qualitative and Quantitative Research in Social Sciences: Methods and Data Analysis (22nd July to 29th July 2018)

Time	Day 1 22/7/2018 (Sunday)	Day 2 23/7/2018 (Monday)	Day 3 24/7/2018 (Tuesday)	Day 4 25/7/2018 (Wednesday)
10.30 to 12.00 noon	<ul style="list-style-type: none"> • Inauguration • Steps in Research process-Overview (Dr. Anagha Lavalekar) 	<ul style="list-style-type: none"> • Data screening and cleaning • Descriptive statistics (Prof. Anjali Radkar) 	<ul style="list-style-type: none"> • Analysis of Variance (ANOVA)- Purpose, steps and limitations (Prof. P.H. Lodhi) 	<ul style="list-style-type: none"> • Analysis of Covariance (ANCOVA) (Prof. P.H. Lodhi)
12 to 1.30 pm	<p style="text-align: center;">(11.30 to 1.30 pm)</p> <ul style="list-style-type: none"> • Testing assumptions • Types of correlation-bivariate and partial • Comparing correlations (Prof. Subrata Rath) 	<ul style="list-style-type: none"> • Comparing means When, Why and How-interpretation of output (Prof. Anjali Radkar) 	<ul style="list-style-type: none"> • Multivariate Analysis of Variance (MANOVA) (Prof. P.H. Lodhi) 	<ul style="list-style-type: none"> • Multivariate Analysis of Covariance (MANCOVA) (Prof. P.H. Lodhi)
1.30 to 2.15 pm	Lunch Break			
2.15 to 3.30 pm	<ul style="list-style-type: none"> • Regression analysis-simple regression (Prof. Subrata Rath) 	<ul style="list-style-type: none"> • Introduction of statistical package Data entry, coding ,transfer, syntax editor (Prof. Anjali Radkar) 	<ul style="list-style-type: none"> • Hands-on training sessions (Dr. Meenakshi Gokhale) 	<ul style="list-style-type: none"> • Effect size-why and how to calculate (Prof. P.H. Lodhi)
3.30 to 6.00 pm	<ul style="list-style-type: none"> • Regression analysis- multiple regression (Prof. Subrata Rath) 	<ul style="list-style-type: none"> • Hands on training • Exploring data with graph (Prof. Anjali Radkar) 	<ul style="list-style-type: none"> • Hands-on training sessions (Dr. Meenakshi Gokhale) 	<ul style="list-style-type: none"> • Hands-on training sessions (Dr. Meenakshi Gokhale)

Qualitative and Quantitative Research in Social Sciences: Methods and Data Analysis
(22nd July to 29th July 2018)

Time	Day 5 26/7/2018 (Thursday)	Day 6 27/7/2018 (Friday)	Day 7 28/7/2018 (Saturday)	Day 8 29/7/2018 (Sunday)
10.30 to 12.00 noon	<ul style="list-style-type: none"> Characteristics of qualitative research (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Approaches to qualitative data analysis- Grounded theory (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Sampling in Qualitative research Qualitative analysis packages (Prof. Sunita Kulkarni) 	<ul style="list-style-type: none"> Journey of my Research (Dr. Neelam Oswal)
12 -1.30 pm	<ul style="list-style-type: none"> Data collection methods in qualitative research- in-depth interviews (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Approaches to qualitative data analysis- phenomenology and techniques (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Case study method (Dr. Subha Ranganathan) 	<ul style="list-style-type: none"> Mixed research methods: When & How (Dr. Sanjay Mehendale) <p style="text-align: center;">Valedictory (1.30 to 2.00 pm)</p>
1.30 to 2.15 pm	Lunch Break			
2.15 to 3.30 pm	<ul style="list-style-type: none"> Data collection methods in qualitative research- focus groups (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Approaches to qualitative data analysis- Thematic analysis (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Methodological challenges and Ethical issues with qualitative research (Dr. Subha Ranganathan) 	<ul style="list-style-type: none"> Questions-answers Feedback from Participants
3.30 to 6.00 pm	<ul style="list-style-type: none"> Data collection methods in qualitative research - observations participatory Methods (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Approaches to qualitative data analysis- Narrative analysis (Prof. Sujata Sriram) 	<ul style="list-style-type: none"> Hands-on training sessions 	