

Research Methodology

PhD Course (6 ECTS)
Faculty of Business and Economics
University of Antwerp
Belgium

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INTRODUCTION

The purpose of the Research Methodology course is to introduce you to the scientific method of empirical research. It provides an overview of the research process from formulating research questions and hypotheses to the design of the actual research steps necessary to answer these research questions. In doing so, it focuses on the **What** and **How** questions of the research process. It also offers a learning-by-doing research experience. The core of this course is that each student develops his/her own research design associated with specific research questions that the student wants to answer (preferably in the realm of his/her PhD). To facilitate this, the course kicks off with an introduction into, and a discussion of, some critical research methodology issues. Subsequently, each student will prepare a research proposal that, after revision in light of feedback from the lecturer and fellow students will be refined to become the basis for a genuine piece of research. Note that the course does not include data collection and analyses but focuses on all steps that are necessary before the actual execution of the project. In all, this implies the following series of activities:

1. First, the course will be introduced in a plenary lecture, explaining what is expected from the students.
2. Second, two sessions will be devoted to the introduction and discussion of important methodological issues researchers encounter in their search for causal explanations. The focus will be on how and when different empirical scientific methods (each with its advantages and disadvantages) can be used to test theory derived hypotheses.
3. Third, each student will prepare a research proposal in which he/she develops a sound research question into testable hypotheses and a research design appropriate for the purpose at hand. This proposal must be presented in a plenary workshop.
4. Fourth, each student will refine her/his research proposal following feedback received from the lecturer and participants to the plenary workshop (and, of course, from his/her supervisor).
5. Fifth, the research proposal and improvements will be presented again in a plenary workshop. The mark on this research paper determines the course grade.

During the Research Methodology course, the student will experience all key aspects of doing research (except data collection and analysis). If done properly, the research proposal can serve as the basis of a chapter of the PhD dissertation and excellent paper. **The research proposal/paper must be 20 to 30 pages** (double-spaced in 12 points font). It will be judged on theoretical soundness, methodological rigor, and writing clarity. The paper should be an **original piece of research developed specifically for the course, and not an adaption of old work.**

Structure of the Research Methodology course

The Research Methodology course is comprised of, by and large, two parts: Part I deals with research preparation, including a reflection on some illustrative methodological issues, and Part II involves the full-blown elaboration of a detailed research proposal.

1. The core of Part I is individual work on preparing a research proposal to be presented at the end of Part I. Moreover, to give a feel of the subtleties of academic research, each student must attend two sessions on illustrative methodological issues. The end product of Part I must be a research design proposal that provides the platform for

further research. At the beginning of Part I, the precise purpose of Part I will be explained during a plenary lecture. At the end of Part I, each student must present her or his proposal in a workshop-type of setting.

2. Part II is devoted to refining this research proposal. At the end of Part II, all students will present their proposal again in a workshop-type setting to discuss and evaluate the improvements made.

The end result is a full fledged research proposal, which will be marked by the lecturer. The final version of this paper must be handed in the end of August at the latest. In both research workshops planned, we learn important arts of doing research next to individual work and knowledge of methodological issues: presenting ideas, engaging in critical and constructive discussion to help colleagues advance, and learning from the critical contributions that others make with regard to our own work.

During the opening plenary session, more details will be provided. Then, for instance, we will allocate papers over presenters for the second and third meeting (on methodological issues). In Table 1, the course’s schedule is summarized. Note that this time schedule is rough, in part, too. In a later stage, details will be given when needed. **Attendance in each session is obligatory.**

Further details will be communicated as we go along. For example, we will pay quite a bit of attention to the “How To Do Research” question. For now, in this course outline, it suffices to list the pre-selected literature.

Table 1: The Research Methodology course structure

PARTS	SESSIONS	DATES	LOCATION
Part Ia: Methodological issues	1: Plenary lecture 2: Causality and validity 3: Illustrative examples of different research designs	February 10 (10-12) February 24 (10-12; 13-15) March 3 (10-12; 13-15)	Preferably on campus, online if necessary (TBA)
Part Ib: Research proposal	4: Proposal workshop I	March 17 (10-12; 13-15)	
Part II: Further elaboration Research proposal	5: Proposal workshop II	April 21 (10-12; 13-15)	
Deadline final research paper: end of August 2021			

Literature of the Research Methodology Course

Session 1: Introduction

The majority of the activities are student-specific, with the exception of one plenary lecture, two literature sessions, and two workshops. The general background literature is Shadish, W.R., T.D. Cook and D.T. Campbell (2002), *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, Boston / New York: Houghton Mifflin. This textbook provides a general introduction into research methodology issues. Specific literature per session is provided below. Note, in advance, that this is not a course in statistics, generally, or any technical tool, particularly. Rather, the aim of this course is to offer an overview of more general issues of research methodology, with an emphasis on questions related to research design.

Session 2: Causality and validity

This session is composed of three elements. The first element involves the presentation of Chapters 1 to 3 of the book of Shadish, Cook and Campbell (2002) by students. The second element is a reflection of the issues raised in these chapters applied to Boone, C., B. De Brabander and A. van Witteloostuijn (1996), 'CEO locus of control and small firm performance: an integrative framework and empirical test', *Journal of Management Studies* 33: 667-699. Finally, the lecturer will reflect on the issues raised, and summarize the major milestones of the research process. Note that the issues that will be discussed are critical, but not exhaustive. There are many more we simply cannot take on board in a course like the current one. Depending upon the methodological bottlenecks you as a researcher will be confronted with during your career, other literature has to be consulted. In the context of the current course, we simply aim to raise the students' 'methodological awareness'. The issues that pass under review during this session, we believe, serve this purpose very well.

Session 3: Illustrative examples of different research designs

As a follow-up on session 2, four papers will be critically discussed, with each paper representing a 'typical' quantitative research design. We focus on quantitative research designs because the main focus of this course is on causal inference and hypothesis testing. For the sake of completeness, we also add one qualitative paper using a case study design which allows us to contrast quantitative from qualitative research designs. All papers can be retrieved from the library. Each paper will be presented by a student, focusing on summarizing the paper's research design and methodology, and the paper's methodological strengths and weaknesses. All papers are own work, implying that we as teachers can directly relate to the remarks made, knowing the history of the research and the reasons for the choices made.

Experimental design:

Declerck, C., Boone, C., Pauwels, L., Vogt, B. and E. Fehr (2020), 'A registered replication study on oxytocin and trust', *Nature Human Behavior*, <https://doi.org/10.1038/S41562-020-0878-X>

Survey design:

Boone, C. and W. Hendriks (2009), 'Top management team diversity and firm performance: Moderators of functional-background and locus-of-control diversity', *Management Science* 55: 165-180.

Longitudinal and panel design:

Sajko, M., Boone, C. and T. Buyl (2020), ‘CEO greed, corporate social responsibility, and organizational resilience to systemic shocks’, *Journal of Management*, <https://doi.org/10.1177/0149206320902528>

Event-history design:

Boone, C. and S. Ozcan (2020), ‘Oppositional logics and the antecedents of hybridization: A country-level study of the diffusion of Islamic banking windows, 1975-2017’, *Organization Science* 31: 990-1011.

Case study design:

Van der Bremept, O., Boone, C., van Witteloostuijn, A. and A. van den Berg (2017), ‘Toward a behavioral theory of cooperation between managers and employee representatives in works councils’, *Economic and Industrial Democracy* 38: 314-343.

Rules of the Research Methodology course

Doing research implies a challenging and exciting quest for knowledge. The only rules that count, are those that relate to how to perform proper research. Here, learning-by-doing is the key, as is guidance by an experienced researcher. Moreover, in a PhD program, students are expected to be intrinsically motivated. Hence, this is a course without many rules. In effect, the only rule is that you are expected to participate intensively and that **attendance to each session is obligatory**. The grade will be based only upon the final research paper. Given the above, we assume that there is no need to introduce any further formal incentives. But with regard to literature presentation and discussion, although there is no formal mark for this, we would emphasize the following: do not treat this lightly, as this helps you to practice the skills, and to internalize the theoretical knowledge, required to conceptualize research and the contribution of papers, conforming to journal article standards. The purpose of good journal articles is not to cloak empirical material in theory, but to provide a pointed contribution to cumulative theory development. It is up to us to make the most of it. We hope that you will enjoy your research journey as much as we did, and still do!

In order to help you to write a compelling introduction to your research proposal and paper we advise you to consult the following paper:

Grant, A.M. and T.G. Pollock (2011), ‘From the editors: publishing in AMJ — part 3: Setting the hook’, *Academy of Management Journal* 54: 873-879.