

Sree Narayana College, Nattika

Department of Statistics

Data Dive: Exploring Statistical Analysis using Excel and JASP

Report of the workshop

Date: January 31, 2025

Time: 10:00 AM - 4:00 PM

Location: Guru Vaikhari Language Lab, Sree Narayana College Nattika

Facilitator: Dr. Rasin R S, Assistant professor, St Thomas College Thrissur

Target Audience: Post-graduate students, Research scholars and Faculty members

This report details the "Data Dive: Exploring Statistical Data Analysis using Excel & JASP" workshop conducted on January 31, 2025, at Sree Narayana College Nattika. The workshop aimed to equip students with practical skills in statistical analysis using two widely accessible software tools: Microsoft Excel and JASP. Participants learned to perform various statistical tests, interpret results, and visualize data effectively. The workshop was highly engaging and provided students with valuable tools for their academic research and future careers.

Workshop Objectives:

The primary objectives of this workshop were to:

- Introduce participants to the basics of statistical analysis.
- Familiarize participants with the functionalities of Microsoft Excel and JASP for statistical analysis.
- Teach participants how to perform various statistical tests (e.g., t-tests, ANOVA, regression analysis) using both software.
- Enable participants to interpret statistical results and draw meaningful conclusions.
- Enhance participants' ability to visualize data using charts and graphs.
- Provide participants with practical experience in applying statistical methods to real-world datasets.

Workshop Content and Methodology:

The workshop was structured around a combination of theoretical explanations, demonstrations, and hands-on exercises. The following topics were covered:

- Introduction to Statistical Analysis: Basic statistical concepts, types of data, descriptive statistics, inferential statistics.
- Introduction to Microsoft Excel for Statistical Analysis: Data entry and organization in Excel, using built-in statistical functions (e.g., AVERAGE, STDEV, T.TEST), creating charts and graphs. *Activity: Calculating descriptive statistics and creating visualizations for a sample dataset in Excel.*
- Introduction to JASP: Overview of JASP interface, importing data, performing basic statistical analyses. *Activity: Comparing Excel and JASP for descriptive statistics.*
- Hypothesis Testing: Principles of hypothesis testing, choosing appropriate statistical tests.
- T-tests: Performing independent samples t-tests and paired samples t-tests in Excel and JASP, interpreting results. *Activity: Conducting t-tests on a dataset comparing two groups.*
- ANOVA: Performing one-way ANOVA and two-way ANOVA in JASP, post-hoc tests. *Activity: Analysing data with multiple groups using ANOVA.*
- Regression Analysis: Simple linear regression and multiple regression in JASP, interpreting regression coefficients. *Activity: Building a regression model to predict a dependent variable.*
- Data Visualization: Creating effective charts and graphs in both Excel and JASP to communicate statistical findings. *Activity: Visualizing regression results.*

The workshop utilized a variety of teaching methods, including:

- Presentations: Concise and informative presentations on key concepts.
- Live Demonstrations: Demonstrations of how to perform statistical analyses in Excel and JASP.
- Hands-on Exercises: Guided exercises where participants applied the learned techniques to sample datasets.
- Q&A Sessions: Opportunities for participants to ask questions and clarify doubts.

Participant Demographics:

A total of 48 students, 2 research scholar and 2 faculties from various disciplines (e.g., statistics, mathematics, commerce, botany, chemistry) participated in the workshop. The participants had varying levels of prior experience with statistical analysis and software tools.

Participant Feedback:

Participants provided feedback through a short online survey after the workshop. The overall feedback was highly positive. Key findings include:

- Participants felt they gained practical skills that they could apply in their research.
- 84.8% of participants found the workshop content presented in a clear and well-organized.
- 80.4% of participants found to be an appropriate balance between theory and practical application.
- 84.8% of participants meet their learning objectives.
- Facilitator Effectiveness: The facilitator received high praise for his clear explanations and ability to engage the participants.

Sample Feedback Quotes:

- " The most valuable aspects of this workshop were the hands-on training, clear explanations, and interactive Q&A sessions, which helped clarify complex statistical concepts."
- "The workshop was very helpful in understanding statistical concepts and applying them using software."
- " The workshop helped me such as improving myself in Excel and JASP and also understanding practical tools, and clarifying complex topics."
- "Workshop help me to gain knowledge about new data software to an extend"

Areas for Improvement:

- Some participants suggested including more advanced statistical techniques.
- A few participants requested more time for individual consultations.

Conclusion and Recommendations:

The "Data Dive: Exploring Statistical Data Analysis using Excel and JASP" workshop was successful in achieving its objectives. Participants gained valuable skills in statistical analysis and learned how to use two popular software tools effectively.

Recommendations:

- Offer follow-up workshops on more advanced statistical topics (e.g., multivariate analysis, time series analysis).
- To conduct the workshop minimum 2 or 3 days, it is more useful to students
- Provide opportunities for students to consult with the facilitator on their individual research projects.
- Integrate statistical analysis training into the curriculum of relevant courses.

Programme chart

Prayer

Welcome address : Ms Dinsy Jose M
Faculty Coordinator

Presidential address : Dr Jaya P S,
Principal

Keynote address : Dr Rasin R S,
Associate Professor
Department of Statistics,
St. Thomas College (Autonomous) Thrissur

Felicitations : Dr Sankaran K K,
IQAC Coordinator and Head of the Department of Statistics


Vote of thanks : Poornima Ramacharan,
Student Coordinator

Program schedule:

9.30 am	- Registration
10.00 am - 11.15 am	- Introduction to Data Analysis
11.15 am - 11.30 am	- Tea Break
11.30 am - 1.00 pm	- Exploring Data with Excel
1.00 pm - 1.30 pm	- Lunch Break
1.30 pm - 3.30 pm	- Story Telling Data using JASP
3.30 pm	- Valedictory Session
3.45 pm	- Tea

Appendix:



- Workshop Brochure



Sree Narayana College Nattika


NAAC Re-accredited (III Cycle) with Grade B+ (CGPA 2.68)
DST-FIST College | NIRF 2020 - Placed in Rank band 150-200
(Affiliated to the University of Calicut)

DEPARTMENT OF STATISTICS




Data Dive: Exploring Statistical Data Analysis with Excel & JASP


"THE GOAL IS TO TURN DATA INTO INFORMATION
AND INFORMATION INTO INSIGHT"





FRIDAY, 31 JANUARY 2025



TIME : 10:00 AM



VENUE : GURU VAIKHARI LANGUAGE LAB



Resource Person

Dr. Rasin R S
Assistant Professor
Department of Statistics
St. Thomas College(Autonomous), Thrissur


LIMITED SEATS

Registration Fees

Post-Graduate Students: Rs. 150/-
Research Scholars: Rs. 200/-
Faculty Members: Rs. 300/-

Fee will be collected at venue

Register Now




Participants are requested to bring their laptops

Dr. Jaya P S
Principal

Dr. Sankaran K K
IQAC Coordinator & HOD

Ms. Dinsy Jose M
Faculty Coordinator

Ms. Poornima Ramachandran
Student Coordinator

For more details:  **94 95 63 41 99 | 90 61 96 36 18**

- List of Participants





























SREE NARAYANA COLLEGE NATTIKA

DEPARTMENT OF STATISTICS

Data Dive: Exploring Statistical Data Analysis Using Excel & JASP

GURU VAIKHARI LANGUAGE LAB, 31st JANUARY 2025

ATTENDANCE SHEET

Sl No.	Name	Designation	Department	Fn	An
1	Kavya K Sasikumar	Research Scholar	Botany		
2	Adhithya R S	Student	Botany		
3	Aiswarya A S	Student	Botany		
4	Aswathy Surendran K	Research Scholar	Botany		
5	Nowrin Yousafali	Student	Commerce		
6	Ambily. P. U	Student	Commerce		
7	Dhanya P D	Student	Commerce		
8	Sreethu N P	Student	Commerce		
9	Thennel T R	Student	Commerce		
10	Nazrin	Student	Commerce		
11	Arya As	Student	Commerce		
12	V M Abinand	Student	Commerce		
13	V P Devika	Student	Commerce		
14	Vismaya A M	Student	Commerce		
15	Arya P S	Student	Commerce		
16	Aryasree.P	Student	Commerce		
17	Neha P B	Student	Commerce		
18	Asma M A	Student	Commerce		

19	Aavany V B	Student	Commerce	AV	AV
20	Anjana T D	Student	Commerce	Anjana	Anjana
21	Abhirami K S	Student	Commerce	Abhirami	Abhirami
22	Vijisha P	Student	Commerce	Vijisha	Vijisha
23	Keerthana K	Student	Commerce	Keerthana	Keerthana
24	Naseeba O.N	Student	Commerce	Naseeba	Naseeba
25	Aswin Km	Student	Commerce	Aswin	Aswin
26	Gayathri T	Student	Statistics	Gayathri	Gayathri
27	Siyab T A	Student	Statistics	Siyab	Siyab
28	Devika R Jayaprakash	Student	Statistics	Devika	Devika
29	Gopika I	Student	Mathematics	Gopika	Gopika
30	Arya J S	Student	Mathematics	Arya	Arya
31	Dhanzy V	Student	Mathematics	Dhanzy	Dhanzy
32	Vinaya. K. V	Student	Mathematics	Vinaya	Vinaya
33	Sreya C S	Student	Mathematics	Sreya	Sreya
34	Varsha T.T	Student	Mathematics	Varsha	Varsha
35	Muhammed Niyas V P	Student	Mathematics	Muhammed	Muhammed
36	Reshmendu Suresh	Student	Mathematics	Reshmendu	
37	Nandana V A	Student	Statistics	Nandana	Nandana
38	Ashitha P V	Student	Statistics	Ashitha	Ashitha
39	Aiswarya P S	Student	Statistics	Aiswarya	Aiswarya
40	Sheetal M A	Student	Statistics	Sheetal	Sheetal
41	Poornima Ramachandran	Student	Statistics	Poornima	Poornima
42	Sreelakshmi K.P	Student	Statistics	Sreelakshmi	Sreelakshmi

43	Nandana C S	Student	Statistics	^{FN} Nandana	^{AN} Nandana
44	Vismaya A M	Student	Statistics	Vismaya	Vismaya
45	Namitha P P	Student	Statistics	Namitha	Namitha
46	Pramisha V P	Student	Statistics	Pramisha	Pramisha
47	S Gouri Parvathy	Student	Statistics	S Gouri	S Gouri
48	Aparna. T. M	Student	Statistics	Aparna	Aparna
49	Aparna C Shaji	Student	Statistics	Aparna	Aparna
50	Mufeeda T	Student	Statistics	Mufeeda	Mufeeda

51. Remya L Faculty chemistry ~~Remya~~
52. Soumya P.k Faculty chemistry. ~~Soumya~~
53. Anya. k Student statistics ~~Anya~~
54. Ashelha.pv student statistics ~~Ashelha~~
55. AYISHA SHAIKHA student Statistics ~~Ayisha~~ ~~Esper~~

Program Certificates:

SREE NARAYANA COLLEGE NATTIKA
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CERTIFICATE

..... has participated in the
workshop on “Data Dive: Exploring Statistical Data Analysis with Excel & JASP”
held on 31.01.2025, organized by Department of Statistics, Sree Narayana College
Nattika.



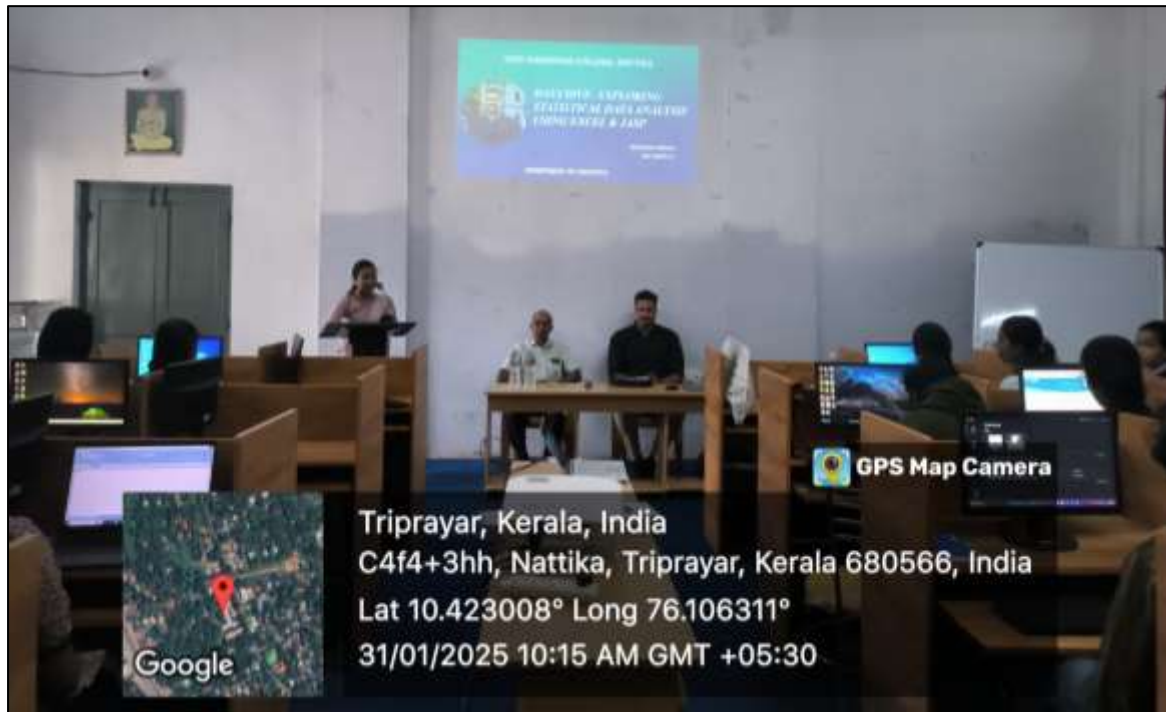

Dr. Jaya P S
Principal



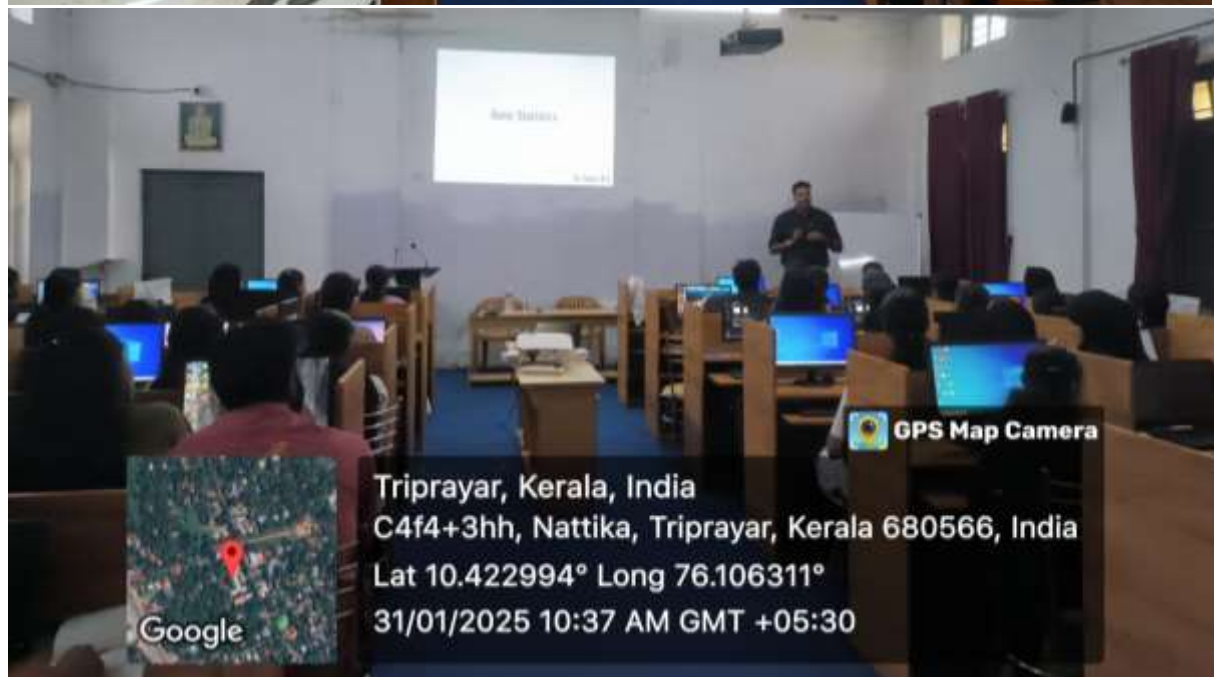
Dr. Sankaran K K
QAC Coordinator & HOD


Ms. Dinsy Jose M
Faculty coordinator

- Program Photos: -







- Softcopy of certificates link:

https://drive.google.com/drive/folders/18yTCFQEy_gzUi27wXiA106jTHmi2LjW_?usp=drive_link

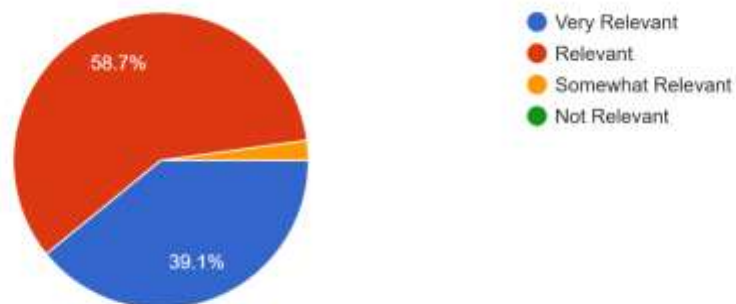
- Feedback form link:

https://docs.google.com/forms/d/e/1FAIpQLSeW59NTA0CbQswVqWSwKVbXXlsbvlyWB6FyUxZgtylz_xxU2A/viewform?usp=header

Feedback Analysis

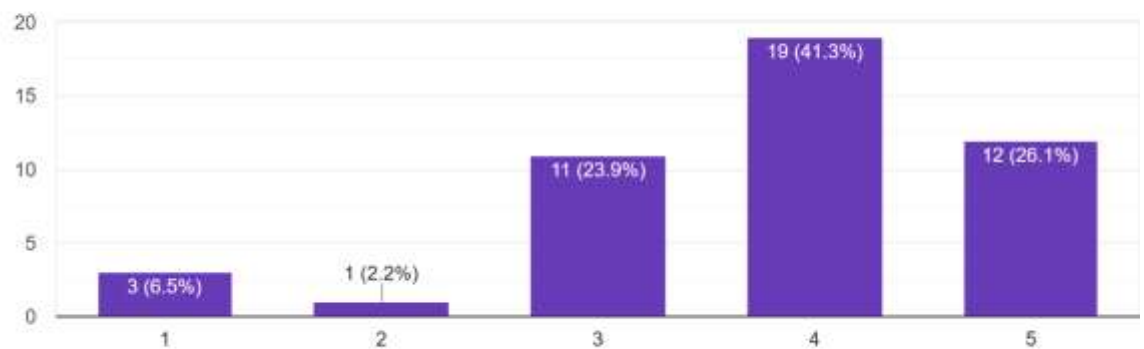
How relevant was the content to your needs?

46 responses



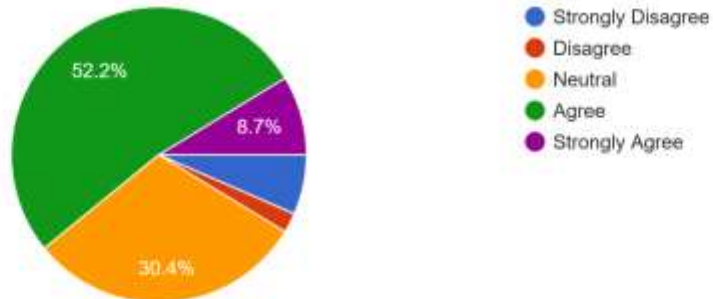
How would you rate your overall experience?

46 responses



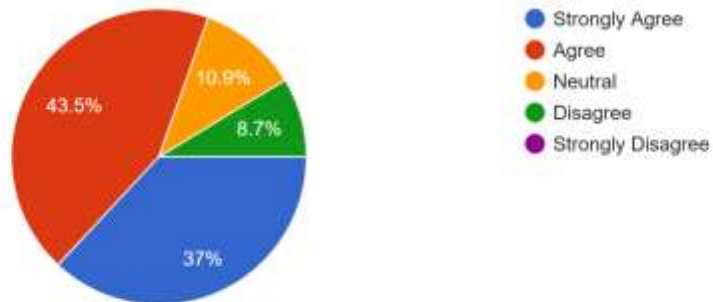
The pace of content delivery was appropriate

46 responses



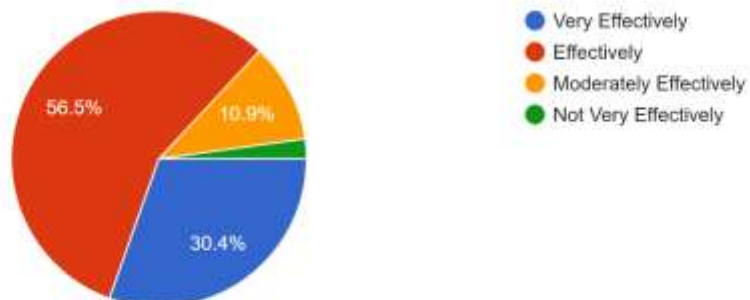
The workshop was well-organized and structured

46 responses



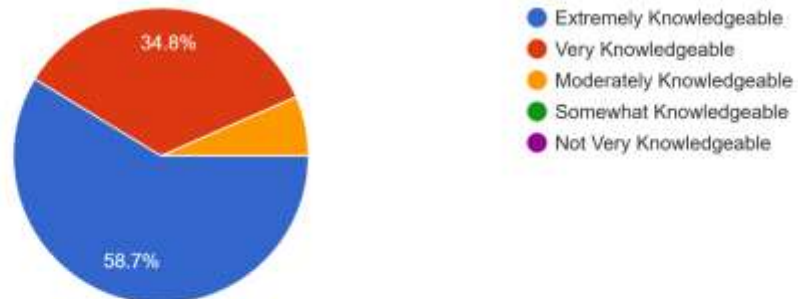
How effectively did the facilitator communicate the material?

46 responses



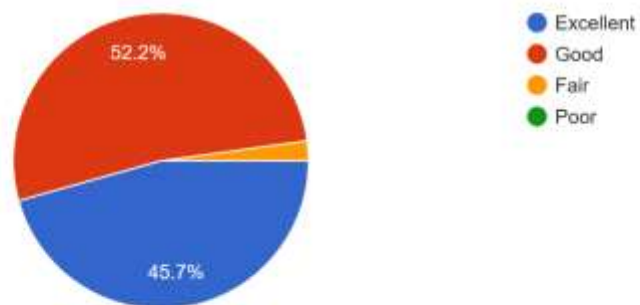
How knowledgeable was the facilitator on the subject matter?

46 responses



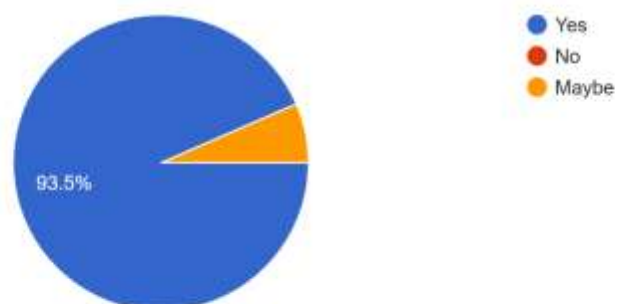
How approachable and helpful was the facilitator?

46 responses



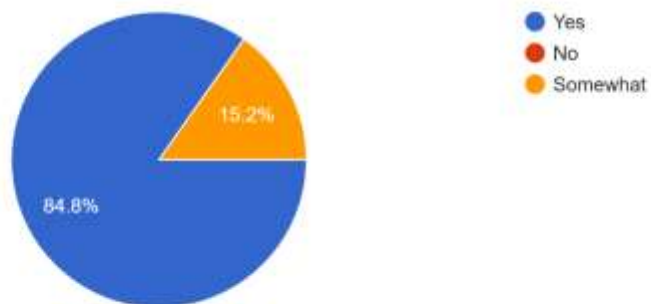
Did the facilitator create a positive learning environment?

46 responses



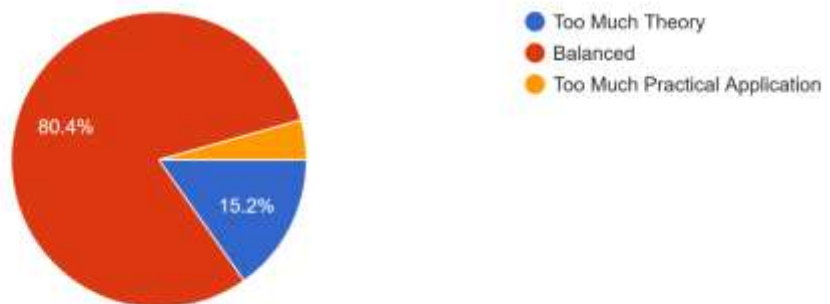
Was the content presented in a clear and organized manner?

46 responses



Was there an appropriate balance between theory and practical application?

46 responses



Did the workshop meet your learning objectives?

46 responses

