Theory Development and Model Building

This course teaches students how to develop and test theories in an applied and concrete way. We discuss and study different research approaches and methods, including structural equation modeling. This course provides students with an opportunity to develop and to fine-tune appropriate and specific theories for their own research.

Students come up and choose a specific topic of their interest at the beginning of the class and develop and present a theoretical framework suitable for their project. The course is also geared towards designing means to test the proposed theory. Another key learning outcome is to enhance students' ability to conduct empirical research in a scale development exercise.

General Information



Learning goals

- Learn how to generate ideas, define concepts, and clarify relationships between concepts.
- Explore the process of theory construction and theory testing using the structural equation modeling (SEM) framework.
- Identify and explore substantive theoretical contributions to the literature and present these in class.
- Exercise and extend analytical skills in order to conduct sound academic research (using R).

Seminar organization

The course will consist of assigned reading material, lectures, student presentations, discussions, and hands-on exercises. Lectures will be intended to elaborate points that might be difficult to glean from readings and to stimulate discussion. Participants will be responsible for reading and analyzing course readings prior to class, presenting the assigned material, leading discussions on this material, and contributing additional relevant material on topics covered.

The success of the course is heavily dependent on all participants having relatively equal levels of knowledge about each topic. It is important, thus, that all participants read the material in advance of each class session.







CHAIR OF MARKETING & INNOVATION PROFESSOR DR. SABINE KUESTER



Aleksandar Blečić, M.Sc. Contact person for MKT 804

Theory Development and Model Building

Course requirements & evaluation

Students have to complete the following requirements:

1.	Presentation of own research	30%
2.	Presentation of readings	30%
3.	Project work	40%

Presentation of own research

Students will present a marketing and management related phenomenon and must include the development of a theoretical framework. The theoretical framework can be original but should be grounded in, or at least linked to, existing theories and models. It is intended to have a short PowerPoint presentation of 10 minutes (per student) which will be followed by a question and answer session of approximately 10 minutes (per student).

Presenters are responsible for:

- In order to introduce your project to the class send **one** slide (.ppt file) with a brief introduction of your research (research idea, key concepts/constructs, theoretical framework) to <u>kuester@bwl.uni-mannheim.de</u> until 27 April, 2021 (12pm at the latest). You will present your introduction of your research in the first session on 28 April, 2021.
- 2. Present your theoretical framework in the final session. Please send the presentation (.ppt file) to <u>kuester@bwl.uni-mannheim.de</u> one day prior to your scheduled presentation.

Your grade for the presentation of your own research is based on:

- your ability to deliver a targeted presentation of the theoretical framework in question and a literature review;
- your ability to bring in your interpretation of the literature relative to the relevant theoretical framework;
- the quality of the classroom experience for the other students;
- and the quality of the presentation slides (I will provide the presenters' slides as hand-out for the audience).

Dates and Times:

After the kick-off session, the course will be taught in six consecutive weeks in single sessions (except for the one double session in the end) on the following dates:

	Date	Venue and Time
Kick-Off:	24 March, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Session 1:	28 April, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Session 2:	5 May, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Session 3:	12 May, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Session 4:	19 May, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Session 5:	26 May, 2021	BWL-ZOOM-01 Virtual Building (1:45-3:15pm)
Sessions 6 & 7:	2 June, 2021	BWL-ZOOM-01 Virtual Building (1:45-5:00pm)

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Presentation of readings

In pairs of two, I ask students to prepare and present the assigned readings in class. The presentation should take not more than 15 minutes. Please send the presentation (.ppt file) to kuester@bwl.uni-mannheim.de one day prior to your scheduled presentation. The readings will be allocated after the kick-off.

Presenters are responsible for:

- presenting the assigned readings for their session; 1.
- critically evaluating the assigned readings and relating it to the context of the course; and 2.

Your grade for in-class presentation of assigned readings is based on:

- the quality of the classroom experience for the other students;
- the quality of the presentation slides;
- and the student's ability of critical reflection. •

I will provide the presenters' slides as hand-out for the audience.

Project work

Each student has to develop a reflective measurement scale as an individual assignment. Students will prepare a written report describing their research approach and the R code for their statistical analysis.

The project is expected to contain the following components:

- construct specification 1.
- item generation 2.
- measurement purification 3.
- construct validity assessment 4.

Your grade of your project depends on:

- the clarity of the construct specification •
- accuracy and comprehensibility of the argument (e.g., item exclusion, model identification)
- coherence and rigor of statistical analyses
- comprehensiveness of comments in the R-code (can a third person easily comprehend your R-code?)

Please make sure that your R-code can be executed smoothly and send an R-file (.R), the corresponding dataset as well as the written report of 2 pages max. until 30 June, 2021 to <u>kuester@bwl.uni-mannheim.de</u>.

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Introduction to the Course

Session 0 24 March, 2021 10:15-11:45am Kick-Off Session

Module A: What is Science

Session 1 28 April, 2021 1:45-3:15pm and Session 2 5 May, 2021 1:45-3:15pm

In the first two sessions we will discuss the philosophy of science.

<u>Literature</u>

- Chalmers, A. F. (2013). What Is This Thing Called Science? (4th ed.). Indianapolis, Hackett Pub, 1-17 [Chapter 1]
- Lehmann, D. R. (2020), "The evolving world of research in marketing and the blending of theory and data," International Journal of Research in Marketing, 37(1), 27-42.

Module B: Theory Construction

Session 3 12 May, 2021 1:45-3:15pm Session 4 19 May, 2021 1:45-3:15pm

In Sessions 3 and 4, we will explore the theory construction process as a precursor to the theory testing approach in Session 5.

<u>Literature</u>

- Ellsworth, Phoebe C. (1977), "From abstract ideas to concrete instances: Some guidelines for choosing natural research settings," American Psychologist, 32(8), 604–615.
- Tellis, Gerard J. (2017), "Interesting and impactful research: on phenomena, theory, and writing," Journal of the Academy of Marketing Science, 45(1), 1–6.

Module C: Theory Testing

Session 5 26 May, 2021 1:45-3:15pm

Starting point of this session is an intermediate-level understanding of regression analysis and exploratory factor analysis. The software used for the assignment is the open source software R (https://cran.r-project.org/) and the R package LAVAAN for covariance-based SEM. In these sessions we will explore the measurement and the structural model underlying SEM.

<u>Literature</u>

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103(3), 411–423.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39–50.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. Journal of Consumer Research, 30(2), 199–218.

Module D: Student Presentations of Theoretical Frameworks

Session 6 2 June, 2021 1:45-3:15pm and Session 7 2 June, 2021 3:30-5:00pm Student Presentations and Wrap-Up

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