

One Week Online Faculty Development Program on Analysing Research Data and Modelling Using SPSS Software

(14–20 December, 2024)

Organized by:

VART Research, Mumbai, India

In collaboration with

Department of Statistics and IQAC, B.H.College, Howly, Assam

Workshop Coordinators:

1) Dr. Chavan Kr. Sarmah

Associate Professor and HOD

Department of Statistics

B. H. College, Howly, Barpeta, Assam

2) Dr. Bagsmrita Bhagawati

Associate Professor

Department of Statistics

B. H. College, Howly, Barpeta, Assam

3) Dr. Jayanta Kumar Bora

Founding & Executive Director of VART Research, Mumbai

Date & Time: 14th to 20th December, 2024, 6 PM-8 PM through Online Platform : Google Meet

No. of Participants 47

No. of Resource Persons 5

The mission and vision to cultivate a generation of highly skilled individuals by online training programmes in present educational setup, the VART Research, Mumbai in collaboration with the department of Statistics and IQAC, BH College, Howly, Assam organized an one week online **Faculty Development Program on Analysing Research Data and Modelling Using SPSS Software** for Ph.D. scholars, Faculties, Researchers working in colleges/institutions/universities/organizations, NGOs & independent researchers and academicians who are working or wish to work in Quantitative research, data management and data analysis in their research work, across the country from 14th to 20th December, 2024, 6PM -8 PM in Google Meet. Out of **47** total participants, **45** participants are from the states of Arunachal Pradesh, Assam, Delhi, Karnataka, Kerela, Maharastra, Odisha, Puducherry, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. Rest **2** are from outside India, One from Nepal and another from Muscat took part in the training programme. In the inaugural session the welcome speech was delivered by Dr. Chavan Kr. Sarmah, HoD of Statistics of B.H. College, Howly. Following are the invited resource persons to address various key issues of research.

- **Dr. Manash Pratim Barman**, Professor, Department of Statistics, Dibrugarh University, talked on *Multivariate Methods: Principal Component Analysis, Factor Analysis & Cluster Analysis*.
- **Dr. Rabinjyoti Khataniar**, Associate Professor, Department of Economics, B.H. College, Howly, delivered two lectures on Statistical Inference: Parametric/Non –Parametric Test and Correlation Analysis, Regression Analysis: Multiple, Logistic & Multinomial.
- **Dr Priyanka Kalita**, Assistant Professor, Department of Statistics of Bhattadev University, Bajali, Assam talked on Time Series Analysis.
- **Dr. Jayanta Kr. Bora**, the Founding & Executive Director of VART Research, Mumbai delivered two lectures on Introduction to SPSS and Data Management and Descriptive Statistics, Basic Statistical Analysis and Data Visualization.
- **Dr. Bagsmrita Bhagawati**, Associate Professor, Department of Statistics of B.H. College, Howly talked on Fundamentals of Statistics and Descriptive Statistics.

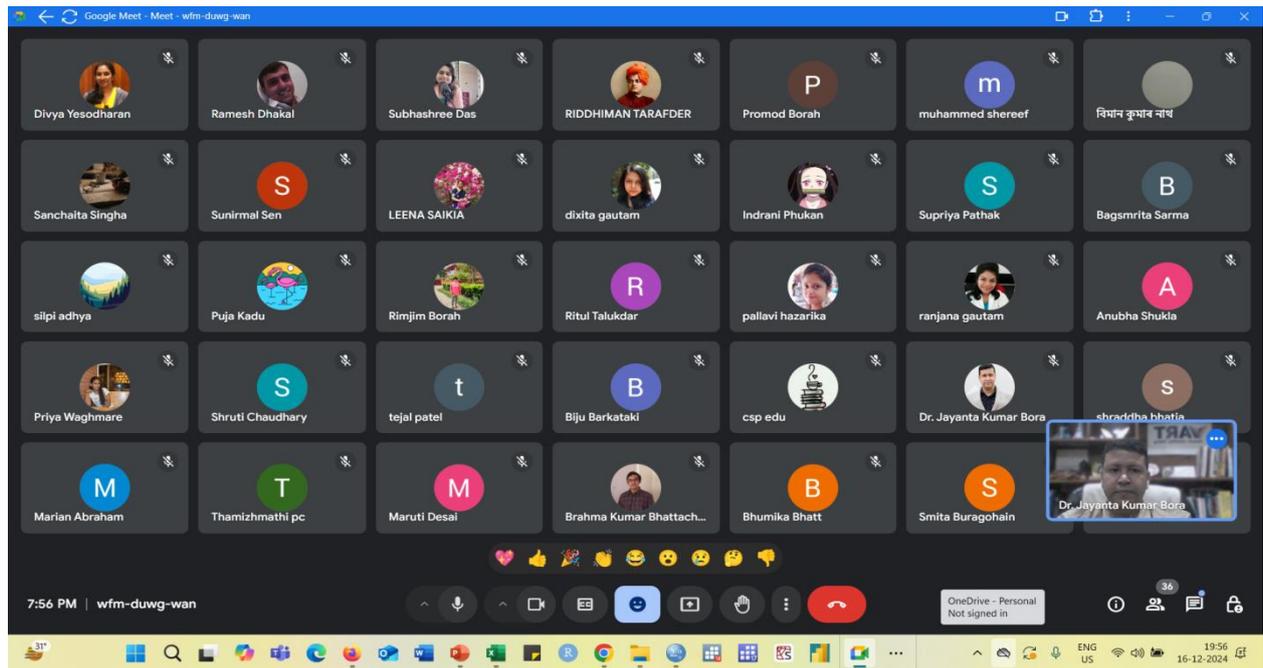
The participants also took part in the workshop with full of enthusiasm and exchanged their views with the Resource Persons. In the valedictory function held on 20th December, 2024, the participants lauded the articulation, efforts and energy of organizing committee for organizing such enriching programme and hoped that they would be able to participate more of such programme in near future. On completion of the workshop the participants were provided with e- certificates and inspiring feedbacks had been received from them.

The list of participants:

SL No	Name	Gender	Highest Education	State belong to	Organization/Institute Address	Occupation
1	Puja Kadu	Female	Masters	Arunachal Pradesh	Rajiv Gandhi University	Student/Scholars
2	Ritul Talukdar	Male	Masters	Assam	B H COLLEGE, HOWLY	Faculties
3	Maruti B Desai	Male	Masters	Maharashtra	Healis-Sekhsaria Institute For Public Health, Mahape, Navi Mumbai	Working professionals
4	Shahjahan Ali	Male	PhD	Assam	B H College	Faculties
5	Sameer Narake	Male	Masters	Maharashtra	Healis	Working professionals
6	Indranee Phukan	Female	Masters	Assam	Rajiv Gandhi University Arunachal Pradesh	Student/Scholars
7	Sangita Singh Roy	Female	Masters	Assam	B. N. College, Dhubri, Assam	Faculties
8	Smita Buragohain	Female	Masters	Assam	Doomdooma College, Rupai Siding, Tinsukia	Faculties
9	Ananya Borgohain	Female	Masters	Assam	Swahid Peoli Phukan College, Namti	Faculties
11	Rup Narayan Dhakal	Male	Masters	Nepal	National Association of Rural Municipalities in Nepal (NARMIN)	Working professionals
12	Suraj Kumar	Male	PhD	Uttar Pradesh	Banaras Hindu University	Student/Scholars

	Pal					
13	Dr.Munish.N	Male	Masters	TAMILNADU	Velammal Medical College Hospital & Research Institute, Madurai, Tamilnadu	Faculties
14	Krithi Pichiah John	Female	Graduates	10	Biman Kumar Nath	Male
15	Divya K Y	Female	Masters	Muscat	Sultan Qaboos University	Faculties
16	Dr Bhumika Bhatt	Female	Masters	Uttar Pradesh	Autonomous State Medical College Firozabad	Faculties
17	Dr Subhashree Das	Female	Masters	Odisha	Hi-tech medical college and hospital, Bhubaneswar	Faculties
18	Thamizhmathi J	Female	Masters	Puducherry	Sri Venkateshwaraa Medical College Hospital and Research Centre	Faculties
19	Dr Jenifer Florence Mary J	Female	Masters	Pondicherry	Mahatma Gandhi Medical College And Research Institute Pondicherry - Cuddalore Road Ecr	Faculties
20	Anubha Shukla	Female	Masters	MAHARASHTRA	IAF	Working professionals
21	Silpi Adhya	Female	Masters	West Bengal	Berhampore Girls College	Faculties
22	Bichitra Pegu	Female	Masters	Assam	Khagarijan College	Faculties
23	Dr Paul Vinoth Kumar S	Male	Masters	Tamil Nadu	LATE SHRI LAKRIRAM AGARWAL MEMORIAL GOVERNMENT MEDICAL COLLEGE ETKAL ROAD, RAIGARH	Working professionals
24	Dr Deepak Shrihari Nimbhorkar	Male	Masters	Maharashtra	Government Medical College Dharashiv	Faculties
25	Marian Abraham	Female	Masters	Mh	iitb	Working professionals
26	Leena Saikia	Female	Masters	Assam	Jorhat Kendriya Mahavidyalaya	Faculties
27	Dr. Sanchaita Singha	Female	Masters	West Bengal	Institute of Public Health (WBUHS), Kalyani , Nadia, West Bengal	Student/Scholars
28	Ardra Kp	Female	Graduates	Kerala	Institute of Medical Science, BHU, Varanasi	Student/Scholars
29	Brahma Kumar Bhattacharyya	Male	Others	West Bengal	Medical College, Kolkata	Student/Scholars
30	Sunirmal Sen	Male	Masters	TRIPURA	Ganaraj Chowmuni, Banamalipur, L.N. Bari Road, Agartala, Tripura (West)-799001	Working professionals
31	Dr Sulagna Pattajoshi	Female	Masters	Odisha	KIIT-KSPH,Patia, Bhubaneswar	Student/Scholars
32	Priya Waghmare	Female	Masters	Maharashtra	Savitribai Phule Pune University	Working professionals
33	Supriya Umesh Pathak	Female	Masters	Maharashtra	Savitribai Phule Pune University	Working professionals
34	Dr.Ranjana Gautam	Female	Masters	Uttar Pradesh	Dr.girilal gupta institute public health and affairs Lucknow university.	Student/Scholars
35	Dixita Gautam	Female	Masters	Assam	Christ University, Bangalore	Student/Scholars
36	Pallavi Hazarika	Female	Masters	Assam	Barpeta College, Barpeta	Faculties
37	Shruti Chaudhary	Female	Masters	Delhi	JNU	Working professionals

38	Dr Asim Kumar Padhan	Male	Masters	Odisha	ICMR NIRRH Mumbai	Working professionals
39	Dhanmoni Baruah	Male	Masters	Assam	North Eastern Hill University	Student/Scholars
40	Dr Ritabrata Tarafder	Male	PhD	WEST BENGAL	S.R.F.College, Beldanga	Faculties
41	Tejal Jagdish Patel	Female	Masters	Maharashtra	ICMR-NIRRH, Mumbai	Working professionals
42	Dr. Rimjim Borah	Female	PhD	Assam	Gargaon College	Faculties
43	Dr.Biju Borkataki	Female	PhD	Assam	B.H.COLlege.P.O.Howly, PIN:781316, Barpeta, Assam	Faculties
44	Krishna Saikia	Female	Masters	Assam	Vill- Mainapara, P.O- Ghilamara, P.S- Ghilamara Dist- Lakhimpur, Assam. Pin- 787053	Faculties
45	Promod Chandra Borah	Male	Masters	Assam	B. H. College	Faculties
46	Dr Muhammed Shereef	Male	PhD	Kerala	Researcher	Faculties
47	Durga Devi	Female	Masters	Assam	Doomdooma College, Rupai siding, Tinsukia, Assam	Faculties



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Dr. Jayanta Kumar Bora

Bagsmrita Sarma

ranjana gautam

Biju Barkataki

dixita gautam

shraddha bhatia

6:19 PM | wfm-duwg-wan

chavan sarmah

Dr. Jayanta Kumar Bora

dixita gautam

Bagsmrita Sarma

Ramesh Dhakal

Asim Padhan

ranjana gautam

Biju Barkataki

23 others

shraddha bhatia

6:19 PM | wfm-duwg-wan

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priyanka kalita (Presenting)

Example of Additive and Multiplicative model

Figure: Example of additive and multiplicative model

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Priyanka Kalita Time series 8 / 18

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priyanka kalita (Presenting)

Characteristics of time series data

- Chronological order : if the data follows regular interval.
- Sequential order: Past data influence the present data.
- Constant Frequency: Continuous data without any missing value.
- Dynamic nature: Data are affected by external factors.
- Temporal Components: Any trend(long term direction upward or downward), seasonality (repeating same patten at fixed interval), cyclic (repeated by not fixed) or noise (random fluctuation i.e., real time data).

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Priyanka Kalita Time series 6 / 18

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priyanka kalita (Presenting)

Model Statistics		Model Fit Statistics				Ljung-Box Q(16)		Number of Outliers	
Model	Number of Predictors	Stationary Residuals	Statistics	DF	Sig.				
Sales of Men's Clothing-Model_1	0	713	21.476	15	.122	0			
Sales of Women's Clothing-Model_2	0	735	23.635	15	.072	0			
Sales of Jewellery-Model_3	0	759	34.750	15	.003	0			

Forecast		Jan 1999	Feb 1999	Mar 1999	Apr 1999	May 1999	Jun 1999	Jul 1999	Aug 1999	Sa
Sales of Men's Clothing-Model_1	Forecast	22261.79	20678.95	20979.81	20245.51	20788.45	20875.04	20767.44	23132.76	
	UCL	28962.89	27393.91	27706.01	26965.12	27540.85	27640.19	27545.23	29623.37	
Sales of Women's Clothing-Model_2	Forecast	35282.70	35953.43	51032.31	50965.90	51430.26	48178.39	50193.54	50781.95	
	UCL	45771.28	46448.24	61533.35	61473.16	61943.74	59698.08	60719.44	61313.15	
Sales of Jewellery-Model_3	Forecast	12778.75387	14305.14946	14121.12359	12769.48913	19023.47995	12423.40502	12906.56818	16047.25729	157
	UCL	19608.85637	21133.35170	20957.42418	19608.88666	26465.97304	19288.99226	19755.24819	22899.02868	234

For each model, forecasts start after the last non-missing in the target of the independent extension period, and end at the last period for which non-missing values of all the predictors are available.

7:27 PM | wfm-duwg-wan

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In-call messages

Let everyone send messages

You can pin a message to make it visible for people who join later. When you leave the call, you won't be able to access this chat.

Nice explanation step by step and also hands on .thanku so much sir.

Marian Abraham 8:10 PM
This was a very good workshop involving mix of practical and theory

विद्यान कुमार नाथ 8:10 PM
Thanks the entire team for wonderfully arranging the programme..

Promod Borah 8:11 PM
Thanks to organisers and all participants

Biju Barkataki 8:11 PM
Thank you organisers for fruitful FDP.

Send a message to everyone

8:11 PM | wfm-duwg-wan

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8:05 PM | wfm-duwg-wan

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8:06 PM | wfm-duwg-wan

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Manash Barman (Presenting)

IBM SPSS Statistics Viewer

Q	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0.14	0.00	260	932	073	097	000	003	000	000	000	000	000	000	000	000	000	000
0.15	0.19	0.17	0.445	0.497	0.121	0.000	0.015	0.000	0.009	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
0.16	0.398	0.397	0.309	0.142	0.074	0.180	0.431	0.036	0.283	0.019	0.019	0.419	0.243	0.044	0.000	0.000	0.000
0.17	0.134	0.126	0.217	0.244	0.012	0.008	0.056	0.357	0.411	0.291	0.291	0.327	0.019	0.000	0.000	0.000	0.000
0.18	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
0.20	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.21	0.297	0.458	0.374	0.445	0.068	0.086	0.084	0.075	0.114	0.393	0.044	0.330	0.060	0.000	0.000	0.000	0.000
0.22	0.339	0.435	0.362	0.250	0.041	0.137	0.424	0.056	0.224	0.221	0.055	0.490	0.044	0.003	0.000	0.000	0.000
0.23	0.137	0.397	0.113	0.115	0.017	0.127	0.377	0.033	0.093	0.066	0.026	0.300	0.106	0.027	0.000	0.000	0.000
0.24	0.134	0.206	0.369	0.497	0.010	0.017	0.293	0.020	0.249	0.121	0.011	0.256	0.230	0.004	0.000	0.000	0.000
0.25	0.000	0.000	0.003	0.012	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
0.26	0.074	0.051	0.066	0.221	0.032	0.101	0.154	0.001	0.011	0.005	0.021	0.206	0.024	0.034	0.000	0.000	0.000
0.27	0.181	0.156	0.365	0.283	0.007	0.052	0.124	0.008	0.185	0.013	0.000	0.334	0.058	0.027	0.000	0.000	0.000
0.28	0.312	0.262	0.172	0.380	0.016	0.276	0.319	0.185	0.005	0.014	0.116	0.024	0.031	0.179	0.000	0.000	0.000
0.29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

KMO and Bartlett's Test

Factor Meyer-Olin Measure of Sampling Adequacy	0.936
Bartlett's Test of Significance	3040.322
df	435
Sig.	< .001

Communities

Initial	Extraction
1	1.000
2	1.000

7:33 PM | wfm-duwg-wan

Manash Barman

shradha bhatia

muhammed sh...

Maruti Desai

Sanchaita Sing...

Puja Kadu

Begsmrita Sar...

ranjana gautam

Bodhirup Taraf...

pallavi hazarika

Dr. Jayanta Kumar Bora

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Rabinjyoti Khataniar (Presenting)

21

Step-4

6:43 PM | wfm-duwg-wan

Rabinjyoti Kha...

shradha bhatia

Ramesh Dhakal

Durga devi

Sunirmal Sen

LEENA SAIKIA

Bodhirup Taraf...

Puja Kadu

Indrani Phukan

muhammed sh...

Bagi

Dr. Jayanta Kumar Bora