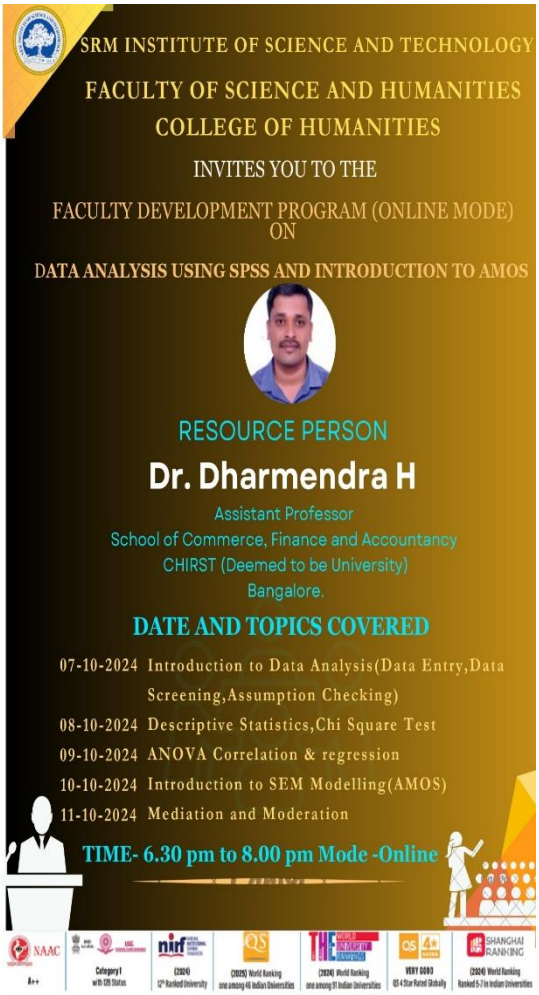
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

COLLEGE OF HUMANITIES

DEPARTMENT OF COMMERCE

REPORT ON FIVE-DAY FACULTY DEVELOPMENT PROGRAM (FDP) ON DATA ANALYSIS USING SPSS AND INTRODUCTION TO AMOS



The **Five-Day Faculty Development Program (FDP) on Data Analysis Using SPSS and Introduction to AMOS** was organized by the College of Humanities, Faculty of Science and

Humanities at SRM Institute of Science and Technology, from October 7 to October 11, 2024. The program was conducted online from 6:30 pm to 8:00 pm each day and aimed to develop essential skills in data analysis among faculty members and research scholars. Under the guidance of **Chairperson Dr. A. Vinay Kumar**, Pro Vice-Chancellor, the FDP was convened by **Dr. A. Duraisamy**, Dean of the College of Humanities, and **Dr. S. Albert Antony Raj**, Deputy Dean of the College of Science. The program's success was further supported by **Co-Conveners Dr. K. Selvasundaram**, Professor and Coordinator - Academics, and **Dr. R. Angayarkanni**, Professor and Coordinator - Research. The organizing committee comprised Dr. D. Bhuvaneswari, Dr. G. Sangeetha, Dr. LavanyaVeeran, and Dr. Sivasankari, while the advisory committee included **Dr. A. Kavitha**, Associate Professor and HOD of Commerce, and **Dr. R. Sridharan**, Associate Professor and HOD of CS&AF. The program's resource person was **Dr. Dharmendra H**, Assistant Professor at Christ (Deemed to be University), Bangalore.

The FDP was structured to provide a comprehensive overview of SPSS and an introduction to AMOS, targeting both foundational and advanced analytical techniques. **On Day 1**, the session began with an address by the Deputy Dean, who introduced Dr. Dharmendra H. The resource person covered introductory topics such as data entry, data screening, and assumption checking in SPSS, alongside explanations of commercial and non-commercial statistical software. He also introduced types of data sources, scales in SPSS, and methods of measuring variables. The session concluded with essential data cleaning techniques, handling missing values, outliers, and unengaged responses, and testing for data normality.

On Day 2, the focus shifted to descriptive statistics and the chi-square test, where participants learned how to apply descriptive measures like mean, median, and mode in SPSS. Dr. Dharmendra explained the differences between parametric and non-parametric tests, factors influencing statistical tool selection, and provided guidance on selecting tests aligned with research objectives. He also demonstrated hypothesis testing using the chi-square test and explained how to interpret the output in SPSS.

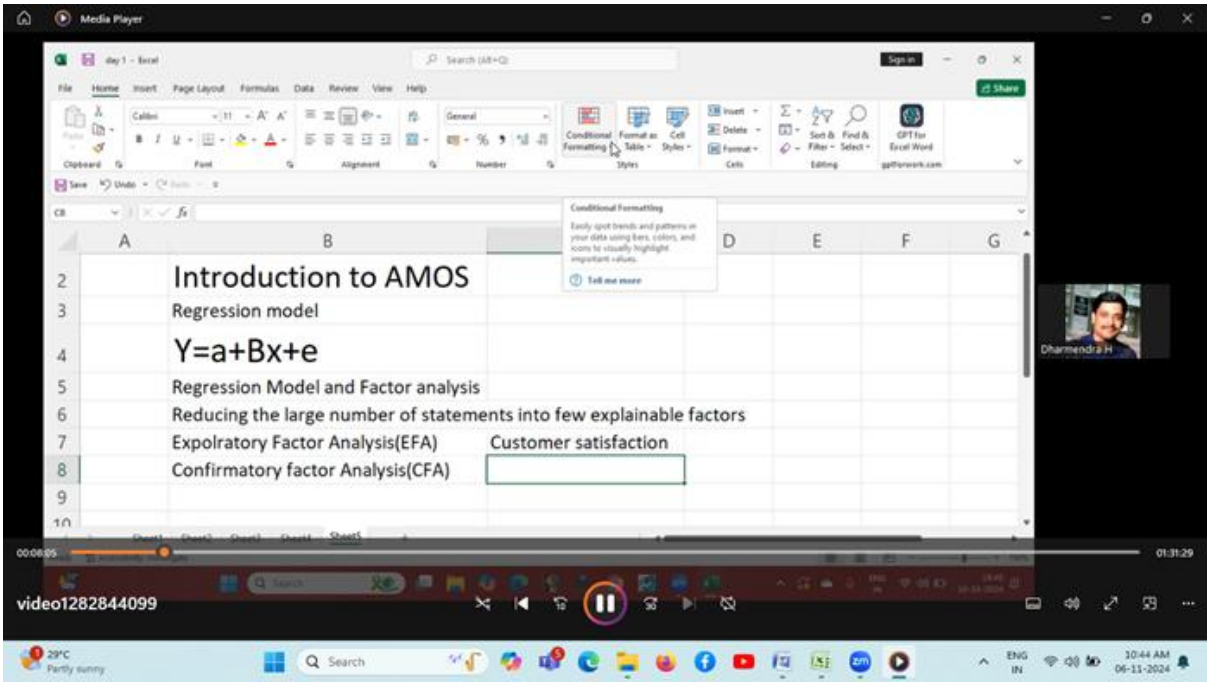
Day 3 covered advanced statistical tests, including ANOVA and regression analysis. Participants were introduced to one-sample t-tests (comparing sample means to population means), independent-sample t-tests (for comparing two groups), and paired-sample t-tests (for related

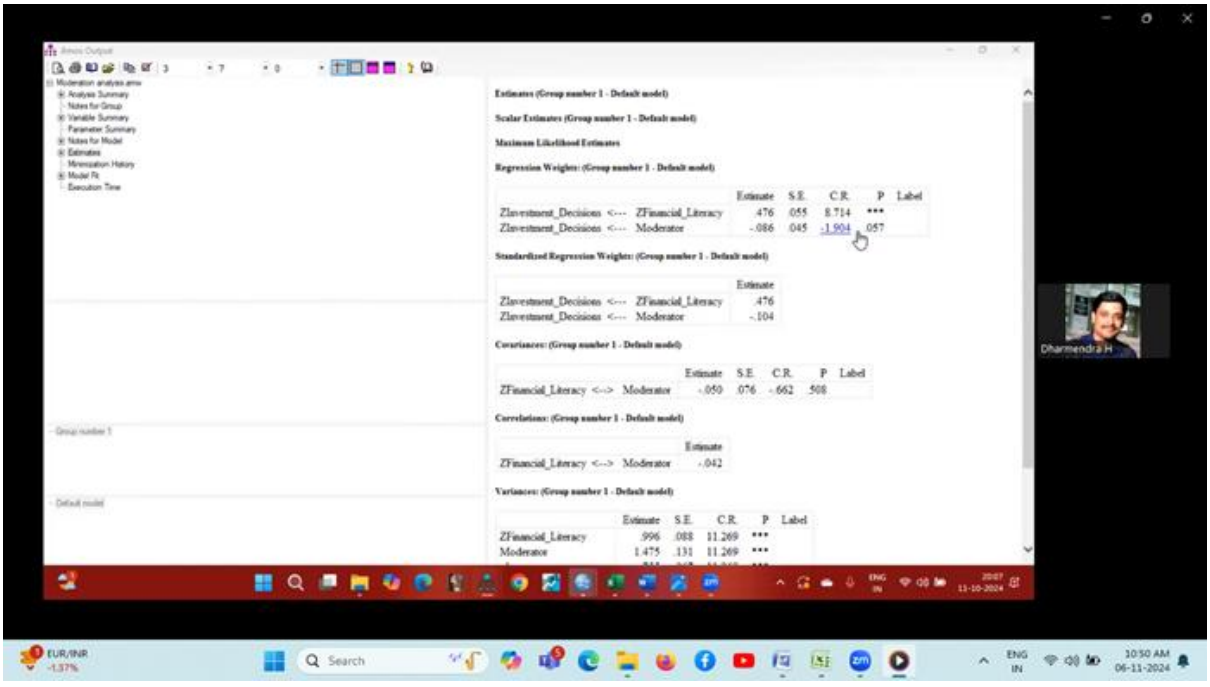
groups). ANOVA was introduced as a method for analyzing differences among more than two groups, with instruction on interpreting SPSS outputs. The session concluded with an introduction to regression analysis, helping participants understand the impact of one variable on another.

Day 4 introduced participants to AMOS, focusing on the basics of structural equation modeling. Topics included factor analysis, essential terminologies in AMOS, and how to present variables within the canvas area, establishing a foundational understanding for future modeling applications.

Day 5 focused on mediation and moderation analysis. Dr. Dharmendra explained how to build a measurement model, assess model fit, and check for validity. Participants were then introduced to mediation and moderation analyses, with practical examples demonstrating their application. The final session was addressed by the Deputy Dean, who expressed appreciation for Dr. Dharmendra H's contributions and acknowledged the dedication of the organizing team.

The FDP received highly positive feedback, with participants highlighting the value of the hands-on training and practical insights gained into SPSS and AMOS. Faculty members and research scholars from SRM and other institutions found the program particularly useful for enhancing their research skills. This FDP provided critical skills for accurate data handling and analysis, enhancing participants' research capabilities significantly. The organizers extend their gratitude to the Chairperson, conveners, co-conveners, and committee members for their roles in this successful program.


Media Player
Introduction to AMOS
Regression model
Y=a+Bx+e
Regression Model and Factor analysis
Reducing the large number of statements into few explainable factors
Expolratory Factor Analysis(EFA)
Customer satisfaction
Confirmatory factor Analysis(CFA)
Dharmendra H
video1282844099


Estimates (Group number 1 - Default model)
Scalar Estimates (Group number 1 - Default model)
Maximum Likelihood Estimates
Regression Weights: (Group number 1 - Default model)
Standardized Regression Weights: (Group number 1 - Default model)
Covariances: (Group number 1 - Default model)
Correlations: (Group number 1 - Default model)
Variances: (Group number 1 - Default model)
Dharmendra H