

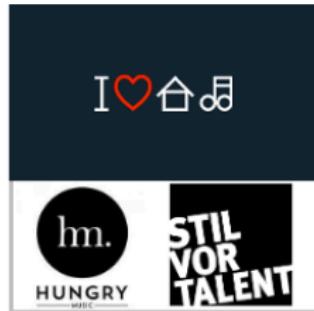
Class 1 - Research I: Principles

Agenda

- Introductions (45 minutes)
 - Getting to know each other
 - Syllabus and materials overview
 - Typical class flow
- Break (5 minutes)
- Skills corner: The craft of research (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

- Syllabus
- Brightspace
- Dropbox (download a local copy for yourself, feel free to add selective highlights for group discussions)
- PollEverywhere
- Miro

Typical class flow

- *Part I:* Conceptual grounding and agenda setting
 - Introduction to topics covered
 - 5 minutes for skill development
- *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

Skills corner

Reading, understanding, writing, crafting

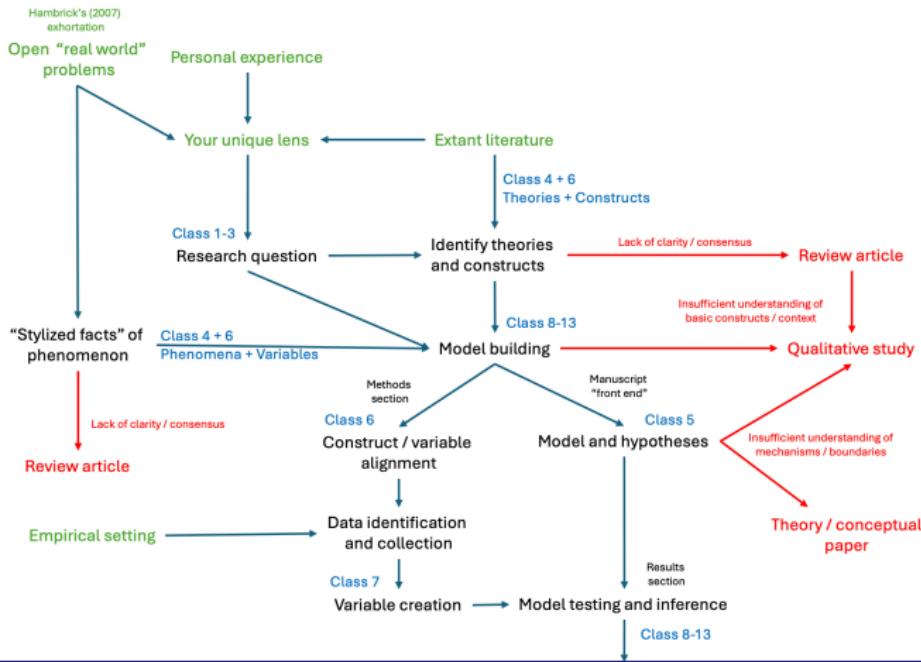
Scholarship is more or less developed in that order

- First you read (a lot, broadly and narrowly)
- 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
- Those thoughts are put out into the world and receive “feedback” through the review process
- Feedback helps you course correct, identify limitations in your understanding or how you are articulating your ideas
- After enough cycles, you begin to craft your research

Crafting research, simply put

- Research (at least in our field) is not manufactured, it is crafted:
to make or produce with care, skill, or ingenuity (Merriam-Webster Dictionary)
- Skill: Developing “soft” (theory-building) and “hard” (model-building) capabilities to make and defend a thesis
- Ingenuity: Having the creativity and base of information to go beyond what is known
- Care: Exerting due time and effort in putting together your analyses and arguments

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



Discrete skills required to complete that process

- Reading articles for multiple purposes
- Summarizing your observations
- Articulating research questions and associated hypotheses
- Selecting appropriate empirical contexts and collecting data
- Employing different analytical techniques to examine that data
- Drawing inferences and explaining how these conclusions can advance the literature

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



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

SAXU MANTIKE

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Prescriptively regarding organization-scientific methodology are typically bounded on the researcher's ability to approach problem naturally. It is a critical examination of the nature of scientific methodology. Inductively, it is a critical examination of the researcher's ability to approach problem with an openness that incorporates more reflective view of the cognitive capacity of the researcher. To this end, we construct a typology of descriptive, prescriptive, and normative criteria for the evaluation of organization-scientific research procedures. This typology addresses both cognitive-positivist and the diversity of research approaches in organization research. We make a case for the need to move beyond the positivist paradigm by identifying the negative element in the formulation and evaluation of scientific research responses.

The objective of scholarly reasoning is to tidy new knowledge in a scientific field or creation of epistemic scientific knowledge more generally; has been approached mostly from the perspective of the philosophy of science (Muller & Bogen, 2002) and the theoretical paradigm (Arieti, 1993) or construction of theory (Arieti, 1995) and its validation (Arieti, 1996; Arieti & Chodat, 1996; Chodat, 1996). Consequently, reasoning in the extant literature is a methodology—opposed to rhetorical, psychological, or some other type of argumentation. The main purpose is crucial, because the general standing of how science creates new and useful explanations is surprisingly limited (Arieti, 1995; Arieti & Chodat, 1996; Chodat, 1996), and the lack of a clear definition of criteria for methodological rigour further exacerbating the problem is that people concur typically do not incorporate negatively into their research.

We thank three anonymous AMR reviewers for their helpful, critical, and constructive evaluations of the manuscript. We also wish to thank our editor, Jerry Hines, for his assistance in the preparation of the manuscript. We also thank the discussors on this article in SMC 2000, whose encouraging and helpful comments on our work on monitoring over the years have played a crucial role in the revision of the article.

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?



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

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Keywords: evidence-based management, evidence-based practice, research-practice gap, academic-practitioner relationships, systematic reviews

We review the recent development of evidence-based management (EBM), tracing its origins to longstanding trends in research and practice, describe findings from studies, and the emergence of evidence-based management (EBM). We provide a definition of EBM and argue how traditional strategic studies influence its use. We then review categories of articles that comprise the strategic advice literature, namely or predominantly descriptive, prescriptive, normative, and evaluative. We also distinguish between strategic, empirical, inductive, deductive, and deductively informed approaches to strategic advice. We then discuss the evidence research base on which EBM depends. Our suggestions for future research emphasize, first and foremost, increasing the production of high-quality empirical studies in EBM. Types of participation in research, including self-selection and co-operation, are discussed as determinants of research output, and persistence, and prevalence, of use of evidence in their working environment are assessed. We also call for broader types of systematic reviews (SRs) 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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Skills corner
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Readings for Today
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Preparation for Next Class
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References