



## FDP on 'Quantitative Data Analysis using R'

<b>Date:</b> 2 <sup>nd</sup> -11 <sup>th</sup> Nov, 2020	<b>Venue:</b> Webinar / Zoom meeting
<b>Time:</b> 04.30pm to 06.00pm	<b>Event :</b> Faculty Development Program
<b>No. of Participant:</b> 120	<b>Event Convener:</b> Dr. Purushottam Bung. <b>Dr. Padmalini Singh</b> <b>Event Coordinator:</b> Prof. Priya Jain

### Objectives

- The FDP was intended to support researchers, consultants, and data analysts to:
  - Have a clear understanding of fundamentals of quantitative research
  - Have hands on R software tools for data analysis
  - To help them acquire a new skill set by learning R

### Agenda/Flow of the Event

<b>(Dr. Ashish Singh, IIT Bombay)</b> 04:00 PM - 06:00 PM		<b>(Mr. Shankar MM)</b> <b>Mentor – CARES, Bangalore)</b> 04:00 PM - 06:00 PM
<b>Session 1</b> 2 <sup>nd</sup> Nov, 2020 (Monday) Measurement & Scaling	<b>Session 2</b> 2 <sup>nd</sup> Nov, 2020 (Monday) Measurement & Scaling	<b>Workshop Session 11</b> 7 <sup>th</sup> Nov, 2020 (Saturday) Introduction to R (Basics)
<b>Session 3</b> 3 <sup>rd</sup> Nov, 2020 (Tuesday) Questionnaire Design	<b>Session 4</b> 3 <sup>rd</sup> Nov, 2020 (Tuesday) Data coding	<b>Workshop Session 12</b> 8 <sup>th</sup> Nov, 2020 (Sunday) Testing of Hypothesis (Parametric & Non-Parametric tests)
<b>Session 5</b> 4 <sup>th</sup> Nov, 2020 (Wednesday) Sampling & Sampling Distribution	<b>Session 6</b> 4 <sup>th</sup> Nov, 2020 (Wednesday) Sampling & Sampling Distribution	<b>Workshop Session 13</b> 9 <sup>th</sup> Nov, 2020 (Monday) Correlation & Regression
<b>Session 7</b> 5 <sup>th</sup> Nov, 2020 (Thursday) Hypothesis testing	<b>Session 8</b> 5 <sup>th</sup> Nov, 2020 (Thursday) Inferential statistics (including testing of statistical significance)	<b>Workshop Session 14</b> 10 <sup>th</sup> Nov, 2020 (Tuesday) Exploratory Factor Analysis And alpha assessment
<b>Session 9</b> 6 <sup>th</sup> Nov, 2020 (Friday) Multivariate analysis	<b>Session 10</b> 6 <sup>th</sup> Nov, 2020 (Friday) Correlation and Regression (testing and interpretation)	<b>Workshop Session 15</b> 11 <sup>th</sup> Nov, 2020 (Wednesday) Overall Practical Approach towards questionnaire-based data analysis using R

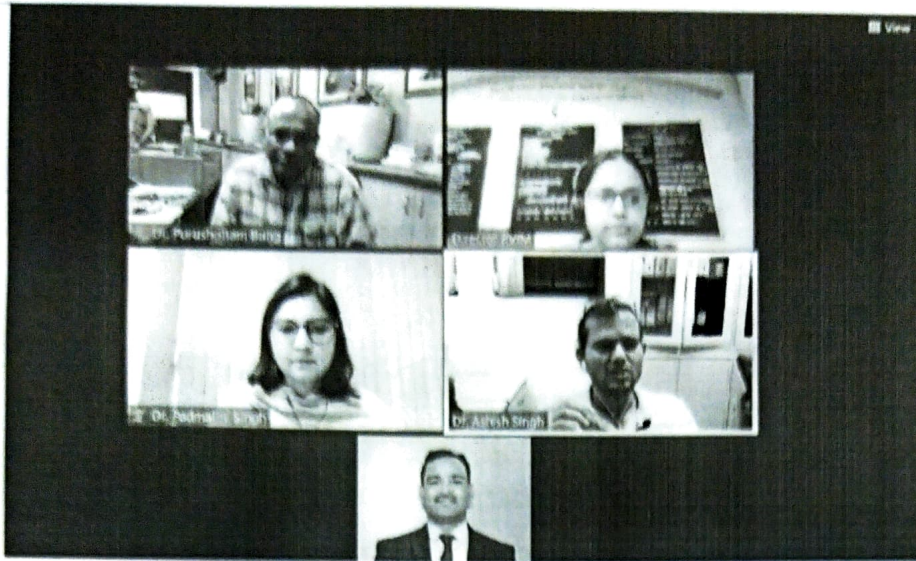
## Outcome Achieved/ Attained:

The FDP was designed in two parts wherein first 5 days Dr. Ashish Singh, Assistant Professor, IIT Bombay delivered the fundamentals of quantitative research, clearing the concepts right from measurement and scaling, questionnaire design, data coding, sampling and sampling distribution, Hypothesis testing, inferential statistics and Multivariate analysis. Once the participants gained conceptual clarity, rest 5 days were dedicated for workshop where participants were simultaneously practicing the instructions by experts on the data sets made available to them in advance. This approach of theory followed by practice was successful in the following ways:

- Participants had a better understanding about the fundamentals of quantitative research right from measurement and scaling, questionnaire design and data coding, sampling and sampling distribution, Hypothesis testing, inferential statistics and Multivariate analysis.
- Participants were able to understand the basics of R programming.
- Participants were able to run the codes following the expert and practicing simultaneously on their own. They were able to generate the results.
- Participants were able to do the basic statistical analysis using R.
- The FDP was helpful for academicians, researchers, consultants and executives to use R for the quantitative research.

10 days FDP was completely appreciated by the participants. The expert's talk followed with the workshop was very helpful in practicing the concepts learnt by the participants.





**Feedback & Coordinator Comment:**

The FDP program was received much appreciation by all the participants. The participants also valued and enjoyed the interaction with the experts as well as during the FDP. The participants have requested to organize FDPs and workshop on research in future too.

**Event Convener: Dr. Padmalini Singh**

**Event Coordinator: Prof. Priya Jain**



*[Handwritten Signature]*  
Director

Annexure 1	Proposal / Approval
Annexure 2	Circular / Brochure of the event
Annexure 3	Brief profile of the speaker
Annexure 4	Attendees list
Annexure 5	Photo Gallery
Annexure 6	Detail Feedback (if required)
Annexure 7	Any other related documents