

Institute of Leadership and
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GUIDE FOR SCIENTIFIC PAPERS



Institute of Leadership and Change Management

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1. Preface

The professional production of scientific papers is an important part of your studies. In addition to the quality of the content, the formal design and citation style also play a central role.

In this guide, you will find information on how to write autonomously a professional scientific paper (seminar papers, bachelor's theses, master's theses, diploma theses, and dissertations) as used at JKU's management institutes.

2. Topic and goals

The topic is specified by formulating a research question that clarifies the goal of the work. With this, you determine what exactly you will address in your scientific work. The research question determines the structure and content of the paper and forms the basis for the methodological approach. In this context, the problem and the background of the work are also stated.

The specification of the topic is usually an effortful but necessary process at the beginning of your work. Problems with the topic arise mainly when the topic and/or goals are formulated too broadly.

Important: When formulating the research question and the related goals of the thesis, make sure that they are clear, understandable, and comprehensible!

Tip: Outline your topic in a meaningful graphic. Through visualization, you condense your thoughts and reflections. Moreover, through visualization, you force yourself to outline the relationships between the main concepts of your paper.

Tip: After formulating your initial objectives and research questions, try to develop exemplary answers and thereby check whether the objective is suitably formulated and whether it covers those answers you want to address.

3. Structure / Outline

The structure/outline provides information about the content of the work. For this purpose, the headings of sections or chapters must be precisely formulated and reveal a common thread.

In essence, it is the map of a scientific paper, gives an overview of the topics, and reflects the goals of the paper.

Consider:

- Which contents (topics) are relevant and in which sequence?
- Which contents (topics) are superordinate or subordinate?
- How are the individual topics related?
- Which chapters / subchapters emerge from this?

Contents and priorities must be reflected in the structure. To do this, it is helpful to first define the main elements and then determine the respective sub-items. Pay attention to a logically structured outline and avoid repetitions.

In this context, also develop an initial title for your paper (working title). The title should represent the topic as precisely as possible. Mind that the initial title of your paper may not reflect your paper too precisely as you advance in your work. You can always change it.

Tip: Use "mind-mapping" to structure your topic. Individual topics, their subdivisions as well as possible connections, can be systematized here by branches of information in a visible form.

Tip: Let someone else read the structure / table of contents of your work. Can he / she recognize from the structure what your work is about?

Tip: Always take a look at your table of contents. Can the "storyline" of your work be derived from the table of contents?

4. Elements of a scientific paper

Scientific papers contain the following elements:

- Cover page
- Signed affidavit (except seminar papers)
- Executive Summary / Abstract
- Table of contents
- List of figures and tables
- List of abbreviations (only if required)
- Introduction
- Main body
- Conclusion / Summary
- Bibliography
- Appendix, if applicable (e.g., questionnaires used, supplementary materials)

4.1. Executive Summary / Abstract

An executive summary gives a short overview (1-4 pages) of the work and conveys the central aspects in a concise form (problem, objective, approach, theoretical foundations, results, summary).

Cite also in the Executive Summary, so that also those readers - who only get a short overview of your work - can recognize the most important sources.

4.2. Introduction

The introduction provides an overview of:

■ Identification of a problem with the status quo

In this section, you clarify the (theoretical and practical) relevance of the chosen topic or problem to address, identify a research gap or a problem in the theory, and convince the reader about its relevance.

What is the status quo, and why is this a problem with it? What happens if the research gap or a problem in the theory persists?

■ Goals of the paper

Based on the initial situation and problem definition, what should therefore be investigated and achieved? In this section, explicitly formulate your research question.

■ Procedure and structure of the paper

How will your research question be investigated? This section outlines how the thesis will proceed to answer the question. Show your theoretical perspective. Clarify why that perspective helps you address the problem you have identified. Show what methods you will use to achieve the objectives. Make sure that the objectives, theoretical perspective, and the method are consistent!

For empirical work (e.g., qualitative studies, quantitative surveys, case studies, but also for a systematic literature review) it is necessary to explain in detail the research design (choice of methods, selection of cases, analysis of data, ...).

4.3. Main body

Important elements of the main body are:

■ Theoretical basis - "State of the Art"

Provide an overview of the different findings on the topic. As you delve into the theoretical content, focus on those topics that are relevant to achieving your goals. At this point, answer the question: What knowledge (what answers) already exists in the scientific community concerning my research objective? Your presentations must not be superficial, not too abbreviated, and not a mere "copying exercise".

Note that the current "state of the art" of the scientific discussion must be presented, therefore you must review the scientific literature on the problem you have chosen to address, particularly the most recent developments of the literature.

Always define the basic terms, especially the two or three ones that you will use throughout your paper. This is necessary to state the use (meaning) of the terms in your paper unambiguously. If different

definitions of terms are relevant for the treatment of your topic (e.g. due to multiple perspectives), you must present them in a comprehensible way.

Tip: You will read several other papers as you review the literature. Remember that every paper has its own two or three key terms. If you decide to stick to the original terms of each paper you read, your paper will become unreadable, replete with complex terminology. You need to paraphrase and explain simply what others have reported, their ideas, and their results, and avoid their terminology. Instead, be loyal to your terminology.

■ In empirical papers

○ **Theoretical perspective**

Describe and justify the theoretical perspective, a set of concepts, together with their definition, and an existing theory that is useful to address the problem that is prominent in your work. The choice and subsequent presentation of a theoretical perspective are instrumental to clarify what aspects of the problem you will focus on, what relationships exist between them, and why those relationships are key to answering your research question. In doing so, be explicit about the assumptions of your theoretical perspective.

○ **Methodological approach**

Describe and justify the methodological approach by (1) first clarifying the research background and the general procedure (research design) (e.g., interpretative qualitative social research), (2) explaining which data you collected in which form and (3) how (with which methods) you analyzed them. In doing so, you should ensure a fit between the objective and your design, supporting all steps with methodological literature or best practice articles. Note that this is not just a description of methods from the literature, but that you are expected to explain and substantiate your own approach in a meaningful way (see: Edmondson & McManus, (2007).

○ **Presentation of empirical results**

In this part of the paper, you describe the empirical results of your analysis. Note that the theoretical and empirical parts must be consistent and individual parts must not stand independently of each other, so that you can link both parts well in the subsequent discussion.

○ **Discussion of the theoretical basis and interpretation of the results**

The discussion is the heart of your paper. Here you connect the theory with your empirical results. It must be clear and comprehensible on which theoretical foundations the work is based and which empirical findings you derive. Develop meaningful conclusions from the empirical investigation. Discuss which of your empirical findings are similar and which are different from previous theoretical findings. In addition, point out any questions that remain unanswered.

■ In theoretical / conceptual papers

○ **Theoretical perspective**

Describe and justify the theoretical perspective, a set of concepts, together with their definition, and an existing theory that is useful to address the problem that is prominent in your work. The choice and subsequent presentation of a theoretical perspective are instrumental to clarify what aspects of the problem you will focus on, what relationships exist between them, and why those relationships are key to answering your research question. In doing so, be explicit about the assumptions of your theoretical perspective.

○ **Methodological approach**

Describe and justify the methodological approach you have chosen to arrive at your theoretical foundation. Cite your chosen data sources, as well as any selection criteria for your literature selection.

○ **Discussion of the theoretical basis**

Point out the currently discussed topics and focus areas within your chosen research topic. How did this research topic develop over time, who are the key authors* shaping this research topic, and what topics have not yet been intensively addressed and researched within the research topic? In this regard, also add a research agenda for possible future research activities that would be relevant.

4.4. Conclusion/ Summary

In the summary, the most important findings with regard to content and methods are summarized and critically commented. If necessary, an outlook on open topics and further development possibilities is given.

5. Literature search

A comprehensive and systematic literature search is essential for a good paper.

The current state of scientific discussion can be found primarily in relevant scientific journals. Above all, use the online databases of the Linz University Library: <https://www.jku.at/bibliothek/bibliotheken/hauptbibliothek/digitale-bibliothek/>

The selection of the appropriate databases is an iterative process, which strongly depends on the respective topic and the involved scientific disciplines.

Please do not only use textbooks or anthologies as a basis for your literature research but work primarily with articles from scientific journals. The following databases, among others, are suitable for literature research of publications in the field of management research (see also eResources of JKU):

- Web of Science (ISI web of knowledge)
- WISO
- Scopus
- EBSCO

Examples of high-quality English-language management journals include:

- Academy of Management Journal
- Academy of Management Review
- Academy of Management Annals
- Administrative Science Quarterly
- Human Relations
- Leadership Quarterly
- Industrial and Corporate Change
- Industry & Innovation
- Journal of Management
- Journal of Management Studies
- Organization Science
- Organization Studies
- Strategic Management Journal
- Strategic Organization

Get an additional overview of the importance of specific journals through journal rankings (e.g., <https://vhbonline.org/vhb4you/vhb-jourqual/vhb-jourqual-3/tabellen-zum-download>). Concentrate your selection - as far as possible - on top journals (e.g., A+ and A ranking at VHB, B-ranked journals only if you need them).

It is expedient to proceed systematically and to immediately organize the content you have found. One challenge is to decide which information and sources are relevant to your work and will be used in the paper.

The literature research ends with the completion of the paper, it is however particularly intensive in the initial phase, since here the basis of the work is created and the total orientation is determined.

Tip: It is also particularly helpful if you are looking for articles that provide an overview of the status of the respective research area and at the same time systematize the previous knowledge. These often have terms like "review of literature" or "literature review" or "meta-analysis" or "systematic review" in the title.

6. Scientific writing

The basic criteria of scientific work include honesty, independence, accuracy, objectivity in the sense of comprehensibility and verifiability as well as completeness and clarity.

The following instructions will support you in the systematic development of your work.

- Introductions that prepare an argument.
- Transitions that connect individual arguments.
- Summaries and, where appropriate, explanations that relate the content presented to your topic or the goals of the paper.

Arguments are often difficult to understand because they are taken for granted and not explained. Make sure that your arguments are presented in a way that is comprehensible to the reader.

A high value is placed on critical reflection in both theory and empiricism. Do not make unsubstantiated claims and do not make statements that are not logically/ factually substantiated. As a scientist, you must be able to prove each of your statements or show that in certain areas, the answers to research questions are unclear or depend on the respective context.

A good scientific paper stands out not only for its content but also for its formal coherence and linguistic style.

- Avoid sentences that are too long and too complex.
- Pay attention to clear and correct sentence structures.
- Argue objectively and correctly.

This means: No colloquialisms, no poetic phrases, no "I-form", no banalities, gimmicky puns, embellishing adjectives, or filler words.

7. Design / Layout

For the **submission** of the Master Thesis please follow the official **guidelines** of the JKU examination department:

The **layout** of the Master Thesis should comply with the JKU criteria for scientific theses.

We advise you to use the sample template (Sample Cover Sheet Master Thesis) of JKU: https://www.jku.at/fileadmin/gruppen/381/PAS/Abschlussarbeiten/Masterarbeit/Musterdeckblatt_MasterarbeitN.dotx

Paragraphs make it easier to read and understand a text.

Meaningful illustrations are well suited for presenting overviews, contexts, concepts, data, etc. Visualization makes connections easier to understand. According to the four basic principles, illustrations are:

- self-contained (understandable and well-founded in itself, interpretable without text)
- simple (as few labels as necessary)
- understandable (as informative as possible)
- clear (no 3-D, max. 2 colors, simple shapes, no shadows)

Avoid illustrations just to fill pages. Figures must be accompanied by a title and the source, if applicable. If a figure could be better expressed by a table, use a table. Quantitative results are often reported exclusively in table form, with few exceptions (e.g., comparison between or among groups)

Eliminate spelling, grammar, and punctuation errors by reviewing the paper intensively.

Tip: *You can install and use Grammarly, free software for spelling and grammar checks.*

8. Gender-equal / inclusive language

Gender-equal formulations are now standard in scientific papers. The use of a general clause is not sufficient. Additionally, make sure that you cite men* and women* equally in your work. The citation frequency does not have to be 50-50.

But if you find (almost) no women scientists, how can that be? Is there really no research by women* or has it received little attention in the scientific canon for a long time? An examination of the history of science can bring surprising insights to light!

For more information, see the JKU Guide to Inclusive Language: https://www.jku.at/fileadmin/gruppen/39/Sprachleitfaden_Langversion_A5-FINAL_bf.pdf

Tip: *To avoid writing double pronouns such as 'his or her,' 'he or she' when referring to an indefinite third person, such as a manager, use can instead use the plural form 'their,' or 'they' whenever possible.*

9. Citation style

An essential expression of scientific honesty is the acknowledgement of every use of external intellectual property by precise citation of the source. From the very beginning, your work should adhere to consistent citation according to the citation guidelines of the most current version of the APA (7th Edition, as of October 2020). In addition, when citing directly in the text, the page number is given.

The sources used are indicated by:

- Surname of the author (if there are more than two authors, the abbreviation "et al." (et alii) is used after the first author).
- Year of publication
- Page number

A basic distinction must be made between literal and analogous reproduction.

- The **literal reproduction** (direct quotation) of a text passage takes place in **quotation marks**. No changes of any kind may be made. Omissions in the quoted passage can be indicated by three dots. In principle, direct quotations should be used very sparingly. They are acceptable if, in a particular case, the special significance of an aspect is to be emphasized (example: definition). Note that in the case of direct quotations, English quotations in German texts should also be cited in English.
- When **reproducing** a text passage according to its **meaning** (indirect quotation), core contents/thoughts are presented in the author's own words, but without quotation marks. The slight change of whole text passages does not correspond to the idea of "meaningful reproduction - i.e., if five or six words are reproduced unchanged, this corresponds in principle already to a literal reproduction!

Examples of a citation directly in the text:

- and the relationship with stakeholders is negatively affected" (Ramasamy et al. 2020: 2).
- Sarkar and Searcy (2016: 1432-1434) expand in their work by claiming that "...".
- Management describes a "complex of control tasks performed in the creation and assurance of performance in organizations based on the division of labor" (Schreyögg & Koch, 2020: 6).

When citing in the text, there is no cf.

10. Bibliography

Sources used are cited at the end of the paper in a bibliography according to APA guidelines (7th Edition, as of October 2020), arranged alphabetically by surname(s) and using consistent spelling. In contrast to the citations in the text, all authors must be listed in the bibliography.

- **Scientific journals:** Family name(s) and initials, (year of publication). Title of article. Name of journal, volume(issue), pages. doi (active link).
- **Books:** surname(s) and initials, (year of publication). Book title. Publisher.
- **Collective works:** surname(s) and initials, (year of publication). Title of chapter/contribution. In surname(s) and initials, (publisher). Title of collective work (edition, pages). Publisher.
- **Internet sources:** The following format is common for citing files or pages from the Internet: family name(s) and initials, (year of publication). Title. Retrieved 10/01/2020 from URL.

Footnotes appear at the bottom of the relevant page and should be numbered consecutively throughout the text.

Alternatively, a citation method recommended in the course "Scientific Work" may be chosen. Once a citation style has been chosen, it must be followed through.

Please discuss the individual citation method with your supervisor.

If electronic material is used in the thesis and cited accordingly, a printout of this material must be submitted upon request of the institute.

Tip: we recommend you use any free citation management software, such as Zotero or Mendeley. Endnote and other Cite-as-you-write software also work equally well. In this way, both citations and the bibliography will be managed easily and consistently.

11. Evaluation of scientific papers

What constitutes a good scientific paper?

- **Topic:** Relevance, clarity, and derivation of the research question, formulation of a concrete research question, classification and delimitation of the topic, justification of the research approach/theory choice, precision, and depth of the topic (focus).
- **Structure / red thread:** Clarity, structure logic, relevance to the topic, the meaningfulness of the headings, independent structure, balanced weighting of the topics, red thread.
- **Content:** Clear introduction and introduction, presentation and transparency of the working process, use of clearly and expediently defined terms, consistent use of the chosen terms, embedding of the terms in concepts/theories, topic coverage, correctness of content, consistency of the argumentation and substantiation of the argumentation in scientific literature, connection and mutual reference of the individual sections.
- **Method:** Selection of methods is documented transparently and completely, correct application of methods, coherent description of data analysis method, comprehensible and thus replicable presentation of approach.
- **Novelty:** Originality and own thoughts, opinions, critical treatment of theory, methodology and empirical material if applicable, transfer from theory to empiricism.
- **Formal aspects:** Consistent citation style, correct punctuation/spelling, style and expression, completeness and uniformity of bibliography, external form (e.g., margins and visual support by illustrations).
- **Literature:** Scope, relevance and quality of sources used, independence in literature acquisition, skill in literature processing.

For the overall assessment of the thesis, the developmental progress during the writing of the scientific thesis is also taken into account.

Tip: *Get feedback early on and keep checking whether you are on the right track. This can contribute significantly to the quality of your work.*

12. Literature on scientific work

The following books and articles on scientific working and specific methodologies may be helpful for you:

Essential on Scientific Working (Textbooks)

- Balzert, H., Schröder, M. & Schäfer, C. (2017). *Wissenschaftliches Arbeiten: Ethik, Inhalt & Form wissenschaftlicher Arbeiten, Handwerkszeug, Quellen, Projektmanagement, Präsentation* (2. Aufl.). Springer.
- Eco U., (2020). *Wie man eine wissenschaftliche Abschlussarbeit schreibt* (14. Aufl.). UTB.
- Goldenstein, J., Hunoldt, M., & Walbenbach, P. (2018). *Wissenschaftliche(s) Arbeiten in den Wirtschaftswissenschaften: Themenfindung, Recherche, Konzeption, Methodik, Argumentation*. Springer-Gabler.
- Gruber, H., Huemer, B., & Rheindorf, M. (2009). *Wissenschaftliches Schreiben: Ein Praxisbuch für Studierende der Geistes- und Sozialwissenschaften*. UTB.
- Karmasin, M., & Ribing, R. (2019). *Die Gestaltung wissenschaftlicher Arbeiten: Ein Leitfaden für Facharbeit/VWA, Seminararbeiten, Bachelor-, Master-, Magister- und Diplomarbeiten sowie Dissertationen* (10. Aufl.). UTB.
- Oehlich, M. (2019). *Wissenschaftliches Arbeiten und Schreiben: Schritt für Schritt zur Bachelor- und Master-Thesis in den Wirtschaftswissenschaften* (2. Aufl.). Springer-Gabler.
- Pianos, T., & Krüger, N. (2014). *Erfolgreich recherchieren – Wirtschaftswissenschaften*. De Gruyter.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th Ed.). Pearson.
- Stock, S., Schneider, P., Peper, E., & Molitor, E. (2018) (Hrsg.). *Erfolgreich wissenschaftlich arbeiten: Alles, was Studierende wissen sollten* (2. Aufl.). Springer-Gabler.

Advanced Method Literature (Specialist Books & Articles)

Academic Writing / Research Design

- Alvesson, M., & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of Management Review*, 32(4), 1265-1281. <https://doi.org/10.5465/amr.2007.26586822>
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, 32(4), 1246-1264. <https://doi.org/10.5465/amr.2007.26586086>
- Huff, A. S. (1998). *Writing for scholarly publication*. Sage.
- Langley, A. N. N., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1), 1-13. <https://doi.org/10.5465/amj.2013.4001>
- Sandberg, J., & Alvesson, M. (2011). Ways of constructing research questions: Gap-spotting or problematization? *Organization*, 18(1), 23-44. <https://doi.org/10.1177/1350508410372151>

Literature Reviews

- 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>
- Cronin, M. A., & George, E. (2020). The why and how of the integrative review. *Organizational Research Methods, OnlineFirst*. <https://doi.org/10.1177/1094428120935507>
- 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>

Theoretical / Conceptual Work

- Corneliessen, J. (2017). Editor's comments: Developing propositions, a process model or typology? Addressing the challenges of writing theory without a boilerplate. *Academy of Management Review*, 42(1), 1-9. <https://doi.org/10.5465/amr.2016.0196>
- Thatcher, S. M., & Fisher, G. (2022). From the editors—The nuts and bolts of writing a theory paper: A practical guide to getting started. *Academy of Management Review*, 47(1), 1-8. <https://doi.org/10.5465/amr.2021.0483>
- Weick, K. E. (1995). What theory is not, theorizing is. *Administrative Science Quarterly*, 40(3), 385-390. <https://doi.org/10.2307/2393789>
- For additional resources see suggestions of the Academy of Management Review (a leading theory journal): <https://aom.org/research/publishing-with-aom/author-resources/submitting-to-review>

Empirical Research

- Alvesson, M. (2003). *Beyond neopositivists, romantics, and localists: A reflexive approach to interviews in organizational research*. *Academy of Management Review*, 28(1), 13-33.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550. <https://doi.org/10.5465/amr.1989.4308385>
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32. <https://doi.org/10.5465/amj.2007.24160888>
- Flick U. (Ed.) (2017). *The SAGE qualitative research kit* (2nd ed.). Sage.
- Flick U. (Ed.) (2022). *The SAGE handbook of qualitative research design*. Sage.
- Froschauer, U., & Lueger, M. (2020). *Das qualitative Interview: Zur Praxis interpretativer Analyse sozialer Systeme* (2. Aufl.). UTB.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31. <https://doi.org/10.1177/1094428112452151>
- Guthrie, G. (2010). *Basic research methods: An entry to social science research*. Sage.
- Miles, M.B., Huberman, A. M., & Saldana, J. (2019). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.
- Silverman, D. (2021). *Doing qualitative research* (6th ed.). Sage.
- Waller, M. J., & Kaplan, S. A. (2018). Systematic behavioral observation for emergent team phenomena: Key considerations for quantitative video-based approaches. *Organizational Research Methods*, 21(2), 500-515. <https://doi.org/10.1177/1094428116647785>
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge University Press.
- Yin, Y. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.