PhD seminar: Introduction to Systematic Literature Reviews as a Scientific Inquiry

Instructor: Period:	Sven Kunisch, PhD Spring semester	
Course type:	PhD seminar (5 ECTS)	
Compulsory literature:	All articles marked with *	
Academic prerequisites:	Enrolment is restricted to PhD students.	
	The seminar is open to all PhD students, but preference will be given to PhD students from the PhD programme at the Department of Business Development and Technology, followed by PhD students from other PhD programmes at Aarhus BSS Graduate School.	
Maximum enrolment:	The maximum number of students is 20.	
Dates:	Day 1: 17 April 2024 Days 2-4: 21-23 May 2024 Paper submission deadline: 5 July 2024 (submission via email)	

Background

While a literature review is part of any research project, including a PhD dissertation, systematic literature reviews have emerged as a form of scientific inquiry and a stand-alone research project. They encompass "a class of research inquiries that employ scientific methods to analyse and synthesize prior research to develop new knowledge for academia, practice and policy-making" (Kunisch et al., 2023, p. 5). Thus, systematic literature reviews can play a crucial role in advancing scientific knowledge and promoting progress in society.

This type of research spans a wide range of methods, including qualitative and quantitative approaches (meta-analysis and bibliometric analysis). These methods can help address a variety of research purposes aimed at generating new knowledge for the benefit of science and society. For example, *Annual Reviews* publishes literature reviews that "capture current understanding of a topic, including what is well supported and what is controversial; set the work in historical context; highlight the major questions that remain to be addressed and the likely course of research in upcoming years; and outline the practical applications and general significance of research to society" (www.annualreviews.org).

Learning objectives

This PhD seminar exposes participants to the 'world of possibilities' in systematic literature reviews in various fields. The seminar enables PhD students to understand basic purposes and approaches of different types of systematic literature reviews and to apply them properly to their own individual research topics.

Specifically, after completion of the PhD seminar, participants should be able to:

- Plan and conduct a systematic literature review as part of a research project (i.e. a form of scientific inquiry).
- Consider a wide range of purposes for conducting a systematic literature review (and making different knowledge contributions).
- Consider various approaches for search and selection as well as for analysis and synthesis.
- Discuss considerations for purpose-method fit as well as aspects of rigor and impact in line with systematic literature reviews.
- Present own methodology and discuss relevant methodological considerations related to their own literature review as part of a research project.

Participants also prepare a first draft of a literature review based on well-grounded review methods, which could be developed into a research paper for their PhD dissertation.

Format and schedule

This PhD seminar comprises four days of class discussions, readings and class preparation. Participants must be prepared for each session, i.e. they are expected to have carefully read and engaged with each reading assignment prior to class. This includes reading the mandatory articles marked with (*), which are a combination of classic articles on certain review methods and more recent articles that conduct a rigorous and impactful literature review. The teaching format is mainly 'flipped classroom' (more details on this are provided below, along with the details on the examination and session leadership).

Days	Topics	
Day 1	Welcome and introduction: 1. Introduction to review research	
Optional	Individual consultation with session leaders	
Day 2	 Planning the review: 2. Types of literature reviews and knowledge contributions 3. Specific types (integrative, problematising and critical reviews) 4. Systematicity (rigor, trustworthiness, among others) 	
Day 3	 Search and selection of the data: 5. Sample selection and search (databases; broad vs. narrow search; keywords; types of data, e.g. grey literature) Analysis and synthesis of the data: 6. Qualitative approaches: qualitative analysis, coding and synthesis 7. Quantitative approaches: meta-analysis, bibliometric analysis 	
Day 4	 Writing and publishing the research paper: 8. Presenting insights and publishing 9. Possible outlets / possibly guest lecture / trends and tips and tricks 	
Final paper	Submission of a (short) literature review research paper.	

Exam details

Successful completion of the PhD seminar is based on the following two requirements:

- 1. Session leadership (individual or group assignment): 50%
- 2. Research paper (individual assignment): 50%

Both parts must be passed to successfully to complete the seminar.

1. Session leadership

Each person (or group) will act as a session leader for one session (i.e. one of the topic areas). The session leader is expected to act as an expert (a team) on the topic and facilitate class discussion.

Each session has a duration of approx. 90 minutes. Participants should spend about 2/3 of their time on the method aspect and the remaining 1/3 on EITHER the critical analysis of the selected article OR on a practical exercise. The *output* should be a PowerPoint presentation as well as a two-page summary of the topic area (a Word document) OR an exercise.

Within each topic area, participants should elaborate on the following aspects in particular:

- Key ideas
- Alternatives and key considerations
- Practical suggestions
- Critical analysis of a selected article OR practical exercise (e.g. how to search, etc.)

2. Research paper

Each participant must submit a *literature review research paper*. Participants can choose a specific domain and review method. The purpose of this paper is to enable PhD students to carry out an initial systematic review in the context of their PhD dissertation topic and to develop their skills to conduct rigorous and impactful literature reviews as part of a standalone research project.

The research paper should address at least the following aspects:

- a) Motivate a systematic literature review (review purpose and methods). This should be done in the introduction, which should briefly describe the domain, identify the research purpose and state what the participant plans to do to tackle the identified problem in the literature. Each of these issues should be addressed in one or a few short paragraphs.
- b) Carry out an initial systematic literature review of the extant knowledge in the specific domain and other fields related to the issue. The review method should be clearly described.
- c) Conduct the analysis for a subset of the literature (approx. 20-30 articles) and synthesise the initial insights from the systematic literature review (in a framework, model, typology, etc.).
- d) Develop initial ideas for future research. This is optional.

Style guide: maximum five pages of text plus two pages of references (and graphs); single-spaced; 11 Times New Roman points.

Workload

Workload type	Working hours
Preparatory assignments (general reading)	10
Participation in class	20
Preparation for session leadership / presentation topics	40
Reading for other sessions	20
Literature review research paper	60
Total (5 ECTS)	150

Topic areas and readings

For an overall introduction into literature review approaches and methods, the following readings and books are recommended:

- Booth, A., Sutton, A., Clowes, M. & James, M. M.-S. (2021). Systematic approaches to a successful literature review. Sage.
- Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J. & Welch, V. A. (Eds.). (2019). *Cochrane handbook for systematic reviews of interventions* (2nd ed.). John Wiley & Sons.
- Kunisch, S., Denyer, D., Bartunek, J. M., Menz, M. & Cardinal, L. B. (2023). Review research as scientific inquiry. *Organizational Research Methods*, *26*(1), 3-45. https://doi.org/10.1177/10944281221127292
- Light, R. J. & Pillemer, D. B. (1984). *Summing up: The science of reviewing research*. Harvard University Press.
- Jesson, J. K., Matheson, L. & Lacey, F. M. (2011). *Doing your literature review: Traditional and systematic techniques.* Sage.

1. Introduction to review research

- * Kunisch, S., Denyer, D., Bartunek, J. M., Menz, M. & Cardinal, L. B. (2023). Review research as scientific inquiry. *Organizational Research Methods*, 26(1), 3-45. https://doi.org/10.1177/10944281221127292
- * McMahan, P. & McFarland, D. A. (2021). Creative destruction: The structural consequences of scientific curation. *American Sociological Review*, 86(2), 341-376. https://doi.org/10.1177/0003122421996323
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104(November), 333-339. https://doi.org/10.1016/j.jbusres.2019.07.039

2. Overview of types of literature reviews and knowledge contributions (theory, conceptual and evidence)

- * Breslin, D. & Gatrell, C. (in press). Theorizing through literature reviews: The minerprospector continuum. *Organizational Research Methods*. https://doi.org/10.1177/1094428120943288
- Grant, M. J. & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal, 26*(2), 91-108. https://doi.org/10.1111/j.1471-1842.2009.00848.x
- Meerpohl, J. J., Herrle, F., Antes, G. & von Elm, E. (2012). Scientific value of systematic reviews: Survey of editors of core clinical journals. *PLOS ONE*, 7(5), 1-5. https://doi.org/10.1371/journal.pone.0035732
- Munn, Z., Peters, M.D.J., Stern, C., Tufanaru, C., Mcarthur, A. & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between

a systematic or scoping review approach. *BMC Medical Research Methodology,* 18, 143. https://doi.org/10.1186/s12874-018-0611-x

- Paré, G., Trudel, M.-C., Jaana, M. & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management*, 52(2), 183-199. https://doi.org/10.1016/j.im.2014.08.008
- * Post, C., Sarala, R., Gatrell, C. & Prescott, J. E. (2020). Advancing theory with review articles. *Journal of Management Studies*, 57(2), 351-376. https://doi.org/10.1111/joms.12549
- Rousseau, D. M., Manning, J. & Denyer, D. (2008). Evidence in management and organizational science: Assembling the field's full weight of scientific knowledge through syntheses. Academy of Management Annals, 2, 475-515. https://doi.org/10.1080/19416520802211651

Application and examples:

- Breslin, D., Gatrell, C. & Bailey, K. (2020). Developing insights through reviews: Reflecting on the 20th anniversary of the international journal of management reviews. *International Journal of Management Reviews*, 22(1), 3-9. https://doi.org/10.1111/ijmr.12219
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.

3. Specific types: The integrative review

- * Alvesson, M. & Sandberg, J. (2020). The problematizing review: A counterpoint to Elsbach and van Knippenberg's argument for integrative reviews. *Journal of Management Studies*, *57*(6), 1290-1304. https://doi.org/10.1111/joms.12582
- Chen, V. Z. & Hitt, M. A. (2021). Knowledge synthesis for scientific management: Practical integration for complexity versus scientific fragmentation for simplicity. *Journal of Management Inquiry*, 30(2), 177-192. https://doi.org/10.1177/1056492619862051
- Cho, Y. (2022). Comparing integrative and systematic literature reviews. *Human Resource Development Review*, *21*(2), 147-151. https://doi.org/10.1177/15344843221089053
- * Cronin, M. A. & George, E. (2023). The why and how of the integrative review. *Organizational Research Methods*, *26*(1), 168-192. https://doi.org/10.1177/1094428120935507
- Durand, R., Grant, R. M. & Madsen, T. L. (2017). The expanding domain of strategic management research and the quest for integration. *Strategic Management Journal*, *38*(1), 4-16. https://doi.org/10.1002/smj.2607
- Elsbach, K. D. & van Knippenberg, D. (2020). Creating high-impact literature reviews: An argument for 'integrative reviews'. *Journal of Management Studies*, *57*(6), 1277-1289. https://doi.org/10.1111/joms.12581
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, *4*(3), 356-367. https://doi.org/10.1177/1534484305278283

Torraco, R. J. (2016). Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, *15*(4), 404-428. https://doi.org/10.1177/1534484316671606

Application and examples:

Shipilov, A. & Gawer, A. (2020). Integrating research on interorganizational networks and ecosystems. Academy of Management Annals, 14(1), 92-121. https://doi.org/10.5465/annals.2018.0121

4. Systematicity

- Cooper, H. & Hedges, L. V. (2009). Research synthesis as a scientific process. In H. Cooper, L.
 V. Hedges & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed.). Russell Sage Foundation.
- Liberati, A., Altman, D. G., Tetzlaff, J. Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P.J., Kleijnen, Jos & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *Annals of Internal Medicine*, 151(4), W-65-W-94. https://doi.org/10.7326/0003-4819-151-4-200908180-00136
- Siddaway, A. P., Wood, A. M. & Hedges, L. V. (2019). How to do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual Review of Psychology*, 70, 747-770. https://doi.org/10.1146/annurev-psych-010418-102803
- * Simsek, Z., Fox, B. & Heavey, C. (2021). Systematicity in organizational research literature reviews: A framework and assessment. *Organizational Research Methods*. https://doi.org/10.1177/10944281211008652
- * Tranfield, D., Denyer, D. & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222. https://doi.org/10.1111/1467-8551.00375

Application and examples:

- Rojon, C., Okupe, A. & McDowall, A. (2021). Utilization and development of systematic reviews in management research: What do we know and where do we go from here? *International Journal of Management Reviews*. 23(2), 191–223. https://doi.org/10.1111/ijmr.12245
- Schalken, N. & Rietbergen, C. (2017). The reporting quality of systematic reviews and metaanalyses in industrial and organizational psychology: A systematic review. *Frontiers in Psychology*, 8(1395). https://doi.org/10.3389/fpsyg.2017.01395

5. Sample selection and search

* Adams, R. J., Smart, P. & Huff, A. S. (2017). Shades of grey: Guidelines for working with the grey literature in systematic reviews for management and organizational studies. *International Journal of Management Reviews*, 19(4), 432-454. https://doi.org/10.1111/ijmr.12102

- Bordignon, F. (2021). Dataset of search queries to map scientific publications to the UN sustainable development goals. *Data in Brief*, *34*, 106731. https://doi.org/10.1016/j.dib.2021.106731
- Christensen, M. C., Todić, J. & McMahon, S. M. (2021). Bridging the grey gap: Conducting grey literature reviews for ethical social work practice and research. *Journal of the Society for Social Work and Research*, 13(3), 609-635. https://doi.org/10.1086/717731
- Haddaway, N. R., Page, M. J., Pritchard, C. C. & McGuinness, L. A. (2022). Prisma2020: An R package and shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and open synthesis. *Campbell Systematic Reviews*, 18(2), e1230. https://doi.org/10.1002/cl2.1230
- * Hiebl, M. R. W. (in press). Sample selection in systematic literature reviews of management research. Organizational Research Methods. https://doi.org/10.1177/1094428120986851

Application and examples:

- https://www.maxqda.com/blogpost/maxqda-literature-reviews-reference-managementsoftware
- George, G., Lazzarini, S., McGahan, A. & Puranam, P. (in press). Partnering for grand challenges: A review of organizational design considerations in public-private collaborations. *Journal of Management*. https://doi.org/10.1177/01492063221148992

6. Analysis and synthesis (qual.)

- Hiebl, M. R. W. (in press). Literature reviews of qualitative accounting research: Challenges and opportunities. *Qualitative Research in Accounting & Management*. https://doi.org/10.1108/QRAM-12-2021-0222
- * Hoon, C. (2013). Meta-synthesis of qualitative case studies: An approach to theory building. Organizational Research Methods, 16(4), 522-556. https://doi.org/10.1177/1094428113484969
- O'Kane, P., Ott, D. L., Smith, A. D. & Brown, T. C. (in press). Understanding computerassisted qualitative data analysis software as a tool to enhance systematic literature reviews in human resource development. *Human Resource Development Review*. https://doi.org/10.1177/15344843221144668
- * Webster, J. & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), xiii-xxiii. https://www.jstor.org/stable/4132319

Application and examples:

Castañer, X. & Oliveira, N. (2020). Collaboration, coordination, and cooperation among organizations: Establishing the distinctive meanings of these terms through a systematic literature review. *Journal of Management*, *46*(6), 965-1001. https://doi.org/10.1177/0149206320901565

Habersang, S., Küberling-Jost, J., Reihlen, M. & Seckler, C. (2019). A process perspective on organizational failure: A qualitative meta-analysis. *Journal of Management Studies*, 56(1), 19-56. https://doi.org/10.1111/joms.12341

7. Analysis and synthesis (quant.)

- Antons, D., Breidbach, C. F., Joshi, A. M. & Salge, T. O. (2023). Computational literature reviews: Method, algorithms, and roadmap. *Organizational Research Methods*, 26(1), 107-138. https://doi.org/10.1177/1094428121991230
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N. & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285-296. https://doi.org/10.1016/j.jbusres.2021.04.070
- Hannigan, T. R., Haan, R. F. J., Vakili, K., Tchalian, H., Glaser, V. L., Wang, M. S., Kaplan, S. & Jennings, P. D. (2019). Topic modeling in management research: Rendering new theory from textual data. *Academy of Management Annals*, *13*(2), 586-632. https://doi.org/10.5465/annals.2017.0099
- * Steel, P., Beugelsdijk, S. & Aguinis, H. (2021). The anatomy of an award-winning metaanalysis: Recommendations for authors, reviewers, and readers of meta-analytic reviews. *Journal of International Business Studies*, 52(1), 23-44. https://doi.org/10.1057/s41267-020-00385-z
- Villiger, J., Schweiger, S. A. & Baldauf, A. (in press). Making the invisible visible: Guidelines for the coding process in meta-analyses. *Organizational Research Methods*. https://doi.org/10.1177/10944281211046312
- * Zupic, I. & Čater, T. (2015). Bibliometric methods in management and organization. Organizational Research Methods, 18(3), 429-472. https://doi.org/10.1177/1094428114562629

Application and examples:

- Campbell, J. T., Bilgili, H., Crossland, C. & Ajay, B. (2023). The background on executive background: An integrative review. *Journal of Management*, *49*(1), 7-51. https://doi.org/10.1177/01492063221120392
- Sarta, A., Durand, R. & Vergne, J. P. (2021). Organizational adaptation. *Journal of Management*, 47(1), 43-75. https://doi.org/10.1177/0149206320929088
- Vogel, R. & Güttel, W. H. (2013). The dynamic capability view in strategic management: A bibliometric review. *International Journal of Management Reviews*, *15*(4), 426-446. https://doi.org/10.1111/ijmr.12000

8. Presenting insights and publishing

Other material and sources

Editorials:

- Bauer, T. N. (2009). The journal of management review issue: Celebrating 35 years. *Journal of Management*, *35*(6), 1297-1301. https://doi.org/10.1177/0149206309346842
- Breslin, D., Callahan, J. & Iszatt-White, M. (2021). Future-proofing IJMR as a leading management journal: Reach, relevance and reputation. *International Journal of Management Reviews*, 23(4), 431-442. https://doi.org/10.1111/ijmr.12275
- Breslin, D., Gatrell, C. & Bailey, K. (2020). Developing insights through reviews: Reflecting on the 20th anniversary of the international journal of management reviews. *International Journal of Management Reviews*, 22(1), 3-9. https://doi.org/10.1111/ijmr.12219
- Cooper, C. L. & Pearson, A. (1999). Editorial. *International Journal of Management Reviews*, 1(1), iii. https://doi.org/10.1111/1468-2370.00007_1_1
- Elsbach, K. D. & van Knippenberg, D. (2018). The Academy of Management Annals: Looking back, looking forward. *Academy of Management Annals*, *12*(1), 1-4. https://doi.org/10.5465/annals.2016.0167
- Fan, D., Breslin, D., Iszatt-White, M. & Callahan, J. (2022). Advancing literature review methodology through rigour, generativity, scope and transparency. *International Journal of Management Reviews*, 24(2). https://doi.org/10.1111/ijmr.12291
- Gatrell, C. & Breslin, D. (2017). Editors' statement. *International Journal of Management Reviews*, *19*(1), 3-3. https://doi.org/doi:10.1111/ijmr.12133
- Parmigiani, A. & King, E. (2019). Successfully proposing and composing review papers. Journal of Management, 45(8), 3083-3090.
 - https://doi.org/10.1177/0149206319874875
- Short, J. (2009). The art of writing a review article. *Journal of Management*, *35*(6), 1312-1317. https://doi.org/10.1177/0149206309337489
- Wortman, M. S. (1976). Editorial comment. Academy of Management Review, 1(1), 4-4. https://doi.org/10.5465/amr.1976.19369636

Useful websites:

- Annual reviews: <u>https://www.annualreviews.org</u>
- American Journal Experts (AJE): <u>https://www.aje.com/arc/what-is-a-scoping-review/</u>
- Campbell collaboration (in business and management): <u>https://www.campbellcollaboration.org/</u>
- Center for Evidence-Based Management (CEBMa): <u>https://cebma.org/</u>
- Cochrane collaboration: <u>https://www.cochrane.org/</u>
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA): <u>http://www.prisma-statement.org/</u>
- University library websites:
 - https://library.au.dk/en/researchers/systematic-reviews#c181168
 - <u>https://libguides.bc.edu/litreview</u>
 - https://libguides.bc.edu/litreview/tutorials
 - https://writingcenter.unc.edu/tips-and-tools/literature-reviews/
 - https://guides.library.harvard.edu/meta-analysis
 - https://libraryguides.missouri.edu/c.php?g=28397&p=5945933