

Discipline: Business Research (General) / Survey Research Methods

1. Language

English

2. Title

Survey Research Methods

3. Lecturer

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4. Date and Location

12. – 15.09.2023

Ludwig-Maximilians-Universität München, Ludwigstr. 28, 80539 München
(exact details about the lecture room will be provided)

5. Course Description

5.1 Abstract and Learning Objectives

Despite the availability of vast amounts of secondary data, there is little doubt that survey research continues to play an important role in economic research. Carefully conducted surveys allow researchers to gain an understanding of the nature of and relationships among unobserved conceptual variables and provide insights into consumer perceptions, attitudes, and intentions. While it may seem easy to create a questionnaire (just ask what you want to know, right?), there are many problems that can turn good intentions into bad results. Developing questionnaires to measure unobserved conceptual variables also requires a solid understanding of measurement theory and the steps required to operationalize constructs. The first part of this course is designed to familiarize participants with the key design decisions for good surveys and the principles of measurement theory.

Complementing these topics, the second part of the course introduces participants to partial least squares structural equation modeling (PLS-SEM), a method that has recently gained massive dissemination in a variety of business research fields. More precisely, the course offers an introduction to PLS-SEM by familiarizing participants with the principles of model estimation and evaluation. In addition to these foundations, the course also covers advanced topics from the field of PLS-SEM (e.g., higher-order modeling, confirmatory tetrad analysis, measurement invariance). Practical applications

and the use of the software application SmartPLS 4 (<http://www.smartpls.com>) are an integral part of this course.

5.2 Content

- Survey design
- Measurement theory (conceptualization and operationalization of constructs)
- Foundations of PLS-SEM (model estimation and evaluation)
- Advanced PLS-SEM topics (e.g., confirmatory tetrad analysis, higher-order modeling, measurement invariance)

5.3 Schedule (including start and end time)

Day I (12.09.2023)

Time	Content
09:00 – 10:30	Principles of survey research
10:30 – 11:00	Break
11:00 – 12:30	Principles of survey research Sampling theory
12:30 – 13:30	Lunch break
13:30 – 15:00	Measurement theory (I)
15:00 – 15:30	Break
15:30 – 17:00	Measurement theory (II)

Day II (13.09.2023)

Time	Content
09:00 – 10:30	Principles of structural equation modeling
10:30 – 11:00	Break
11:00 – 12:30	Principles of PLS-SEM
12:30 – 13:30	Lunch break
13:30 – 15:00	Measurement model evaluation in PLS-SEM
15:00 – 15:30	Break
15:30 – 17:00	Measurement model evaluation in PLS-SEM

Day III (14.09.2023)

Time	Content
09:00 – 10:30	Structural model evaluation in PLS-SEM
10:30 – 11:00	Break
11:00 – 12:30	Structural model evaluation in PLS-SEM
12:30 – 13:30	Lunch break
13:30 – 15:00	Confirmatory tetrad analysis (CTA-PLS)
15:00 – 15:30	Break
15:30 – 17:00	Higher-order modeling

Day IV (15.09.2023)

Time	Content
09:00 – 10:30	Heterogeneity in PLS path models
10:30 – 11:00	Break
11:00 – 12:30	Measurement invariance testing
12:30 – 13:30	Lunch break
13:30 – 15:00	Multigroup analysis
15:00 – 15:30	Break
15:30 – 17:00	Wrap-up, Q&A

5.4 Course format

The course consists of a series of presentations and exercises. Most of the workshop will involve “hands-on” analysis of the dataset using the statistical SmartPLS 4 software, which offers an easy-to-use graphical interface. The software output diagnostics and proper interpretation of the results will be covered. Potential obstacles and “rules-of-thumb” to ensure appropriate application of the technique will be introduced. The dataset from the book on PLS-SEM (Sage, 2022) by Hair, Hult, Ringle, and Sarstedt will be used for demonstration purposes.

6. Preparation and Literature

6.1 Prerequisites

Participants should have a basic understanding of statistical concepts (e.g., correlation, covariance, standard deviations). Knowledge of multivariate statistics and SEM techniques is helpful, but not required. Participants must bring a laptop with the [SmartPLS 4](http://www.smartpls.com) software readily installed. The software is available at www.smartpls.com. The course participants will get a free 60 days license key to run all functionalities of the SmartPLS 4 software.

6.2 Essential Reading Material

Sarstedt, M., & Mooi, E. A. (2019). [*A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics \(3rd Edition\)*](#). Heidelberg: Springer. Chapters 3 & 4

Sarstedt, M., Hair, J. F. & Ringle, C. M. (2021). [Partial Least Squares Structural Equation Modeling](#). In: C. Homburg, M. Klarmann, and A. Vomberg (Eds.), *Handbook of Market Research*. Berlin: Springer.

6.3 Additional Reading Material

Hair, J. F., Hult T., Ringle C. M., & Sarstedt, M. (2022). [A Primer on Partial Least Squares Structural Equation Modeling \(PLS-SEM\) \(3rd Edition\)](#). Thousand Oaks: Sage.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). [Advanced Issues in Partial Least Squares Structural Equation Modeling \(PLS-SEM\)](#). Thousand Oaks: Sage.

Liengard, B., Sharma, P. N., Hult, G. T. M., Jensen, M. B., Sarstedt, M., Hair, J. F., & Ringle, C. M. (2021). [Prediction: Coveted, yet forsaken? Introducing a cross-validated predictive ability test in partial least squares path modeling](#). *Decision Sciences*, 52(2), 362-392.

Sarstedt, M., Hair, J. F., Pick, M., Liengard, B. D., Radomir, L., & Ringle, C. M. (2022). [Progress in partial least squares structural equation modeling use in marketing in the last decade](#). *Psychology & Marketing*, 39(5), 1035-1064.

Sarstedt, M., Hair, J. F., & Ringle, C. M. (2022). [“PLS-SEM: Indeed a silver bullet” – A retrospective and recent advances](#). *Journal of Marketing Theory & Practice*, advance online publication.

Sarstedt, M., Radomir, L., Moisescu, O. I., & Ringle, C. M. (2022). [Latent class analysis in PLS-SEM: A review and recommendations for future applications](#). *Journal of Business Research*, 138, 398-407.

Sharma, P. N., Liengard, B. D., Hair, J. F., Sarstedt, M., & Ringle, C. M. (2022). [Predictive model assessment and selection in composite-based modeling using PLS-SEM: Extensions and guidelines for using CVPAT](#). *European Journal of Marketing*, advance online publication.

Sharma, P. N., Shmueli, G., Sarstedt, M., Danks, N., & Ray, S. (2021). [Prediction-oriented model selection in partial least squares path modeling](#). *Decision Sciences*, 52(3), 567-607.

6.4 To prepare

All participants are required to read the following chapters prior to the course:

Sarstedt, M., & Mooi, E. A. (2019). [A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics \(3rd Edition\)](#). Heidelberg: Springer. Chapters 3 & 4

Sarstedt, M., Hair, J. F. & Ringle, C. M. (2021). [Partial Least Squares Structural Equation Modeling](#). In: C. Homburg, M. Klarmann, and A. Vomberg (Eds.), *Handbook of Market Research*. Berlin: Springer.

7. Administration

7.1 Max. number of participants

20 participants

7.2 Assignments

Active participation in discussions (50%) and in class exercises (50%)

7.3 Exam

Take home exam

7.4 Credits

The course corresponds to a scope of 6 LP/ECTS

8. Working Hours

Working Hours (hours
<i>Preparation</i>	30 h
Active participation	100 h
Preparation for exam	30 h
Exam	20 h
SUMME	180 h