

CoRe: Facilitating consumer-centered management

Research Methodology



With the increasing need to understand the perceptions and behaviors of consumers, so has the need to advance the methodological toolkit to explore corresponding effects. Our research in the field of Research Methodology focuses on the development of new and evaluation of existing data analysis techniques to further our understanding of consumer behavior. Special research interest is geared toward partial least squares structural equation modeling (PLS-SEM), a method for analyzing complex inter-relationships between observed and latent variables, which has gained vast prominence in business research and practice. As part of our research activities, we also explore aspects related to data quality such as the measurement of abstract concepts (e.g., consumer attitudes) and the use of conjoint analysis. Recent research topics include the following:

- ▶ Model selection in PLS-SEM,
- ▶ Predictive model evaluation of PLS path models,
- ▶ Incentive alignment in choice-based conjoint analysis,
- ▶ Discriminant validity assessment in structural equation modeling,
- ▶ Measurement and uncertainty, and
- ▶ Data quality in machine learning.

Selected Publications

- ▶ Hair, J. F., & Sarstedt, M. (2021). Data, measurement, and causal inferences in machine learning: Opportunities and

challenges for marketing. *Journal of Marketing Theory & Practice*, forthcoming.

- ▶ Danks, N. P., Sharma, P. N., & Sarstedt, M. (2020). Model selection uncertainty and multimodel inference in partial least squares structural equation modeling (PLS-SEM). *Journal of Business Research*, 113, 13-24.
- ▶ Liengaard, B., Sharma, P. N., Hult, G. T. M., Jensen, M. B., Sarstedt, M., Hair, J. F., & Ringle, C. M. (2020). Prediction: Coveted, yet forsaken? Introducing a cross-validated predictive ability test in partial least squares path modeling. *Decision Sciences*, forthcoming.
- ▶ Rigdon, E. E., Becker, J.-M., & Sarstedt, M. (2019). Factor indeterminacy as metrological uncertainty: Implications for advancing psychological measurement. *Multivariate Behavioral Research*, 54(3), 429-443.
- ▶ Rigdon, E. E., Becker, J.-M., & Sarstedt, M. (2019). Parceling cannot reduce factor indeterminacy in factor analysis: A research note. *Psychometrika*, 84(3), 772-780.
- ▶ Rigdon, E. E., Sarstedt, M., & Becker, J.-M. (2020). Quantify uncertainty in behavioral research. *Nature Human Behaviour*, 4, 329-331.
- ▶ Sharma, P. N., Sarstedt, M., Shmueli, G., & Thiele, K. O. (2019). PLS-based model selection: The role of alternative explanations in IS research. *Journal of the Association for Information Systems*, 20(4), 346-397.
- ▶ Sharma, P. N., Shmueli, G., Sarstedt, M., Danks, N., & Ray, S. (2020). Prediction-oriented model selection in partial least squares path modeling. *Decision Sciences*, forthcoming.