

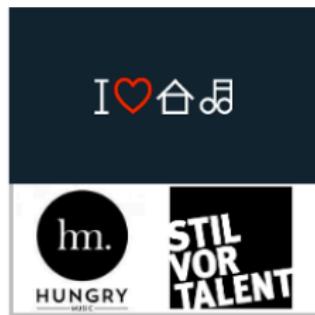
Class 1 - Research I: Principles

Agenda

- Introductions (45 minutes)
 - Getting to know each other
 - Syllabus and materials overview
 - Typical class flow
- Break (5 minutes)
- The Craft of Research I (10 minutes)
- Readings for today (60 minutes)

Introductions

A little about me



A little about me



A little about me



A little about you

Please remember to fill out your introductory Qualtrics survey so that I can learn a bit about you and your goals for the class!

Today, let's level set on your familiarity with some key ideas:
[Pollev.com/drfox](https://pollev.com/drfox)

Syllabus and materials overview

Definitely - Syllabus - Brightspace - Dropbox - PollEverywhere
Maybe - Miro - Perusall

Typical class flow

- *Part I:* Conceptual grounding and agenda setting
- *Part II:* Core paper discussion
 - We will discuss the 2-3 papers that all students have been assigned to read in detail
 - These papers typically will provide a mix of conceptual background and how-to guides
- *Break*

Typical class flow

- *Part III: Activity period*
 - (Weeks 2 – 7) Compare / contrast: One group tasked with reviewing two additional papers to explain their points of intersection, divergence, and ties to core papers
 - (Weeks 8 – 14) Replication: One group tasked with using data from one of my current or published papers to replicate analyses and comment on that process and raise questions for general awareness

Typical class flow

- *Part IV: Summative lecture on concepts*
 - I will make a brief presentation to tie together and highlight key concepts
 - Elements missed in the general discussion will be given greater focus

The Craft of Research I

Reading, understanding, writing, crafting

Scholarship is more or less developed in that order

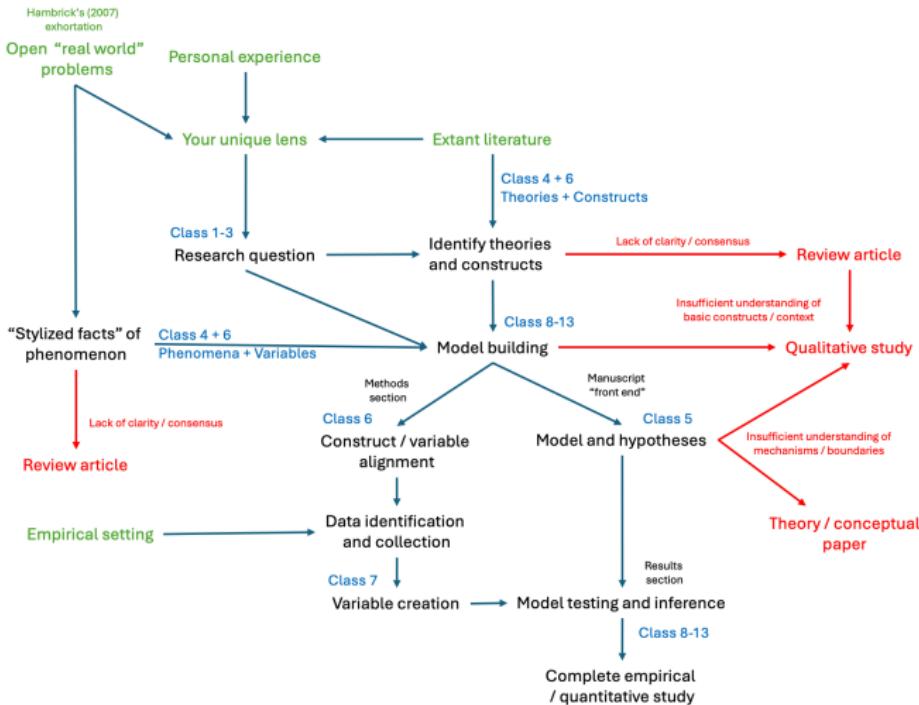
- First you read
- Enough reading helps you start to understand (both in terms of content as well as analysis)
- When you have understand enough, you can start writing your own thoughts
- After enough cycles, you can craft your research

A pictoral representation of the research process (we will revisit this in class 7)

On the following slide, I illustrate how the class fits together

- Note that it assumes that the intent is to complete a quantitative, empirical project, but I have indicated “offramps” to other types of contributions in red
- Class content is indicated in blue
- Information relied upon from ‘outside the system’ is shown in green

A pictoral representation of the research process



Readings for Today

Preamble

I have provided some discussion questions for us to consider in case we need to get the ball rolling.

We may or may not discuss those questions depending on the flow of the class.

In general, I would rather talk about your ideas and questions rather than these “canned” items.

Readings

- 1 Popper, K. R. (2002). *The Logic of Scientific Discovery*. Routledge. [Ch .1]
- 2 Mantere, S., & Ketokivi, M. 2013. Reasoning in Organization Science. *Academy of Management Review*, 38(1), 70-89.
- 3 Nosek, B. A. & Errington, T. M. 2020. What is replication? *PLOS Biology*: 1-8.
- 4 Rynes, S. L., & Bartunek, J. M. (2017). Evidence-Based Management: Foundations, Development, Controversies and Future. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 235-261.

Popper (2002)

The Logic of Scientific Discovery. [Ch .1]

According to the view that will be put forward here, the method of critically testing theories, and selecting them according to the results of tests, always proceeds on the following lines. From a new idea, put up tentatively, and not yet justified in any way — an anticipation, a hypothesis, a theoretical system, or what you will—conclusions are drawn by means of logical deduction [...]

[Then,] there is the testing of the theory by way of empirical applications of the conclusions which can be derived from it. [p. 9]

Popper (2002)

Discussion Questions

- In your view, what is the main point?
- Do this worldview currently inform your work? How might it?

Karl
Popper

*The Logic of Scientific
Discovery*



London and New York

Mantere and Ketokivi (2013)

Reasoning in Organization Science. Academy of Management Review, 38(1), 70-89.

Labels aside, a closer look at research practice reveals that researchers across research traditions use all three forms of reasoning. It is hardly surprising to observe that we all make inferences to a case (use deduction), inferences to generalizations (use induction), and inferences to explanations (use abduction). Thus, using reasoning types as labels to describe entire research designs is misleading. Instead, differences between research approaches, whatever they may be, are found not in the types of reasoning used but, rather, in how the three reasoning types are used in conjunction with one another. (p. 76)

Mantere and Ketokivi (2013)

Discussion Questions

- What mode(s) of reasoning do you tend to rely on in your current work?
- What concrete practices did you draw from this paper, if any?

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REASONING IN ORGANIZATION SCIENCE

SARU MANTERE
Honors School of Economics

MIKKO KETOKIVI
© Business School

Researches regarding organizational methods of reasoning are typically limited to the researcher's own discipline. In critical examinations of the use of scientific reasoning methods, however, scholars have been more inclined to note research in other disciplines. This article argues that incremental research in other disciplines can help us to better understand how and why we reason. A typical example of incremental research is the field of law, where scholars have examined the use of deductive and inductive reasoning in legal argumentation. We argue that the use of deductive reasoning is often considered to be negative; thus the diversity of research perspectives in organizational science is important. We also argue that the use of deductive and inductive reasoning is not always negative; it can also be positive.

The objective of scholarly reasoning is to improve our understanding of a phenomenon. The creation of organizational scientific knowledge, more generally, has been approached from many different perspectives, such as positivism (Majchrzak & Reagans, 2002) and the role of theory (Majchrzak, 2000). In addition, the construction of knowledge (Majchrzak, 1998) and research design (Majchrzak, 2000; Majchrzak & Chidambaram, 1999) have been approached from the writer's interests in a methodological—on approach to research—perspective. The amount of scientific reasoning. The writing process, however, is not always the focus of research. An understanding of how scholars reason and formulate arguments is increasingly limited (Ligtvoet, 2006), and perhaps this lack of understanding is defining criteria for methodological rigor. Furthermore, critics of scientific reasoning methods argue that the use of deductive and inductive reasoning reduces the resultant presumption unscientifically (Sternbach, 1999).

We find three arguments against researchers for their belief in deductive and inductive reasoning of the scientific method. We are also granted to license either any 50 billion for her business or 100 million for her business. She is also granted to deductive logic to Bill McLean, whose entrepreneurial and leadership skills have been well known for years. These two arguments have played a crucial role in the formation of the article.

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Nosek and Errington (2020)

What is replication? PLOS Biology: 1-8.

To be a replication, 2 things must be true: outcomes consistent with a prior claim would increase confidence in the claim, and outcomes inconsistent with a prior claim would decrease confidence in the claim. The symmetry promotes replication as a mechanism for confronting prior claims with new evidence. Therefore, declaring that a study is a replication is a theoretical commitment. Replication provides the opportunity to test whether existing theories, hypotheses, or models are able to predict outcomes that have not yet been observed. (p. 2)

Nosek and Errington (2020)

Discussion Questions

- Do you agree with their definition of replication?
 - How does this fit in with the replication crisis?

Rynes and Bartunek (2017)

Evidence-Based Management: Foundations, Development, Controversies and Future.

Management academics have long noted a large gap between academic research and managerial practice. [...] Some have viewed the causes of the gap as lying primarily with academic researchers, who are characterized (perhaps caricatured) as having become overspecialized, self-referential, obsessed with theory, excessively mathematical, jargonladen, unconcerned about practical problems, and dismissive of practitioners [...] Others have focused on practitioners, who are sometimes characterized or caricatured as research phobic, anti-intellectual, susceptible to unproven fads and fashions... (p. 236)

Rynes and Bartunek (2017)

Discussion Questions

- Are you familiar with evidence-based practice from your current work?
- Where might you fit in helping to advance evidence-based management? How might you go about doing it?



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Evidence-Based Management:
Foundations, Development,
Controversies and Future

Sara L. Rynes^a and Jean M. Bartunek^b
^aDarden College of Business, University of Virginia, Charlottesville, VA 22904;
and ^bHarvard Business School, Harvard University, Boston, MA 02163;

Abstract

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Keywords

evidence-based management, evidence-based practice, research-practice gap, academic-practitioner relationships, spousal review

We review the recent development of evidence-based management (EBM), tracing its origins to longstanding gaps between research and practice in management and the need for more systematic approaches to research and practice (EBR). We provide a definition of EBM and review four historical periods allowing us to use. We then review categories of article types in EBM, including empirical studies, conceptual studies, reviews of programs, reading-related, empirical, series, and editorials and responses. Critiques related to EBM are also discussed. Finally, we review the future directions for EBM as well as broader concerns about the scholarly research base in management. We conclude by discussing the implications for the field, first and foremost, increasing the production of high-quality empirical studies in EBM. Topics of particular interest include research collaboration by scholars and practitioners, the use of mixed methods in EBM, application, and practitioners' use of evidence in their working environments. We also highlight the need for more cross-disciplinary efforts (like that have generally been conducted in the organization sciences).

Preparation for Next Class

Next class

Research II: Positions

- 1 Huff, A. S. (1999). Writing for Scholarly Publication. [Chs. 1, 3]
- 2 McGrath, Joseph E. (1981) Dilemmatics: The Study of Research Choices and Dilemmas, American Behavioral Scientist, 25, 2, 179-210.
- 3 Simsek, Z., Heavey, C., Fox, B. C., & Yu, T. 2022. Compelling Questions in Research. Journal of Management, 48(6), 1347-1365.
- 4 Tushman, M., & O'Reilly, C. (2007). Research and Relevance: Implications of Pasteur's Quadrant for Doctoral Programs and Faculty Development. AMJ, 50, No. 4, 769-774.

Introductions
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The Craft of Research I
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Readings for Today
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Preparation for Next Class
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References