

Multilevel and Latent Variable Structural Equation Modelling for Academic Research and Top Journal Publishing

December 09 - 18, 2025

8 Days Online & 2 Days Offline (Two Weeks)



Program Overview

The Faculty Development Program (FDP) titled "Multilevel and Latent Variable Structural Equation Modeling for Academic Research and Top Journal Publishing" is designed to equip faculty members and researchers with advanced analytical skills to enhance their academic writing, research, and reporting. With the growing complexity of modern research problems, understanding and applying cutting-edge techniques such as multilevel modeling, latent variable analysis, mediation, and moderation has become essential for publishing in high-impact journals.

This FDP will delve into advanced statistical modeling techniques using popular software tools such as R, Mplus, and AMOS. Participants will gain hands-on experience in applying these methods to real-world datasets, interpreting results, and reporting findings in alignment with top journal standards. The program aims to bridge the gap between theoretical understanding and practical application, fostering confidence in analyzing complex data and communicating insights effectively.



Objectives of the Program

- 1. Introduce participants to advanced multilevel modeling and latent variable SEM analysis techniques.
- 2. Provide hands-on training on mediation, moderation, and structural equation modeling using R, Mplus, and AMOS.
- 3. Enhance participants' ability to assess and report findings for conditional process models.
- 4. Equip participants with the skills to develop publishable-quality research using advanced statistical frameworks.
- 5. Enable participants to navigate the peer-review process for top-tier academic journals by presenting robust, data-driven findings.

Detailed Program Content

Day 1: Foundations of Multilevel and Latent Variable Modeling

Introduction to Multilevel and Latent Variable Models

- Overview of multilevel modeling and its importance in academic research.
- Introduction to latent variable modeling and its applications.
- Understanding the relevance of these models for top-tier journal publications.

2.Basic Mediation and Moderation Models

- Conceptual understanding of mediation and moderation.
- Analyzing simple mediation and moderation models using R, Mplus, and AMOS.

Day 2: Advanced Mediation and Moderation Techniques

Analyzing Complex Mediation Models

- Parallel and serial mediation models.
- Understanding second-order mediation and its applications.
- Practical session: Building serial and parallel mediation models using Mplus.

2. Examining Moderation with Latent Variables

- Two-way and three-way interaction effects.
- Conditional process modeling with latent variables.
- Hands-on session: Applying moderation techniques using AMOS

Day 3: Conditional Process Models and Multilevel Frameworks

Conditional Process Models

- Integrating mediation and moderation into conditional process models.
- Practical applications in real-world research scenarios.
- Interactive exercise: Conditional process analysis using Mplus.

2. Introduction to Multilevel Modeling

- Random intercept and random slope models.
- Applications in two-level and three-level hierarchical data.
- Hands-on activity: Constructing random intercept models using Mplus.

Day 4: Multilevel Confirmatory Factor Analysis and SEM

Multilevel Confirmatory Factor Analysis (CFA)

- Principles of CFA for multilevel data.
- Performing multilevel CFA for 2-level and 3-level models.
- Practical session: Multilevel CFA implementation in Mplus.

2. Multilevel Structural Equation Modeling (SEM)

- Understanding SEM with level-1 predictors and mediators.
- Cross-level predictors in SEM.
- Hands-on session: Applying multilevel SEM to research data using Mplus.

Day 5: Advanced Multilevel SEM and Research Reporting

Advanced Multilevel SEM

- Multilevel SEM with random intercept and slope.
- Exploring cross-level moderators and level-3 predictors.
- Interactive session: Modeling cross-level interactions in Mplus.

2. Writing and Reporting Research for Top Journals

- Best practices for presenting findings from multilevel and latent variable models.
- Structuring manuscripts for high-impact journals.
- Handling reviewer feedback and revisions.
- Practical exercise: Drafting a results section based on program datasets.

Program Highlights

Hands-On Training with Advanced Tools

• Practical sessions using R, Mplus, and AMOS for mediation, moderation, and multilevel SEM techniques.

2. Insights from Renowned Experts

• Led by Prof. Sreejesh S (FT50 Journal of Business Ethics paper with SEM and Multilevel SEM applications) and Prof. Anandakuttan B. Unnithan, both with strong publication records.

3. Focus on High-Impact Publications

• Learn to design, analyze, and report research for top-tier journals with real-world insights and actionable strategies.

4. Bridging Theory and Practice

• Master integrating theoretical models with advanced techniques and translating them into impactful research.

5. Real-Life Applications

• Analyze case studies and datasets inspired by published research, focusing on SEM and multilevel SEM techniques.

6. Interactive and Personalized Learning

• Engage in discussions, hands-on exercises, and receive feedback to enhance your research quality.

Program Coordinators



Prof. Sreejesh SAssociate Professor, Marketing
Management

Prof. Sreejesh S is currently working as Associate Professor of Marketing Management Area at Indian Institute of Management Kozhikode, Kerala, India. His main research interests include brand management, services marketing,

online marketing & advertising. His publications have appeared in the leading journals of marketing, such as European Journal of Marketing, Industrial Marketing Management, Computers in Human Behaviour, Journal of Travel and Tourism Marketing, Marketing Intelligence and Planning, International Journal of Contemporary Hospitality Management, Internet Research, etc. In addition to the chapter contributions in books and case study developments, he has also authored books of international repute with Pearson India and Springer International



Prof. Anandakuttan B. Unnithan Professor, Marketing Management

Prof. Anandakuttan B. Unnithan obtained his PhD degree in Marketing from Cochin University of Science and Technology, Kochi, Kerala. His career as a business educator, researcher and administrator has spanned over two decades. Prof. Anandakuttan has previously served IIM Kozhikode as Dean and was instrumental in the launch of new programs such as EPGP-Kochi, PGP-BL, PGP-LSM, and PGP-Finance. His research interests include consumer behavior, services marketing, and advertising. His publications have appeared in leading journals in marketing, advertising, and other business disciplines. He has consulted with major corporations and government agencies and is actively engaged in executive education and management development programmes.

Programme Fee:

Rs. 50000 (Residential) **GST @ 18%**

Cancellation Policy:

Joining instructions will be sent to the selected candidates 10 days prior to the start of the programme. Kindly do not make your travel plans unless you receive the confirmation email from IIM Kozhikode. If the programme is cancelled, the participants or the sponsoring organization will have the option to either get the fee paid by them adjusted against any other management development programme(s) of the Institute or get a refund. IIM Kozhikode will not be liable for any other expenses incurred by the organization or the participant. Also the transaction fee will not be refunded.



Management Development Programme

IIMK Campus P.O,

Kozhikode - 673 570, Kerala, India.

Phone: +91-495-2809558, +91 495 2809549 & +91 495 2809208

e-mail: mdp@iimk.ac.in











