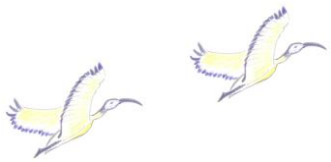

A Guide to Writing an Academic Paper

Practical Guidelines for Students
of Nuertingen-Geislingen University

Jessica Lubzyk, Christiane Fitzke, Sabine Frey, Dirk Funck, Hans-Karl Hauffe, Sylvia Lepp, Dana Loewy, Rüdiger Reinhardt, Uwe Rothfuß, Kerstin Schramm, Carola Pekrun

Last updated: July 2018

Preface

This compendium consists of practical guidelines to help students at Nuertingen-Geislingen University compose an academic paper or a thesis. It is structured in such a way that you can use it during the whole writing process - from the initial preparations right through to revising the final text.

The original version for the degree program in Business Administration is based on the "Leitfaden für Wissenschaftliches Arbeiten" by Dr. Michael Lerchenmüller and Diplom-Betriebswirtin (FH) Vochezer. In later editions, references to other works were added, especially to DUDEN[1] (1989) and many more. When IBIS ("Individuelle Betreuung für ein individuelles Studium", a student-orientated counseling program) was introduced, the idea came up to develop a guidebook which could help students from all the different degree programs at Nuertingen-Geislilngen University. A group of professors collected ideas and component parts and entrusted the IBIS Team with the task of issuing a new edition. This issue is available to you on the university website and it is unlikely to be the last one. Therefore, we are grateful to receive your comments or criticism.

Academic research and writing follows certain generally accepted rules, but it also follows subject-specific conventions which might be interpreted differently by the individual lecturers. Therefore we suggest that you treat the techniques, principles and rules outlined here as recommendations. You should always **ask your supervisor[2]** beforehand if there are any **different or additional rules** set by the degree program or by him/her which you need to adhere to.

These guidelines do not claim to be a textbook. It might be a good idea to also consult a textbook on the subject of academic research and writing to get more hints. In the online library catalog[3] you will find several books on the topic as well as e-books and CD ROMs.

If you have any questions or comments, please contact Sylvia Lepp or Jessica Lubzyk.

Nürtingen, July 2018

Jessica Lubzyk, Christiane Fitzke, Sabine Frey, Dirk Funck, Hans-Karl Hauffe, Sylvia Lepp, Dana Loewy, Rüdiger Reinhardt, Uwe Rothfuß, Kerstin Schramm, Carola Pekrun

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[1] DUDEN (Ed.) (1989): Wie verfasst man wissenschaftliche Arbeiten, 5th ed., München: Dudenverlag.
[2] Gender-neutral language is used wherever possible. Where this is not possible, a pronoun in the masculine gender shall be considered as including the feminine gender unless the context clearly indicates otherwise.
[3] HfWU (Ed.) (n.d.): Library. URL: https://bsz.ibs-bw.de/aDISWeb/app?service=direct/0/Home/$DirectLink&sp=S127.0.0.1:23052.

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List of Abbreviations

APA	American Psychological Association
art.	article
BGH	Bundesgerichtshof (German Federal Court of Justice)
BGBl	Bundesgesetzblatt (Federal Law Gazette)
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
DIN	Deutsches Institut für Normung (German Institute for Standardization)
EU	Europäische Union (European Union)
EStG	Einkommensteuergesetz (German Income Tax Law)
EZB	Elektronische Zeitschriftenbibliothek (Electronic Magazine Library)
ed.	edition
Ed.	Editor
f.	following [page]
ff.	following [pages]
GIF	Graphics Interchange Format
HfWU	Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen (Nuertingen-Geislingen University)
ibid.	ibidem, in the aforementioned place
IfW	Institut für Weltwirtschaft (Institute for the World Economy)
IHK	Industrie- und Handelskammer (Chamber of Industry and Commerce)
ILO	International Labor Organization
IMF	International Monetary Fund
LAG	Landesarbeitsgericht (Labor Court at Federal State Level)
LArchG	Landesarchivgesetz (Archiving Law at Federal State Level)
MLA	Modern Language Association
n.d.	no date
OECD	Organization for Economic Cooperation and Development
OPAC	Online-Bibliothekskatalog (Online Library Catalog)
p.	page
pp.	pages
SPO	Studien- und Prüfungsordnung (Course and Exam Regulations)
SQ3R	Survey, Question, Read, Recite, Review
SWB	Südwestdeutscher Bibliotheksverbund (South West German Library Association)
UNO	United Nations Organization
URL	Uniform Resource Locator
UrhG	Urhebergesetz (German Copyright Law)
VLB	Verzeichnis lieferbarer Bücher (German Books in Print Catalog)

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1 About these Guidelines and Academic Research and Writing

by Sylvia Lepp

Academic research and writing is one of the basic skills specifically taught during the degree programs at Nuertingen-Geislingen University. We have learned from experience, however, that if “Academic Research and Writing” is taught in the form of a lecture, in the majority of cases it does not substantially improve the students’ problem-solving and writing skills. We generally learn best when we have to apply what we have learned. “Through writing, you learn how to write!”

This is mainly because academic writing is very complex and does not only include the presentation of a text. According to Otto Kruse, four components are important in academic writing:

The Content: Professional expertise, information literacy and research skills

The Process: Process and project skills

The Product: Language and writing skills

The Context: Social and communication skills[1]

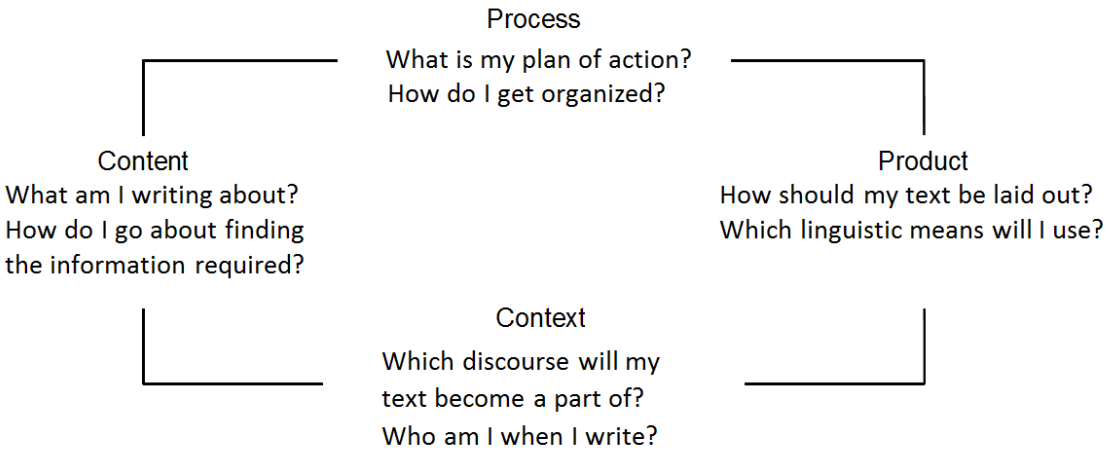

Figure 1: The Components of Academic Writing Skills (Subjectively)

Source: Kruse 2007, p. 130.

The main problem for students when they embark on their degree program is that they have to meet so many new demands all at the same time. Unless these are made very clear from the outset, they will only realize this when it is too late, i.e. after they have completed their paper. In addition to this, academic research and writing follows specific steps. You could compare this to **constructing a house**. First of all, the foundations need to be laid, so that the outer shell can be erected on top of it. Only then can the interior be done. In the end, the house can be painted

[1] see Kruse, O. (2007): Schreibkompetenz und Studierfähigkeit. Mit welchen Schreibkompetenzen sollen die Schulen ihre Absolvent/innen ins Studium entlassen, in: Becker-Mrotzek, M.; Bredel, U.; Schindler, K. (Ed.):Köbes: Kölner Beiträge zur Sprachdidaktik. Reihe A Texte schreiben, Köln: Gilles&Francke, pp. 117-143.

and decorated. The following figure 2 depicts the sequence of writing an academic paper.

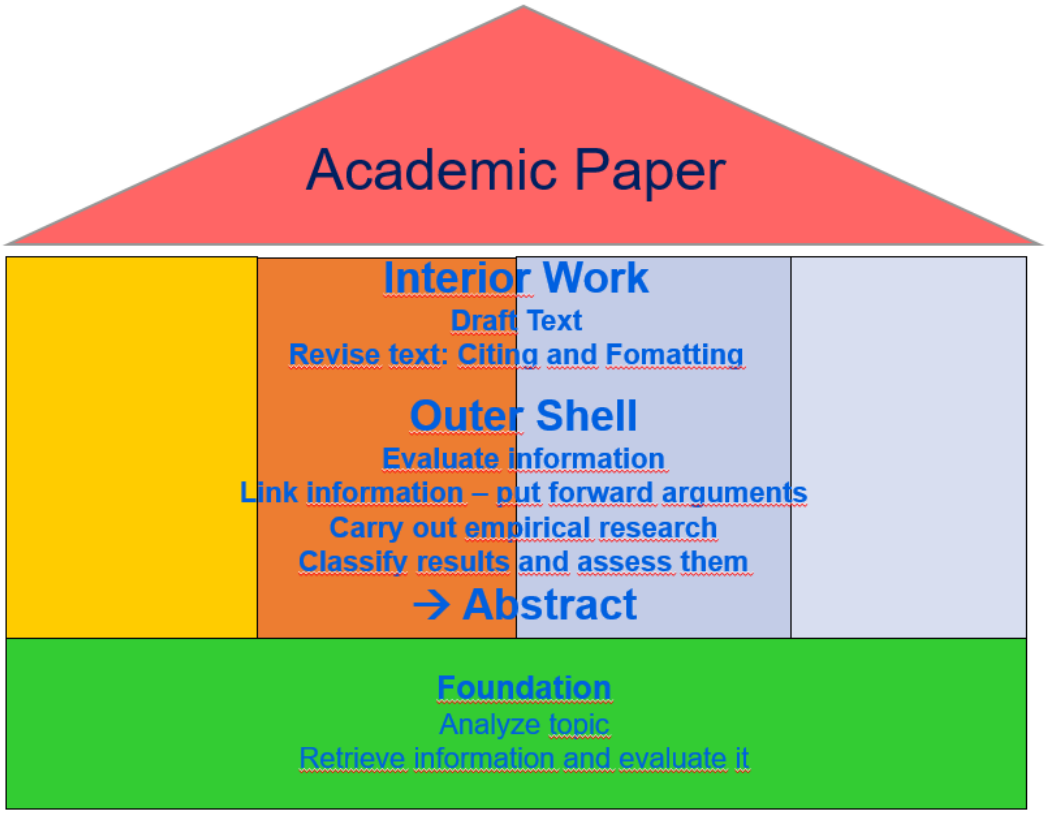

Figure 2: Writing an Academic Paper is Like Constructing a House

Source: Own image

If you were to get a topic for your assignment and started writing straight away, this would be like starting with the interior work first. It's self-explanatory that this is bound to fail!

For this reason, these guidelines are structured in such a way that they serve as a practical tool which includes all the skills mentioned. They should also assist you in your task in such a way that

- you can start a research project yourself - laying the **foundations**
- you can find specific scientific literature easily and evaluate it - getting the **materials**
- you can structure your work in the required way – **constructing the outer shell**
- you can mark third-party information in your text in line with the relevant rules – doing the **interior work**
- you can present your scientific findings in the appropriate way - **painting and decorating**
- you can **present and discuss** your academic paper.

To make things easier for you right from the start, these guidelines follow the steps that are necessary to write an academic paper. Each chapter can of course be used independently of the others - but beware! Do not start with the interior work!

What are the steps required to write an academic paper and in which sequence do they need to be carried out? How much time should you set aside for each individual step?

Table 1: Typical Sequence of the Individual Steps

Work Phases	Individual Steps	
Preparing your work Laying the foundations Getting the materials	Developing / analyzing the topic - Gathering ideas - Asking questions - Initial review of literature, sources and data - Clarifying and delineating the topic - Specifying the research question and the objectives - Choosing a method - Drawing up a rough structure Getting Information - Researching information and assessing the relevance of sources - Checking the reliability of sources - Indexing your sources	30%
Writing the paper Constructing the outer shell Interior Work	Writing the abstract Evaluating the information (literature search) - Purposeful reading and excerpting - Quoting your sources - Connecting information, argumentation Carrying out and assessing empirical research Classifying results, assessing them and reflecting on them Drafting the text	40-50%
Presenting your paper Decorations	Reviewing the draft - Mode of expression, style, enhancing features Layout - Components of an academic paper - Formatting	30%

Source: Own image

Important: Start off by drawing up a rough timeline which should be updated regularly (rolling plan). Based upon the date when you have to hand in your paper, determine which steps you must have completed by which stage.

Advantages:

- You will have a better overview and coordination of the individual steps
- You can divide up the short amount of time you have available and factor in personal activities

– You can check on your progress

In **Chapter 2** you will learn what academic research and writing is all about. Academic research and writing means the following: Thoroughly analyzing a chosen topic and presenting it in writing or orally, i.e. academic research and writing can be defined as a problem-solving process. By tapping into the existing knowledge of the science community, your own ideas lead to new insights. You must adhere to certain basic principles. Specific standards and quality criteria required from academic papers are based on these and will be used to assess the quality of your paper. These are not only important for academic papers during your degree program, they will also be of value to you in any future professional communication.

In **Chapter 3** you will learn how to prepare your academic paper - i.e. laying the foundations and getting the materials. The actual writing process is preceded by several steps that help develop insights. During this process, the problem is identified and the content systematically assessed and defined. You will learn different strategies that will help you to successfully complete these steps, such as using your current knowledge, exploring the topic, developing questions, collecting ideas, researching available literature in a concentrated manner and assessing and evaluating it.

In **Chapter 4** you will learn how to compose your academic paper - constructing the outer shell and doing the interior work. First of all, you should write your abstract. This is the “construction plan” for the actual paper. It helps you define the topic, set out a rough structure and plan what you intend to do in the different phases. After consultation with your supervisor, you can fine-tune the rough structure and fill out the content. The basic rules and styles of academic writing and the appropriate writing strategies will help you to write your draft. The chapter also contains citation rules and hints on how to develop a coherent argument.

In **Chapter 5** we deal with layout issues and formal requirements – the decorative effects. You will learn how to present your academic paper to best suit your target audience. Strategies for successful communication and the formal requirements regarding layout will help you round off your paper in the best way possible.

These guidelines are based on the research cycle depicted in figure 3.

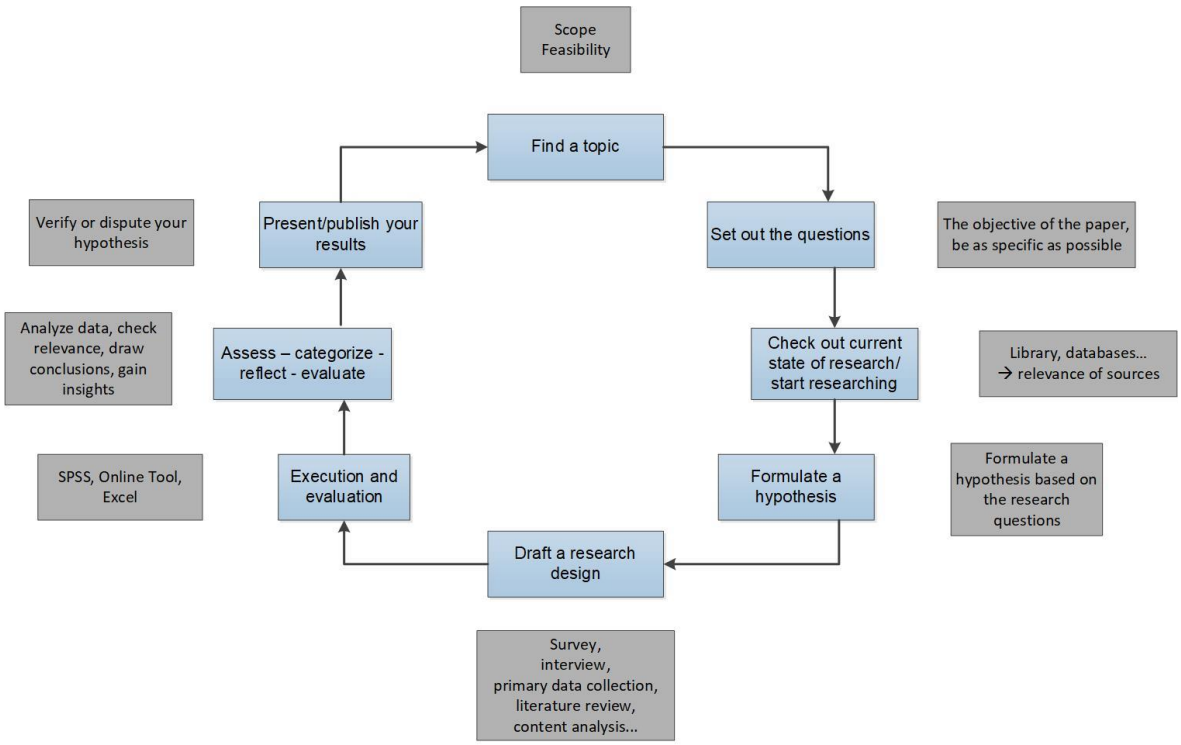

Figure 3: Research Cycle

Source: Author's own

This research cycle is not a static process but rather an iterative process. We might realize when drafting the research design, for example, that the previously developed research question cannot be answered methodically. In this case, we would have to start the process again - with finding a new topic.

2 What is Academic Research and Writing?

by Sylvia Lepp and Dirk Funck

In this chapter you will learn the basic structure of academic research and writing. Academic research and writing means the following: Thoroughly analyzing a chosen topic and presenting it in writing or orally, i.e. academic research and writing can be defined as a problem-solving process. By tapping into the existing knowledge of the science community, your own ideas lead to new insights. You must adhere to certain basic principles. Specific standards and quality criteria required from academic papers are based on these and will be used to assess the quality of your paper. These are not only important for academic papers during your degree program, they will also be of value to you later on in professional communication.

2.1 The Basics of Academic Research and Writing

"Academic research and writing" is a very broad subject which is defined in many different ways in the relevant literature. In the context of universities, Sesink talks about "academic research and writing" if the students meet the following requirements:[1]
Proposing their own ideas on the basis of scientific conclusions and in debate with the scientific views of others.
Presenting their ideas in their own words and in a comprehensible way.
"Coming up with their own ideas" does not mean, however, that they just take the ideas of other people and write them down in a slightly changed manner. Through the examination of the material researched (literature etc.) a lot of new ideas can emerge, which can be laid out in a logical way with the help of a systematic approach. It is very important that scientific methods are objective and verifiable. Ideas must be given a reality check.

Please also refer to the statutes on safeguarding academic integrity at Nuertingen-Geislingen University ("Satzung zur Sicherung wissenschaftlicher Redlichkeit der HfWU") https://www.hfwu.de/fileadmin/user_upload/IBIS/Leitfaeden/2018-05-28_Satzung_zur_Sicherung_wissenschaftlicher_Redlichkeit__002_.pdf

2.2 Different Approaches to Academic Research and Writing

The applied sciences (e.g. economic, social or natural sciences) focus on real phenomena and their characteristics. Theoretical assumptions need to be checked for their practical relevance. In order to be able to make reality in its many forms accessible for research, models are required which reduce complexity and allow in-depth differentiated analyses and recommendations. Researchers pick a particular research approach to help them create a model from reality. We are now going to outline some common approaches in the economic and social sciences:

- **Decision Theory Approach** The protagonists' motives and goals serve as a starting point for scientific analysis. The decision-making process is systemized and various options are assessed accordingly. This is a frequently used approach when dealing with organizational issues in operations management and marketing.

[1] see Sesink, W. (1990): Einführung in das wissenschaftliche Arbeiten – ohne und mit PC, München: Oldenburg, p. 9 f.

- **Systems Theory Approach** This approach analyzes systems, i.e. a certain amount of elements, which are all related to one another. The aim is to make statements in relation to the control, regulation and adaptation of diverse systems**.** This approach can help in strategic analysis where several stakeholders are involved and is also often used in problems related to Controlling.
- **Factor / Resource Theory Approach** The focus is on the production of goods and services, i.e. a combination of the different factors of production and performance. From a strategic point of view, the resource approach provides an opportunity to determine rare and valuable factors of production and performance that are hard to imitate or substitute and which might lead to a competitive advantage. This approach is also a suitable analytical framework for problems in the areas of acquisition, logistics and production.
- **Behavior Theory Approach** In this approach, the emphasis is on human beings and their motives, attitudes and behavior. With the help of the behavioral sciences, stimulus and response mechanisms within and outside the enterprise are put under examination. Useful information can be gained here for purchasing departments, management issues or marketing and consumer behavior.
- **Institutional Economics Approach** This approach mainly focuses on analyzing the efficiency of institutions in their efforts to fulfill tasks in the value chain. Based on the actual transaction costs, statements can be made about the advantages of outsourcing projects or cooperation models.

When working on a research question, a conscious decision should be made about which approach to use. This leads to more clarity and transparency around the topic that is being researched. This doesn't mean that the different approaches cannot be combined, adapted or developed during the research project. It is possible, for example, to carry out a strategic analysis of a company using system theory ideas supported by a resource approach and then develop strategies based on a decision theory approach. Recommendations on implementation as far as the market or HR management are concerned could then be based on behavioral sciences.

There are no "right" or "wrong" approaches. It is important, however, that the approach is suitable for gaining insights directly related to the research question or the research goal.

2.3 Requirements Concerning Academic Papers at University

An academic paper written at university serves to compile, process and edit information. It is more than an essay or a summary. It needs to exhibit this and show how the authors have collected the data, demonstrate that they are familiar with the current state of research and that they can systematically process the retrieved information in a way that is best suited to the question they are researching.

The skills of academic research and writing are gradually built up over the course of the degree program. The students' first attempt at academic research and writing begins with their having to complete an assignment, a presentation or a seminar paper. One of the most important academic papers during a degree program is the Bachelor's or Master's thesis. In a university context, the most demanding academic papers are dissertations and postdoctoral theses alongside publications (called "Paper" in modern German) in recognized science journals.

During seminars you will be given assignments which will introduce you to the issues of academic research and writing. In an **assignment** you need to prove that you can delineate a given topic and describe it in a problem-oriented way, that you know scientific theories and the current state of research and that you have the skills to undertake academic research and writing. In your assignments during the first part of the degree program, emphasis is placed on the general techniques required in academic writing, but you will have to come up with ever increasing amounts of your own conclusions before your final thesis.

In your **final thesis** you will have to prove that you can independently solve a problem from your area of study using scientific methods and present the results competently. You must demonstrate that you understand the correlations in your subject and are able to classify conclusions in a critical way, apply scientific methods and formulate the results.

The methods used in academic research and writing are primarily concerned with the way information and data is researched, excerpted and evaluated, structured, subdivided, debated and cited, but they are also about the art of expression and formal presentation.

Depending on the problem you are researching, you can choose between two research methods which are both different in their approach and their technique.

Theoretical Papers (also called literature reviews) develop or assess a theory on the basis of existing literature. Theorists use a deductive approach. Beginning with a frame of reference, the implications derived from this guide them in their research.

Empirical Papers develop or assess a theory on the basis of the data collected. Empiricists use an inductive approach. They argue that you only have to gather information on enough individual incidents to be able to recognize the complex system of relationships between the isolated data. Therefore, their research is done directly on the subject in question and this is what is documented in their paper. You will find out more about this in chapter 7.

Researchers always refer back to the conclusions reached by the scientific community and reference the sources of their data through citations.

2.4 The Principles of Academic Research and Writing

According to Preißner[1], academic research and writing is characterized by the following attributes:

Academic research and writing requires a **systematic approach**. In order to guarantee a verifiable argument, the paper must have a clear composition which follows the steps of the investigation.

Academic research and writing requires **objective arguments**. Avoid emotional arguments. All your conclusions must be based on verifiable criteria. You must always give the origin and source of your main ideas.

Academic research and writing means **striving for general validity**. Ensure that your conclusions are also valid in several other cases. Always state the validity of your conclusions.

Academic research and writing includes **critically assessing other people's studies**. Your main goal should be to make a contribution to the advancement of science. This requires documenting the current state of research and drawing your own conclusions or contributing to it through your own research.

Academic work can be based on **literature review or empirical analysis** or a combination of both. In literature review, you should make sure that you are choosing from a well-balanced selection of sources. You should include different schools of thought and make sure that any idea you use is generally recognized. In empirical studies, you should always ask yourself the question if the result is representative. Your material must always be available for inspection to enable a review of the methods used to collect and evaluate the data.

The **main terms** used in your academic paper must be defined. Many technical terms have ambiguous meanings. To provide a common ground for discussion, you have to explain how you understand the terms used in your paper.

2.5 Quality Criteria for an Academic Paper

Criteria relating to content

- Was the topic dealt with comprehensively?
- Was the topic defined and delineated plausibly?
- Were the assessment criteria made clear?
- Was there a sufficient amount of sources? Were they of sufficient quality?
- Do the citations used still retain their original meaning, i.e. the meaning of the citations wasn't changed.

[1] Preißner, A. (1994): Wissenschaftliches Arbeiten, München: Oldenburg.

Criteria relating to technique

- Unambiguity of the terms used: Were the terms you used defined and delineated clearly?
- Is there enough documentation available to allow verifiability?
- Is there a plausible context of justification?
- Have citation rules been adhered to?

Criteria relating to presentation

- Transparency and verifiability?
- Simplicity, conciseness?
- Stimulating?
- Expression and style?

2.6 Relevance for Your Future Career

The basics of academic research and writing and the principles and regulations derived from it are not only relevant for your course of study but also for non-academic careers.

If you work in a bank, for example, you will have to get an overview of your area of operations and present your knowledge in a comprehensible way. You will have to come up with theories and justify them and be credible in order to convince your colleagues of your ideas, which means that your arguments must be well-founded and verifiable.

The processes which are used during the different stages of academic research and writing are the same as those you will use later on in your career.

3 Preparing Your Academic Paper - Laying the Foundations

by Christiane Fitzke, Sabine Frey and Sylvia Lepp

In this chapter you will learn how to prepare your academic paper - i.e. laying the foundations and getting the materials. Several steps precede the writing process. In these we gain insights which help to clarify the problem and to systematically assess and define the topic. You will learn strategies that will help you to successfully complete this step, such as using what you already know, exploring the topic, developing questions, collecting ideas, researching available literature in a concentrated manner and assessing and evaluating it.

3.1 Analyzing the Topic and Setting Goals

Choosing your topic and how you phrase it are essential components of your assignment. You should therefore formulate the research question clearly. This will help you decide what you want (or do not want) to investigate. Before you start exploring the topic in your mind and before you start writing, you should put it in a wider context and make sure that you are personally interested in working on this topic.

During this stage you should pay particular attention to the criteria relating to the content.

- Was the topic dealt with comprehensively?
- Was the topic defined and delineated plausibly?
- Were the assessment criteria made clear?
- Was there a sufficient amount of sources? Were they of sufficient quality?

3.1.1 Are You Personally Interested in it?

- Activate previous knowledge: What do I know about the topic already? The topic shouldn't be completely new to you. This will enable you to judge what might be important for the problem you are researching and what might not.
- Include your own experience: What motivates me to choose this topic? Do I have some personal experience that might be related to the topic? Discuss situations you may have experienced. You are more likely to enjoy working on the paper and make a success of it if you have a personal interest in the topic.
- Ask some initial questions:
  In order to successfully work on a topic, you need to have a precise research question. This helps you choose what should be included and will guide you.
  What do I want to achieve with this paper?
  Which questions do I want to answer?
  Which sub-questions might I ask?
  In which sequence do I want to answer them?
  How is my topic different from other, similar topics?
  Where does my topic fit into the current research landscape?

Attention: Your paper's topic must be the same as the topic you have been given. You may only modify the topic if your supervisor has given you explicit consent to do so.

3.1.2 Assessing Your Topic

Before delving deeper into the topic, you should decide if it is of a manageable size within your given deadline or if you could narrow it down further.

To be able to assess this, you should ask questions on the topic. If you find it hard to formulate concrete questions - this might well be your first study in this subject area -, follow Rückriem, Stary and Frankt's[1] recommendation and start with the so-called "WH-Questions".

What is the problem? Wherein lies the difference? What are its essential attributes? How can you influence certain attributes? How are certain attributes linked to each other? What happens if you change one of these attributes?

Draw up a mind map which shows what you currently associate with the topic. It will help you get a clearer image of the structure of your topic and point out ways to delineate it more clearly.

In your mind map you will systematically work from the center out (a circle which contains the topic) to the periphery using keywords and catch phrases. This creates a kind of map of the wider topic with all the different aspects distributed among major and minor branches down to little twigs. Note down the aspects that belong together in a bundle in one part and other aspects that are related beside one another. Connect the different aspects with lines you label leading to a network of major, minor and mini branches (twigs).

Try and fine-tune the mind map by taking into account or adding

- reasons and causes
- consequences and developments
- historical developments
- logical or temporal relationships
- concrete examples or
- expert opinions and traditions

[1] see Rückriem, G.; Stary, J.; Franck, N. (1997): Die Technik wissenschaftlichen Arbeitens. Eine praktische Anleitung, 10th ed., Paderborn: Oldenburg, p. 133 f.

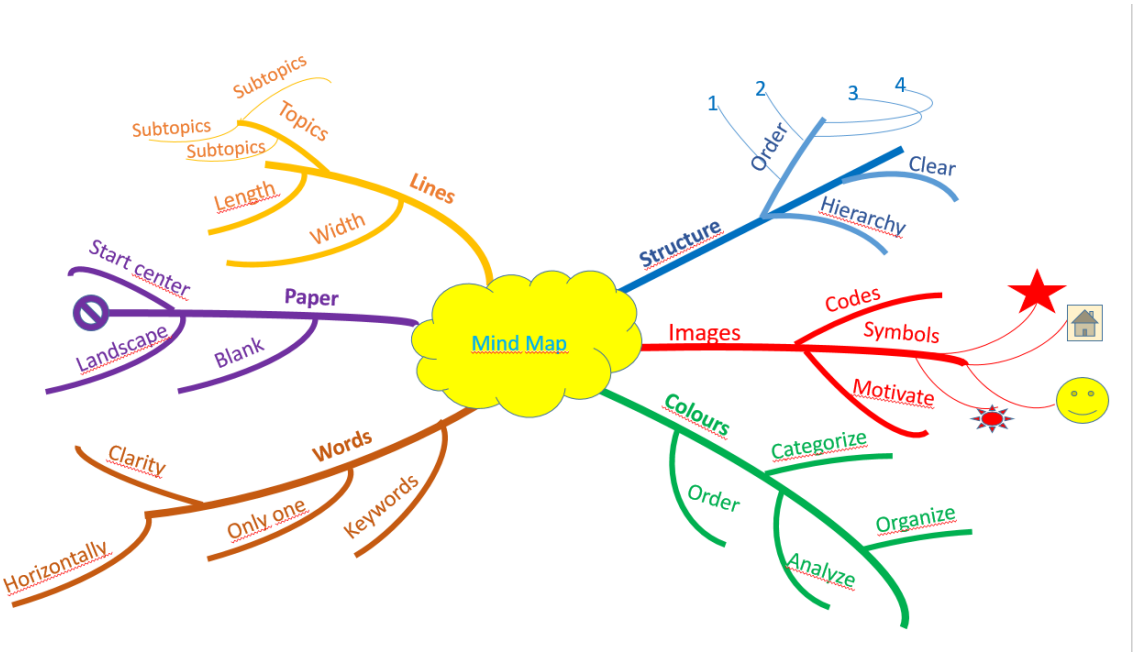

Figure 4: Mind Map

Source: Author's own

3.1.3 Delineating Your Topic

In order to define your problem and to set objectives for your work, you should ask further and more detailed questions. This will help guide you in the decisions you have to make and in how to structure your paper.

By formulating a problem in the right way, every topic can be defined and delineated and therefore it becomes more manageable. There are different strategies available for narrowing down a topic. You can try the following:

- Assume a specific perspective: Looking at the issue from a specific point of view may make you realize that certain aspects are irrelevant for your study and can therefore be excluded.
- Only consider a limited period of time: The topic itself might give you an appropriate time range, e.g. "Changes since the commencement of the act."
- Focus on a certain aspect of the object under investigation.
- Compare a certain amount of theories, models and positions.
- Use the example of a concrete case as a starting point.

Regardless of the strategy you use for narrowing the field, you should remember right from the start that you will have to justify your decision later on in a verifiable way. Why, for example, did you pick these two positions and compare them to each other? What criteria did you use in your comparison and why did you use these particular ones?

Once you have narrowed down your topic sufficiently, you can draw up a first rough draft. The easiest way to do this is by explaining to somebody else what you want to investigate, what the objective of your work is, what you want to demonstrate, which questions you want to answer. Explain what you have to do to get answers

and what arguments you will use to convince others of your conclusions. This way, you will automatically create a common thread for your argument.

3.2 Getting Information

3.2.1 Finding the Needle in the Haystack

The amount of information available in all the sciences has increased dramatically. This means that even during your literature search you will have to work systematically. If you have thoroughly analyzed your topic as described in section 3.1 and set a clear objective for your study, you will now be in a position to carry out a focused data collection and assemble high-quality material tailored to your topic.

You will need a good search strategy to begin with because without it you will come up with far too much information. If you want to find exactly what you need, you should first start with a general search and then narrow it down step by step. Your first step should not be to enter a keyword from the title in the library catalog or an internet database. The ideal search is done via standardized types of text which

- allow you to start with a general search and then become more specific and also
- let you start simply and then become much more complex.

Literature recommendations from your seminar are obviously your first choice for starting your search.

If you are really lucky, you will find a **State-of-the-Art Article** on your topic, also referred to as a “review” in the natural sciences. This type of article outlines the latest points of view and developments in your object under investigation and will give you useful hints about basic literature and authors who have already dealt with the topic. These types of articles can often be found in compendiums, concise dictionaries and encyclopedias.

The particular challenge when using digital information is in evaluating the quality of the data, selecting it and putting it in a meaningful context. This can be made even more efficient by carrying out a focused data search based, for example, on the following **search strategies** – which, incidentally, you can also apply in conventional databases:

When you use the **pattern method,** you start with a known keyword and try to get hits with the help of your search engine (e.g. Wiso, BEFO, EconLit). The more general your search word is, the more hits you will get.

The **semantic method** limits the amount of hits you get if you enter two or three search words together, creating correlated sequences.

Possible pools:

Libraries:
- General or specialist libraries
- University libraries

Statistics Offices and other institutions that provide official data:
- Statistisches Bundesamt in Wiesbaden (federal statistics bureau)
- Statistische Landesämter (statistics offices at federal state level, e.g. Statistisches Landesamt Stuttgart)
- Municipal statistics offices

Federal and state ministries and other economic policy institutions
- Deutsche Bundesbank in Frankfurt/Main
- Bundesanstalt für Arbeit in Nuremberg
- EUROSTAT in Brussels

Zentralen für politische Bildung (agencies for civic education)
- Bundeszentrale in Bonn (federal agency)
- Landeszentralen e.g. in Stuttgart (agency at federal state level)

International institutions, mainly UNO, IMF, ILO, OECD, EU

Economic institutes, e.g. Institute for the World Economy (IfW)

Business institutions, e.g. Industrie- und Handelskammer (IHK, chambers of industry and commerce)

Associations, parties and interest groups

Enterprises across all industries, public enterprises and institutions

In addition to the above named sources, you can also get information from individuals, e.g. by doing interviews, or through your own empirical surveys. You will find out more about this in chapter 7.

3.2.2 Researching Information at Nuertingen-Geislingen University

Gathering information means more than just googling ...

... even though internet search engines are useful instruments.

But not everything that you will find on the internet can be regarded as a reliable scientific source and not all scientific sources are available on the internet through “open access”.

Here is a basic outline of how the University Library can assist you in researching and acquiring scientific literature:

Books (Monographs):

In Nuertingen-Geislingen University’s online library catalog (OPAC) you can search for formal criteria (i.e. keyword from the title, author) or factual criteria (e.g. catch phrases). When the title is displayed fully, you will get information on where the copies are located and whether they are available or out on loan.

If there are no copies available at your campus (Nuertingen or Geislingen) or if all copies are out on loan, you can order books from the other campus.

OPAC can be accessed via the University Library’s website.

E-Books:

The University Library has a substantial amount of electronic books (e-books) on offer. You can set a filter in the extended search function in OPAC by choosing “e-book” in the media type box. If you’re not restricting your search to e-books, you will recognize them by the red “E” mark in the hit list.

In the full display, you will find the URL that directs you to the e-book.

A lot of e-books can be accessed from outside of the university web (you need to log in with your university account).

You will find a list of different e-book providers and access options on the library website under “Digital Media - e-books”.

Magazines:

Please note: The following two catalogs/lists only index the magazine titles, not individual articles!

If you carry out a search in them, you need to know the exact source of the article.

Print (Printed Magazines):

The magazines available in the library are listed in the online library catalog. You will find them via the “Advanced Search” by choosing the media type “magazine” and then entering the name of the magazine.

Electronic Magazines (E-Journals)

You can find freely available e-journals or e-journals licenced by the University Library by entering the magazine name in the “Elektronische Zeitschriftenbibliothek” (EZB), the library’s electronic magazine catalog. A traffic-light indicator shows you the type of access available for a particular e-journal.

You can access EZB on the library’s website under „Digitales Angebot – Elektronische Zeitschriftenbibliothek“ (Digital Media, Electronic Magazine Library).

Databases:

For a topical search for magazine articles or individual contributions in anthologies, you should use a literature database specializing in the subject (e.g. „WISO“ – Wirtschafts- und sozialwissenschaftliche Literatur, literature on the economic and social sciences).

The University Library has licenses for several of these databases and offers free access from within the campus net, which you can usually also access from outside the campus by logging in with your university account.

Some of the databases do not only contain bibliographic data of a specific article but also the full text which can then be downloaded and/or printed out.

You will find an overview on the University Library’s website under “Digitales Angebot – Datenbankangebot” (Digital Media, Databases).

The library offers a lecture where you will be introduced to the use of databases. We would strongly recommend you to attend this lecture.

Academic Papers and Publications:

If stocked in the library, academic papers and publications up until 2004 can be researched through the online library catalog. From 2004 on, papers which have been approved for publication by the authors are accessible in pdf format on the academic papers and publications server on the University Library’s website (“Digitales Angebot - Hochschulschriftenserver”). Academic papers and publications are only accessible from within the campus net.

What can I do if the University Library does not have the required literature available?

Books and magazine articles which are not available in the library either in printed or in electronic form can be ordered via an interlibrary loan. Interlibrary loans can be ordered via the online library catalog (OPAC).

Alternatively, you can personally borrow them in other libraries of course. To do this, they will need to be listed in a joint catalog which contains the stock of several libraries (for Baden-Wuerttemberg this would be the SWB = Südwestdeutscher Bibliotheksverbund (South West German Library Association), for example).

Magazine titles can be found in a catalog covering the whole of Germany called ZDB (Zeitschriftendatenbank, magazine database).

You will find the links for these joint catalogs on the library website.

3.2.3 Evaluating the Relevance of Your Sources

You should use a lot of sources (the more sources you use, the better the chances that you are familiar with the current state of research). As the author you are responsible for the quality of the sources and what they convey, for they need to underpin the credibility of your study. As a basic rule you should only use the best and original sources.

To find out about the quality of the sources you have found, you can use the following rules of thumb:

Any book or magazine articles without a source cited are usually expressions of opinion and therefore not suitable for a well-founded argument in your study.

Websites and publications by organizations are usually focused on showcasing and might therefore give a biased view of things.

Older books and publications are rarely up-to-date, therefore you should always use the latest editions.

3.3 Evaluating Information

Reading - one of the most important skills for academic research and writing - can enhance the learning process or it can hinder it. Academic reading is different from leisure reading not only in the purpose it serves but also in the method. You would normally read a novel without any prior preparations and regulations. With academic reading you pursue an objective: You want to find connections, gain knowledge and understand facts.

3.3.1 Reading Techniques

There are basically three types of reading which suit different purposes and work ethics. These reading strategies are particularly suitable for different phases in the work process:

To get a broad overview of your topic, you should apply the **selective reading** strategy.

We would recommend you to plan the reading sequence as follows:

- Read newer texts before older ones.
- Pay attention to the type of text (chapter 3.2.2) and the quality of your text.
- Ask questions of the text that relate specifically to your study.
- Find out about the structure and the thread of argument in the text.
- Only read labor intensive texts if they are definitely related to your topic.

To get a broad overview during the preparation stage, you should first apply the strategies of **cursory reading**, diagonal reading and skimming. This works better if you have asked some questions of the text beforehand.
The aim of cursory reading (also of diagonal reading and skimming) is to find the main points in the text as fast as possible. It represents a focused search for the key words that you have worked out in the previous step (chapter 3.1). It is important to memorize the terms you are looking for so that they will literally jump out at you from the text when you skim through it. This might take a bit of getting used to in the beginning, but with some practice you will quickly achieve a rapid reading speed.

During the main work phase you can apply the technique of **structured reading**. This technique attempts to distinguish connections and pertinent lines of argument.

3.3.2 Structured Reading

Once you have found the passages you were looking for in the text, structured reading begins, i.e. systematically processing information. There are several methods to do this:
The **5-S-Method**: **S**canning, a**S**king, **S**earching, **S**etting down in writing, **S**ecuring[1] and
The **SQ3R Method**: **S**urvey, **Q**uestion, **R**ead, **R**ecite and **R**eview[2].

The 5-S-Method
By **Scanning** the text we can ascertain if it is relevant to our study. Cursory reading achieves this. Next, you will **aSk yourself** what the authors wanted to achieve with their text, what questions they have tried to answer in their study and whether these questions might help you with your own problem. The next step is to **Search** for answers in the text. The answers you have found should be **Set down in writing** (in your own words). This is the only way you can be sure that you have really understood the text and it will make it easier later on to integrate these ideas in your text as you understand them. Take care to note down bibliographic information for citing (see footnote). This will save you a lot of unnecessary and time-consuming searching later on. **Securing** then means rechecking if you have grasped the authors' arguments and the reasoning behind their propositions completely and correctly. "Setting down in writing" and "Securing" correspond with excerpting which will be described in more detail in chapter 3.3.3.

The SQ3R Method
This reading strategy was developed by Robinson in 1948 and combines different techniques in a sequence of steps that will allow you to achieve a quick and deep understanding of the text.

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[1] see Wagner, W. (1982): Uni-Angst und Uni-Bluff. Wie studieren und sich nicht verlieren, 8th ed., Berlin: Rotbuch.
[2] see Robinson, F.P. (1948): Effective Study, New York.

Table 2: Summary of the SQ3R Method

1	**Survey:** Get an overview of your text.	Skim title, table of contents, preface, headings, text or chapter summaries, index of key words and authors, bibliography
2	**Question:** Ask questions of the text ...	... about the content, individual chapters, the author's position, all this depends on the problem under investigation.
3	**Read:** Read the text section by section looking for possible answers. If a section does not answer your questions, do not read on.	Find out any particularities in the structure of the text; weight what you find under the aspects that the questions have brought up; use graphic illustrations.
4	**Recite**: Write down information in your own words after having read each section.	Find out how much you have really understood by summarizing the main points in your own words.
5	**Review** Get an idea of the overall context	Re-read the text and try to answer any remaining questions you might still have.

Source: Own diagram based on: Robinson 1948.

3.3.3 Excerpting Information

Before you actually start writing, you should create excerpts from relevant literature. Excerpts should help you define the ideas you got from reading an essay or a book about your topic. In the excerpt, important arguments, trains of thought and references from the sources you have read will be collected and supplemented by your own ideas and cross references. Don't begin an excerpt the first time you read through a text but only after the second reading, which should follow a cursory reading phase where you will try to achieve a broad overview.

Your excerpt should take the form of building blocks which you can refer to later on when you start writing your own text. Therefore:

- Only start excerpting after you have clearly formulated your topic.
- Be clear about your reading intention.
- Analyze the text's terminology.
- Find out how the text you are excerpting from should be classified.
- Update your mind map.
- Excerpt with the book closed.
- Re-read any text passages that might be relevant.
- Try and excerpt in complete sentences if possible.
- Summarize the main statements and the line of argument of the text in as few words as possible.
- Only go into detail if a particular chapter is relevant.

- Take the author's intention into account.

Only mark those passages during your reading that are expressed concisely and which you would like to use as verbatim quotations. If you write your excerpts on the computer, you can key in the whole quotation.

When you're excerpting an author's statements, you should also write down your own considerations, ideas and thoughts. In this way, the excerpts may become a source of inspiration for you during the phase when you are writing your actual paper. You must clearly distinguish, however, what is yours and what is the author's.

Mark quotations in your excerpts and write down notes on their context (what context was this written in?) and where exactly you found them (e.g. if quotations cover two pages write down the change of page). Attention to detail at this point will save you having to invest a lot of time in searching later on.

Also note down the exact source if you are paraphrasing somebody else's ideas. We would recommend you to insert a column on the left-hand side of the excerpt where you can note the page number of the original text that the paraphrases and ideas refer to.

3.3.4 Compiling a Bibliography of Your Sources

A bibliography is basically an index of books, i.e. a compilation of books and other publications (specialist magazines, compendiums, specialist encyclopedias etc.) on certain subject areas or topics. Finding and compiling reliable literature is an academic achievement in itself, considering the vast amount of publications available.

The literature you have compiled is usually so comprehensive that it cannot be read in its entirety. This means you will have to select certain items from the collected literature. When you scrutinize your collection again in relation to your rough structure, you can already begin to discard some of the literature you have collected. But you won't be able to read everything you have left either. We would recommend you to try to get an overview by looking at the table of contents and the key word index and by browsing through any relevant pages. You should collect the information you have gathered in a reference management system.

Nuertingen-Geislingen University has acquired a campus license for the Citavi reference management and knowledge organization software which you can access free of charge. You can use Citavi to manage your references, search library catalogs and specialist databases, organize facts, collect quotations and to automatically create formally correct bibliographies in different citation styles.

You can install and use Citavi on your own computer. You will find information on how to download and use Citavi at: http://www.hfwu.de/de/bibliothek/serviceangebote/literaturverwaltung-citavi.html.

If you prefer to do your referencing by hand on index cards or in a document on the computer, please refer to chapter 4.4 where you will find information on how to document sources.

Bibliographies serve two main functions: They help you during the research phase and they are also an essential element in your (academic) paper. Therefore, there are two different types of bibliographies:

The Working Bibliography: A Bibliography for Your Literature Search

In a so-called working bibliography you include the sources you require for writing your academic paper - this type of bibliography supports the research of scientific literature. They are called working bibliographies because they are basically a work in progress. Depending on what step of the process you're in and the state of your research, sources that you need to look at later can be constantly added to the working bibliography.

Classification criteria of the sources referenced can be varied (as opposed to the bibliography!): Depending on what the focus of your paper is, references in a working bibliography can be classified according to publication year, signatory or magazine title or in alphabetical order of the author's second names.

It is a good idea to create two working bibliographies and to update them regularly:

- An index of sources you have already read and worked through and
- an index of all the sources you still have to research and work through.

Bibliography and List of References: Literature Cited in Your Paper

The Bibliography and List of References is inserted at the end of an academic paper after the last chapter of your text.

You will find more information on the table of contents in chapter 5.3

4 Writing an Academic Paper - The Outer Shell and the Interior Work

by Sylvia Lepp, Uwe Rothfuß, Kerstin Schramm and Jessica Lubzyk

In this chapter you will learn how to compose your academic paper - constructing the outer shell and doing the interior work. First of all, you should write your abstract. This is the “construction plan” for the actual paper. It helps you to define the topic, set out a rough structure and plan what you intend to do in each different phase. After consultation with your supervisor, you can fine-tune the rough structure and fill in the content. The basic rules and styles of academic writing and the writing strategies connected with them will help you to write your draft. This chapter also contains citation rules and hints on how to develop a coherent argument.

4.1 Writing Your Abstract

If you want to fully benefit from your supervisor’s guidance, you should have your abstract ready when you consult him/her for the initial talk about the topic. The abstract is a useful tool which enables you to introduce your paper briefly and concisely. Writing it out will help you get to the point of your topic, order your ideas and plan the actual production phase.[1] An in-depth discussion with your supervisor will help you answer some of the questions that you couldn’t work out on your own and help improve and assess the quality of your paper.

During this phase you should pay particular attention to the criteria relating to the content.

- Were all aspects of the topic dealt with?
- Was the topic defined and delineated plausibly?
- Were the assessment criteria made clear?
- Was there a sufficient amount of sources? Were they of sufficient quality?

The communications scientist Frank Marcinkowski suggests the following structure for your abstract:

1 The Research Question

Explain briefly and concisely what your paper is about and the central question you are investigating. You should also mention how your problem is relevant in the overall context of the subject. You can use this first part of the abstract as the introduction in your paper.

What is the core issue? What do I want to show? What is the objective of my study? What do I want to focus on? What will I not look into? [2]

[1] see Marcinkowski, F. (2009): Hinweise zur Gestaltung von Exposés für B.A.- und Masterarbeiten. http://www.uni-muenster.de/imperia/md/content/kowi/kmg/merkblatt-expose.pdf.
[2] see ibid.

2 Current State of Research

Reading and processing relevant specialist literature on the topic is an essential prerequisite for writing the paper later on. Therefore you should provide evidence in your abstract that you have been able to identify and compare the basic research approaches in relation to your question.[1]

What subject-specific theories does my research question relate to? In which textbooks/encyclopedias/specialist books will I find the necessary information? Are there any academic papers in existence in which similar questions were investigated?

3 The Central Question and (Working) Hypotheses

This section will contain all the subquestions required to answer your central question and the hypotheses under investigation in your paper.

“Usually, if this is expressed in a very vague or complicated language, it can be assumed that the author is not yet clear about his/her own research interest. It should always be very clear what you will use to explain your points. As far as possible, dependent and independent “variables” should be specified.”[2]

4 How to Construct an Argument

At this point you will describe how you are going to build up your argument, the order in which you will deal with your questions and the information you will be using to answer them. When you are drafting the structure of the paper, you are still permitted to phrase your headings as questions, as this tends to help the thinking process. In your final version of the paper, questions in the headings should be replaced by statements.

The structure you have now come up with is an orientation device for you and your supervisor as well as the foundation for the ideas in your academic paper. You are demonstrating that you are capable of systematically dealing with a task or a question.

When you are structuring your paper, please observe the following rules:

- The structure has to be in a logical order, starting with general points and then becoming more specific.
- The main heading must be a summary of all the subheadings on one level.
- If you are subdividing a section further, it has to contain at least two subheadings.
- To keep the structure simple, your paper should be subdivided in such a way that the individual sections do not differ greatly as regards thematic weighting and the size and subdivision of the subsections.

There are no hard and fast rules about which **Heading Style** to use in an academic paper. We would like to recommend the following heading styles to structure your

[1] ibid.
[2] ibid.

paper, however. Please be aware that you must not mix the different styles.[1] Please note: You can only have a paragraph 1.1 if there is at least also a 1.2.

Decimal Numbering

1 Linear:	2 Indented:
1	1 .....
1.1	1.1 .....
1.2	1.2 .....
2	2 .....
2.1.....	2.1 .....
2.1.1	2.1.1 .....
2.1.2	2.1.2 .....
2.1.3	2.1.3 .....
2.2	2.2 .....
3	3 .....
3.1	3.1 .....
3.2	3.2 .....
3.2.1	3.2.1 .....
3.2.1.1	3.2.1.1 .....

Attention: No full stop after the last figure! (international norm)

If your thesis is very substantial, you can alternatively use number symbols (i.e. passages or chapters can be numbered with Roman or Greek numerals or letters from the alphabet).

5 How to Deal With Data and Methods

At this point in a theoretical paper you should state which sources you want to refer to for your arguments.

In an empirical research you should state if you will collect the primary data yourself and outline the design of your investigation - or if you are going to analyze secondary data. During a secondary analysis you can either refer to raw data you have access to or you can base it on aggregate data which you have found in research literature. At this stage also describe how you plan to evaluate the data.

Which particular data/statements do I want to refer to in my arguments?

[1] see Wagner, W. (1989): Wie verfasst man wissenschaftliche Arbeiten, 2nd ed., Mannheim: Dudenverlag, p. 124 f.

6 Expected Outcome

"You must not reveal the results of the study here of course. Every scientist should be clear at the beginning of a study what he/she wants to achieve and what type (!) of result he/she would (ideally) like to get in the end. What will/should you know "more" about at the end of the study compared to the beginning?"[1]

7 Literature

At the end of the abstract you should mention the literature which you consider most relevant for the research question. You will certainly have to add to this later on. The references should comply with the rules on citation (see chapter 4.4). Check if you have a sufficient amount of literature available and if it is fundamental, up-to-date and citable.

Attributes and Goals of a Literature Survey:

- It shows the current state of research.
- It gives information about which studies your paper is based on.
- It shows the differences and similarities to other studies.

The literature listed in the bibliography should always refer very closely to the text, this means: no citation without references and no references that are not mentioned in the text.

4.2 Linking Information - Putting Forward Arguments

During this phase you should pay particular attention to the criteria relating to technique ...

- Unambiguity of the terms used: Were the terms you used defined and delineated clearly?
- Is there enough documentation available to allow verifiability?
- Is there a plausible context of justification?
- Have citation rules been adhered to?

... and to the criteria of presentation:

- Transparency and verifiability?
- Simplicity, conciseness?

After having discussed the abstract with your supervisor, you can now go on to thoroughly work through the materials you have chosen in regard to your questions (see chapter 3.3.1). You can also simultaneously fine-tune the structure of your paper.

After having excerpted all the sources you consider relevant and that can help you answer your questions, you can start writing your text under the individual headings. You might realize during this phase in your project that certain headings are missing from the structure or that they are in the wrong place (→ Plausibility in the context of justification). At this stage don't try to find the perfect words for your ideas, but

[1] ibid.

rather start by sketching down your thoughts with a few key words. You only concentrate on your writing style, exact phrasing and grammatical correctness during the review phase.

You should make sure, however, to insert the citations you have chosen at the intended place in your argument and to reference them. Make sure that every idea by somebody else is marked as a verbatim or paraphrased quotation (→ Citations retain their original meaning, their meaning wasn't changed). To avoid time-consuming post-editing, we would recommend citing all quotations according to the rules even during the draft stage of your paper (→ Have citation rules been adhered to?). The exact citation rules and breaches of them (=plagiarism) are outlined in chapter 4.4.

After you have finished your first rough draft, thoroughly check what you have written for transparency and verifiability, simplicity and conciseness.

Your reader has to be able to reach the same conclusions as you on the basis of what you have written. This means on the one hand that your argumentation must be watertight and on the other hand that you have considered all possible objections (→ Coherence). In every academic paper quality is more important than quantity. Even though using a lot of sources might indicate that you have dealt intensively with the topic and are putting forward arguments based on the current state of research, you should avoid using sources (only) for the sole purpose of enlarging your bibliography. Sometimes, less is more (→ Conciseness).

Furthermore, you must have references for all your statements. Statements such as "in most companies, method X is used" or "very often, enterprises do not follow rule Y" must be referenced using trustworthy sources, statistics or your own surveys (→ Transparency). Avoid making speculative claims that you cannot justify. You can mention at the end of a paragraph that you do not share the author's view, but you have to explain this with valid and verifiable reasons (→ Verifiability).

An academic paper is usually divided into three parts: The introduction, a main text and a conclusion. Depending on the topic, the main text can be subdivided into different parts.

Your introduction serves a very important purpose for your readers. If you cannot arouse your readers' curiosity - or at least interest - in your topic, they will only read it reluctantly or not bother with it at all.

Very often, the introduction is divided up into three parts: the paper's objective, the paper's purpose and the paper's composition.

In the introduction you should give all the information you have already presented in your abstract:

- Objective of the investigation
- Relevance of the topic
- The research question
- Validity
- What is being researched?
- What is not being researched?
- Materials and methods

– Composition of the paper

The main text serves to convince your readers of the facts and arguments you are putting forward.

It contains the text you have written in relation to your headings and is therefore subdivided into several chapters. First of all you have to define the meaning of the main terms, i.e. describe what you mean by them and explain what you specifically do not mean by them. Usually these key words are defined here for the first time in the text. Key words that are important for the paper as a whole can also be defined in separate paragraphs of the introduction.

The next step is to write about your investigation of the topic based on your research and analysis of the materials you have collected and, if applicable, to support it with any surveys which you may have carried out yourself.

The conclusion serves to convince your reader of your results. Try and summarize the research question, your arguments and your conclusion in a few compact sentences that will remind readers of the logical structure of your study. This way, the most important points will stay in their minds. At the end of the conclusion you may also express your own subjective evaluation or opinion and point out any questions that are suitable for clarification during further research, e.g. after transposing them into another context or by looking at them from a different viewpoint.

The following figure 5 depicts a system for composing an academic paper.

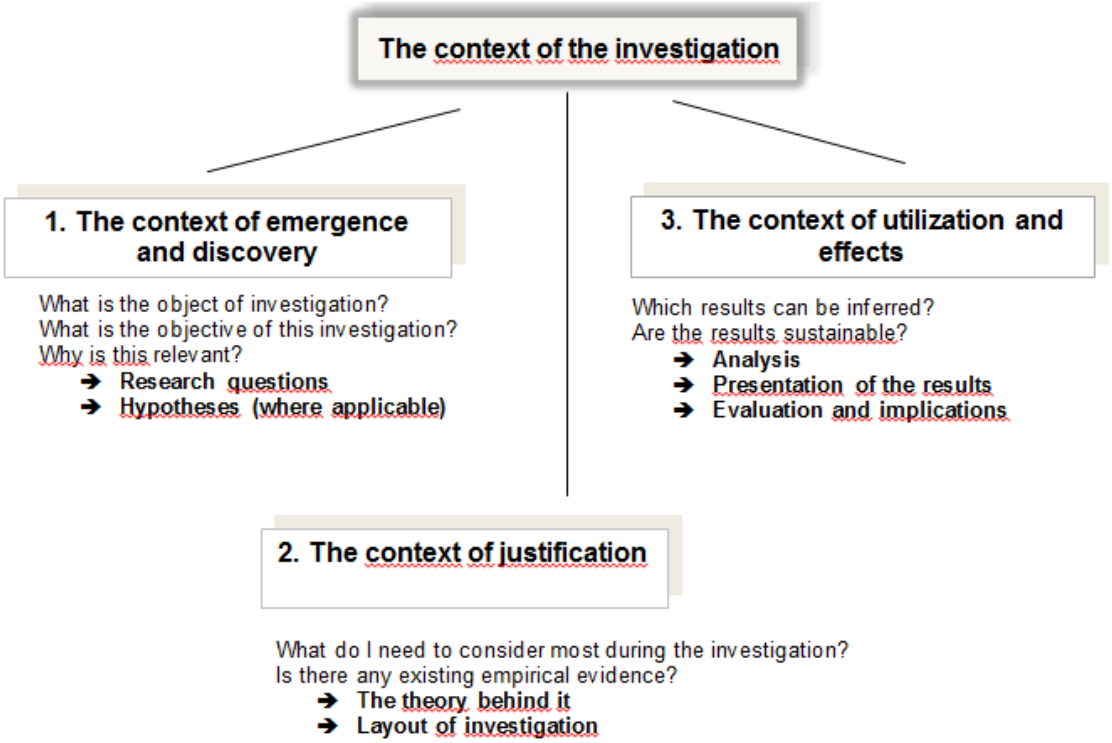

Figure 5: System for Composing Your Paper

Source: Own image based on Friedrichs, J. (1990) Methoden empirischer Sozialforschung. 14th ed., Wiesbaden VS Verlag.

The context of emergence and discovery includes the objective of the paper and the relevance of the investigation. The objective of the paper leads to the research question and also to any hypotheses which might have to be disputed.

In the context of justification, the research design will be examined. In other words: Which method will be used to answer the research question. The methodology is described and justified.

The context of utilization and effects presents the results of the investigation. The results are then analyzed and assessed.[1]

This is a suggestion on how to structure a **theoretical paper**.

1 Introduction
- Research question and starting point
- Objective and procedure
- Composition

2 Theory basics
- These serve to formulate the problem that is to be investigated and to develop the research hypotheses (starting with general comments and then becoming more specific)
- Explain relevant facts (term definitions, not a whole paragraph though) and how they are connected
- Current State of Research

3 Methodology
- Design of the study and methods used (e.g. qualitative and quantitative methods, Porter's etc.)
- Explanation and relevance of the methodology

4 Investigation and analysis
- Research the question and the topic
- Empirical evidence
- Deduct relevant results
- Practical examples and/or case studies
- Fact based evaluation (e.g. opportunities and risks)

5 Summary, perspective, concluding remarks
- Summary of results
- Relevance to the research question/problem
- Any remaining questions

The composition of an **empirical paper** is similar to that of a theoretical paper. The following is an example of the layout of an empirical paper.

1 Introduction
- Research question and starting point
- Objective and procedure
- Composition

[1] see Friedrichs 1990.

2 Current State of Research
- Serves to formulate the problem that is to be investigated and to develop the research hypotheses (starting with general comments and then becoming more specific)
- Explain relevant facts (term definitions, not a whole paragraph though) and how they are connected
- Current State of Research

3 Materials and methods
- Random sample (Who? When? ...)
- Design of the study/choice of methods/survey instrument e.g. questionnaire, interview (Which instrument was used and why, describe the instrument.)
- Execution (Describe how you carried out the data survey.)
- Hypotheses

4 Results
- Presentation and evaluation of the data

5 Discussion
- Evaluation of the results with regard to the hypotheses and the research question
- Implication of the results
- Critical assessment of the results and the methodology

6 Conclusion
- Summary of the results
- Relevance to the research question/problem
- Any remaining questions

There are specific rules for natural science papers. Please refer to chapter 6.

4.3 Reviewing Your Draft

Even if you have put a lot of effort into writing your first draft, you will still not be able to avoid thoroughly reviewing your paper several times.

It is important that you first review the content of the paper, then edit it and finish it off by doing a linguistic revision.

Revising the content includes reviewing your draft in accordance with the quality criteria in relation to content and technique as described in previous chapters. Otherwise you might start doubting the content during your language revision and you might feel that you must completely change your paper at the last minute. This would cost you an unnecessary amount of time which you will need later on for fine-tuning and your paper's quality might suffer because of it.

The focus of an **editorial review** is to check if technical terms and foreign words need to be explained and if they have been used unambiguously. Then you need to check if your quotations are correct and if you have cited them properly. Finally, you should check if all tables, figures and diagrams etc. are in the right place and if they have been referenced.

During your **linguistic revision** you should pay particular attention to the criteria related to presentation:

– Conciseness

"This means: Is the amount of text in proportion to what you want to say? A brief and densely packed style of writing is one extreme, an elaborate and long-winded style the other. Long-windedness may be caused by the following: Writing about unnecessary details, superfluous explanations, going too far afield, digressing from your topic, circumlocutions, repetitions, filler words and empty phrases." [1]

→ Limit yourself to essential information and get straight to the point.

– Simplicity

Simplicity refers to the words you use and the construction of your sentences, i.e. linguistic expression: commonly used and descriptive words are made into short, simple sentences. If you use difficult words (foreign words, technical terms), you must explain them. What you are writing about may be either simple or difficult - what is important is how you present it."[2]

→ Choose commonly used words and explain any technical terms.

→ Use simple sentences and avoid overly complex sentences.

– Stimulating?

"This means any added ingredients that the authors or speakers employ to stimulate interest, empathy, or a desire to read or listen in their audience. For example: exclamations, direct speech, rhetorical questions which stimulate the readers' imagination, true-to-life examples, directly addressing the reader, appearances by real people, buzz words, funny phrases, presenting information in the form of a story."[3]

→ Address your reader directly.

→ Illustrate your facts with examples.

→ Involve the reader with the help of rhetorical questions.

– Visualizations

Visualizations always come at the end of an information processing stage, this means your research of the idea always comes before the visualization. The purpose of visualization is to summarize what you said in your text with an image.
There are different ways to visualize complex or abstract facts:
You can produce your own diagrams with the help of Microsoft Graph.

Block diagrams, such as organization charts, show where something is located in a particular system,

[1] Langer, I.; Schulz von Thun, F.; Tausch, R. (1981): Sich verständlich ausdrücken München: Reinhardt, p. 20.
[2] ibid. p. 16.
[3] ibid. p. 22.

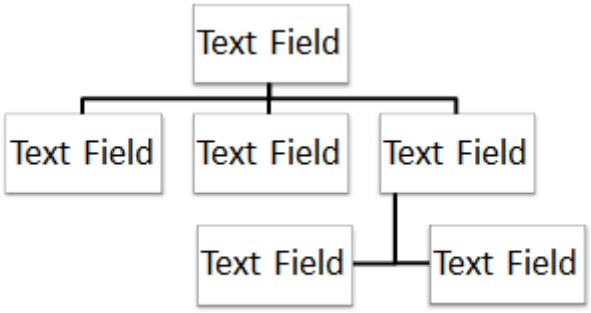

Figure 6: Organization Chart

Source: TechSam (Ed.) (n.d.): Visualisieren. URL: http://www.teachsam.de/arb/visua/visua_2.htm.

... or its correlations,

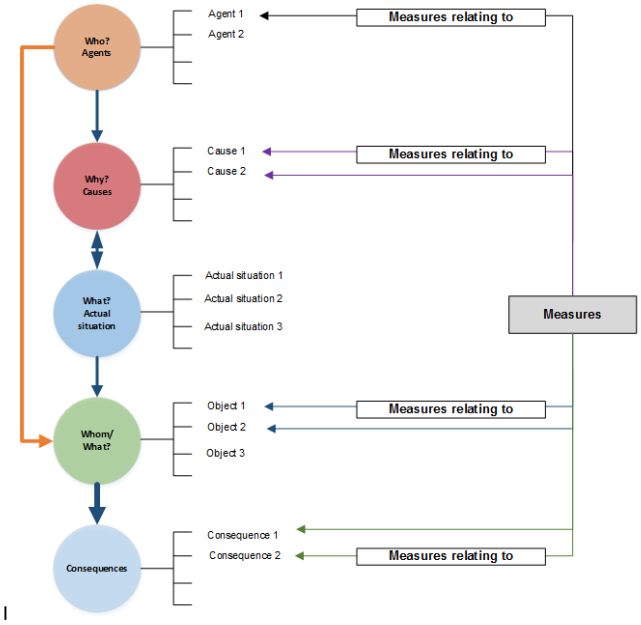

Figure 7: Block Diagram on Correlations

Source: TechSam (Ed.) n.d.

... or they visualize complex correlations.

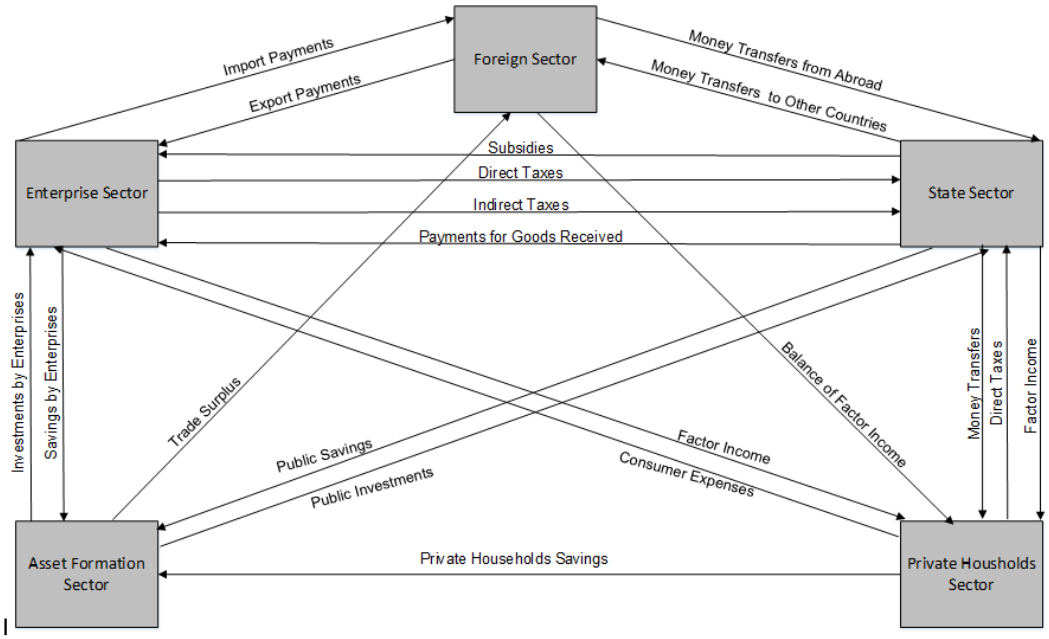

Figure 8: Block Diagram on Complex Correlations

Source: Springer Gabler (Ed.) (n.d.): Kreislaufanalyse.
URL: http://wirtschaftslexikon.gabler.de/Definition/kreislaufanalyse.html.

Charts and Symbols

Charts and symbols help to get the reader involved on an emotional level.

After revising your paper, it makes sense to have it proof-read by a competent third party (e.g. fellow students, friends, relatives) who are not familiar with the topic. The emphasis should be on spelling, style, punctuation and comprehensibility of the text. Most word processing programs include a spellcheck function. Even though it doesn't find every mistake, it pays to use it. Only you are allowed to change the content, however. You guarantee this by signing the "Declaration on Honor".

4.4 Other People's Statements in Your Text - References and Citations

As a basic rule, every idea that is not the author's own but somebody else's has to be highlighted. It doesn't matter if it is a direct or an indirect quotation. This is the only way to protect yourself from any suspicion of theft, namely plagiarism. And this is also the only way the reader can verify cited statements. You will comply with the requirement of having to cite by informing the reader at the end of the quotation about the source you used.[1]

What can be cited?

Basically you can cite any academic texts which are available at the University Library. This includes, amongst others, monographs, compendiums, essays from scientific publications and articles from specialist encyclopedias. You may also cite material from archives and published theses.

[1] see Heister, W; Weßler-Poßberg, D. (2007): Studieren mit Erfolg: Wissenschaftliches Arbeiten, Stuttgart: Schaeffer-Poeschel, p. 133.

You should remember, though, that not everything that's citable is worth citing.

You should never cite from pulp or popular fiction. Sources like Wikipedia are also not suitable for citation, since you cannot rely on the scientific correctness of what is stated there. It may be useful, however, for getting a general idea on the topic you are researching.[1]

Even though we are in the Age of the Internet, you should still make sure that you use enough sources from literature (unless this is agreed otherwise with your supervisor).

4.4.1 Direct and Indirect Quotations

Direct (Verbatim) Quotations

- If you are quoting verbatim, you have to reproduce the quoted text letter by letter, including spelling mistakes or out-dated spelling.
- The quoted text is always inside quotation marks (otherwise you would be claiming that somebody else's ideas are your own - beware, you could be accused of plagiarism!).
- If you are quoting in a quotation (quotation within a quotation), use single quotation marks for the inside quote.
- If a quotation contains a spelling mistake, the author can draw attention to this by inserting the Latin word *sic* (= *thus was it written*), followed by an exclamation mark (both in square brackets, i.e.: [sic!]), after the word.
- If something needs to be added to the quotation, for example because it has to be inserted into a sentence or if it is not understandable without an explanation, the text that needs to be added is put in square brackets, followed by a comma and the author's initials. [added text, initials X.Y.]
- If you want to leave out a part of the quotation, the omitted part should be marked by an ellipsis in parentheses (...).
- As a rule, you should use verbatim quotations sparsely and selectively. It is better to use your own wording. Verbatim quotations are useful, however, if the original text explains something very aptly or if something is to be emphasized or highlighted. They are also helpful if the original text uses easy to remember terms or if the facts have been expressed in such a meaningful and concise way, that to phrase them differently would result in a decline in quality.
- Quotations from secondary literature (i.e. quotations where you quote from author A because of a quotation by author B) should only be used in exceptional cases because of the risk of changing the meaning of the original idea during the transfer. There is one exception to this rule: The original source is not accessible. In this case you quote in the following way: *as quoted in* (primary source as quoted in secondary source).[2]
- If a reference in a footnote citation contains several sources, you should include them all in the footnote, divided by a forward slash or a semicolon.

Indirect (Paraphrased) Quotations

A paraphrased quotation means that the author's statements are put into your own words. This type of reproduction requires very good language proficiency. It is much more than restructuring the order of the sentence and retaining the meaning. By

[1] ibid. p. 133.
[2] see Balzert, H. et al. (2008): Wissenschaftliches Arbeiten, Witten-Herdecke: W3L, p. 103.

rephrasing somebody else's ideas you must demonstrate that you have understood them.[1] Indirect quotations are used much more frequently in academic papers than direct ones. In the bibliography they are preceded by a *see*. In the Harvard style "see" is not necessary and quotation marks in the text can be left out.

Quotations in a Foreign Language
These can be inserted in their original language if the language is commonly taught in schools and if the meaning of the quotation would be changed by the translation. You should offer a translation in the footnote, however.[2]

4.4.2 Citation Styles

There are two citation systems that are used frequently:

The German Citation Style
The complete source (**Full Reference**) is cited in a footnote at the end of a page the first time you refer to it. Any time you refer to it subsequently, a **Short Reference** suffices. In addition, the complete title is cited in the bibliography at the end of your paper. If you use the same sources repeatedly, the following abbreviations can be used: *ibid*. (= *ibidem, in the aforementioned place*) if you have referenced the exact same source immediately beforehand. In indirect quotations, the source is preceded by "see" or "cf." (Latin 'confer', "compare").

Check with your supervisor if you can use short references from the beginning, even when citing the source for the first time. This will make your work easier.

The American Citation Style
Directly after the quotation, the source is cited in brackets by way of a **short reference** in the main text of the paper. (Harvard style).
The complete title is only cited in the bibliography at the end of your paper.
In the American citation style, the source is in parentheses before the full stop.

In the German citation style, as opposed to the American citation style, the following may apply: If the citation only refers to the last sentence, it can be inserted directly behind it (i.e. before the full stop). If the reference relates to the previous paragraph, however, it must be inserted after the full stop. If a whole passage is based on one source, then a note at the beginning of the passage is advisable: (e.g. According to XY ...). If in doubt, insert the reference cited in the footnote after the full stop.

You should cite the source after each individual paragraph, even if several paragraphs stem from the same source.

Both the *German* and the *American Citation Styles* have advantages and disadvantages. Using short references is easier, for example, because you do not have to do footnotes. By using full references, however, you save the reader the trouble of having to constantly look up the bibliography. Unless your supervisor has given you specific instructions, it is entirely up to you which citation style to use.

Attention: The citation style you use for your first quotation must be adhered to for the rest of your paper.

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[1] see Heister, W; Weßler-Poßberg, D. (136):
[2] see Theisen, M.R. (2011): Wissenschaftliches Arbeiten, 15th ed., München: Vahlen, p. 150.

If you have any doubts or problems, it’s best to ask your lecturer.

4.4.3 Layout of Your Citations

In the following section you will find citation examples for each different type of source. Full references and short references have been included according to Theisen's citation style. You will also find these citation styles in Citavi: Theisen, 16th ed., Chicago Style (full reference in the footnote) and Theisen, 16th ed, Harvard Style (short reference in the text).

References in the bibliography are the same as in the full reference but without the page number. Anthologies and magazines are an exception to this: In magazine articles, the section in which the article was printed must be cited, e.g. pp. 201-213 or pp. 39-41.

Table 3: Basic Citation Layout

Full Reference	Short Reference
Basic Pattern *Second name, abbreviated first name (year of publication): Title, edition abbreviated, place of publication: Publisher's name, "p." page number.*	*Basic Pattern* *Name year of publication, "p." page number.*
A paraphrased quotation is always preceded by *"see"*.	In the footnote a paraphrased quotation has to be preceded by *„see"*, in the short reference in the text you may precede it by *„see"* if you choose.
If a publisher is based in several locations, only the first one is mentioned.	
If several publications by an author from the same year are cited, you should differentiate them with 2011a, 2011b ...	If several publications by an author from the same year are cited, you should differentiate them with 2011a, 2011b ...
If the year of publication is unknown, this is marked by *„n.d."* ("no date").	If the year of publication is unknown, this is marked by *„n.d."* ("no date").
If the author of a publication is unknown but the publishers are known, then they will be cited instead and marked *„(Ed.)"*.	If the author of a publication is unknown but the publishers are known, then they will be cited instead and marked „(Ed.)".
If there are more than three authors, the first one will be suffixed by *„et al."* (lat.: "and others").	If there are more than three authors, the first one will be suffixed by *„et al."* (lat.: "and others").

Table 4: Citation Style for Monographs

Full Reference	Short Reference
One author: Meffert, H. (2014): Grundlagen marktorientierter Unternehmensführung, 12th ed., Wiesbaden: Gabler, p. 100.	Meffert 2014, p. 100.
Several authors: Berekoven, L.; Eckert, W.; Ellenrieder, P. (2009): Marktforschung: Methodische Grundlagen und praktische Anwendung, 12th ed., Wiesbaden: Gabler, p. 40.	Berekoven; Eckert; Ellenrieder 2009, p. 40.

Author unknown: Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (Ed.); Umweltbundesamt (Ed.) (2011): Umweltwirtschaftsbericht 2011, Berlin, p. 5.	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (Ed.); Umweltbundesamt (Ed.) 2011, p. 5.

Table 5: Citation Style for Anthologies

Full Reference	Short Reference
Gleißner, W. (2010): Bewertung von Private Equity-Gesellschaften, in: Drukarczyk, J.; Ernst, D. (Ed.) (2010): Branchenorientierte Unternehmensbewertung, München: Vahlen, p. 201.	Gleißner 2010, p. 201.
With essays from an anthology, the section which contains the essay has to be cited in the bibliography, e.g. pp. 201-213 or pp. 39-41.	

Table 6: Citation Style for Magazines and Newspapers

Full Reference	Short Reference
Magazine articles: Huber, F. (2011): Marktanalyse, in: W&V 03/11, p. 39.	Huber 2011, p. 39.
Newspaper article: Röder, J. (2016): Gold als Investment boomt, in: Handelsblatt of 19 August 2016, p. 2.	Röder 2016, p. 2.
With magazine articles, the section which contains the article has to be cited in the bibliography, e.g. pp. 201-213 or pp. 39-41.	

Table 7: Citation Style for Doctoral and Postdoctoral Theses

Full Reference	Short Reference
Kleinsteuber, A. (2011): Kognitive und affektive Messewirkungsforschung, Erfurt, Diss., p. 67.	Kleinsteuber 2011, p. 67.

Table 8: Citation Style for Official Gazettes, Legal Sources, Jurisprudence

Full Reference	Short Reference
Article 5 Section 1 Phrase 1 EStG.	Article 5 Section 1 Phrase 1 EStG.
OLG Stuttgart, NJW 2002, 1254.	OLG Stuttgart, NJW 2002, 1254.

Table 9: Citation Style for Online Sources

Full Reference	Short Reference
Basic Pattern *Second name, abbreviated first name. (Year of publication): Title. Complete URL ("retrieved on" date).*	*Basic Pattern* *Name Year of publication.*

Lubzyk, J. et al. (2017): Wie man eine wissenschaftliche Arbeit erstellt. URL: https://www.hfwu.de/fileadmin/user_upload/IBIS/Leitfaeden/Leitfaden_ wissenschaftliches_Arbeiten.pdf (retrieved on 20 February 2017).	Lubzyk et al. 2017, p. 30. Exception for FBF (Business Administration and International Finance): Lubzyk et al. 2017, p. 30, online.
Controlling-Portal (Ed.) (2016): Stärken-Schwächen-Analyse. URL: http://www.controllingportal.de/Fachinfo/ Grundlagen/Staerken-Schwaechen-Analyse.html (retrieved on 10 August 2016).	Controlling-Portal (Ed.) 2016. Exception for FBF (Business Administration and International Finance): Controlling-Portal (Ed.) 2016, online.
Please note: If no author is mentioned, list the editor of the page instead. You will find the editor's name in the legal notice (disclaimer) of the website.	

Table 10: Citation Style for E-books

Full Reference	Short Reference
Meffert, H. (2014): Marketing. Grundlagen marktorientierter Unternehmensführung, 12th ed., Wiesbaden Gabler, p.100.	Meffert 2014, p.100.

Citations for e-books are the same as for printed media.

Table 11: Citation Style for Own Interviews and Surveys

Full Reference	Short Reference
Müller, Fa. YZ, Interview on 12 January 2010: Customer care, see appendix 1.	Müller, Interview on 12 January 2012, see appendix 1.
Customer survey, March 2010, see appendix 2.	Customer survey, March 2010, see appendix 2.
If you are quoting passages from interviews/surveys you specifically carried out, you have to reference the interview/survey in a footnote. You will also have to include the complete interview/the evaluation of the survey in the appendix.	

Special Characteristics of Legal Citations:

Case Law:

Ideally, you should quote the following: court, type of ruling, date, reference number and where it can be found. Example: BGH, ruling of 01 April 2015, II ZR 115/13, NJW 2015, p. 1234; or: LAG Baden-Württemberg, ruling of 12 January 2010, 5 Sa 1433/09, NZA-RR 2010, p. 378. Evidence of the rulings does not belong in the bibliography. You could include a separate index on court rulings - please check with your examiner/supervisor if this is required.

Standard law codes (e.g. Bürgerliches Gesetzbuch - BGB) do not have to be referenced. This is different, however, in the case of special legislation or legislation proposals (e.g. draft legislation by a federal ministry). In this case you must cite the official document as the source, never cite Beck texts from dtv (publisher of paperbacks on legislation) or similar! The correct sources for legislation are the federal or state law gazettes, e.g. „Gesetz zur Verbesserung des Einkommens mittelloser Studenten fern der Heimat“ GVES of 01 April 2000, BGBl. I, No.5, p 1007, issued on 02 April 2000. The entire legislation process is also documented on the internet, e.g. at Bundesgesetzblatt-online (www.bgbl.de). www.buzer.de is also useful, it includes comprehensive documentation on the development of individual laws plus related materials.

Recognized established legal publications, e.g. annotations, include a “citation proposal” - mostly on one of the first pages - that you should use.

4.5 Legal Problems and Copyright Issues Related to Theses

For a long time it was disputed or ignored that there might be legal and especially copyright issues related to theses. The sole copyright of the author was also disputed because it was assumed that the supervisor had a “joint copyright“ (UrhG § 8 Joint Author). This meant the possibility of the supervising professor using the thesis without asking permission, a practice which was declared unacceptable in the recommendations for safeguarding good scientific practice by the DFG, German Research Foundation, published in 1998.[1] The internet has led to a transparency of academic publications and clearly demonstrated the legal consequences of copyright infringements by the author, cf. the plagiarism case of the former German minister Guttenberg.
If you write a thesis, you should always be aware of the two contrasting sides of copyright. YOU become the originator (copyright owner) on the one hand and on the other hand you also infringe the copyright of a third party, e.g. through citations (article 51, UrhG, German copyright law). Please note the following important points:

Exam Paper - Original Copy of the Paper

[1] see Deutsche Forschungsgemeinschaft (Ed.) (1989): Vorschläge zur Sicherung guter wissenschaftlicher Praxis: Empfehlungen der Kommission „Selbstkontrolle in der Wissenschaft“; Weinheim:Wiley-VCH.

The university is entitled to an original copy of the thesis because, according to university law, this is a part of the examination. The university does not have the right to exploit the paper because of this, however.

Publication Requirement - Publication of the Thesis
Unlike dissertations, there is no obligation to publish a thesis.

Archiving Requirement
The university is NOT obliged to archive the thesis beyond the legal retention period. Retention periods for theses are usually specified in the degree program's exam regulations.
Mostly, this is a period of 5 to 10 years. NEITHER is the university obliged, however, to destroy archived theses after the retention period has elapsed. The author of a thesis CANNOT exclude the fact, therefore, that a thesis that was not published originally can be accessed by everybody after it is passed on to the State Archive of Baden-Wuerttemberg after the common 30-year non-disclosure period (LArchG article 6).
This means that a "non-publication" clause in a thesis is no guarantee that a copyright or other statutory infringement will not have legal consequences in the future. Therefore it is mandatory that you observe all the regulations for academic papers REGARDLESS OF whether you want to publish it or not.

Copyright and Exploitation Rights in Theses
The authors are the sole proprietors of the copyright and all resulting usage and exploitation rights of their theses. Please note that you can agree to a "simple" or an "exclusive" exploitation right. If, for example, you have concluded an "exclusive agreement" with a publisher on the publication of your paper, this publisher only will have the right to publish your work. Even you as the author will NOT have the right to publish your work anymore. (It must be checked in each individual case if a second publication right according to article 38, section 4, UrhG exists).
The university or the supervisor or a third party (company, corporation) can only acquire usage rights if the author concedes.
Papers composed in cooperation with a company which contain the company's internal data or confidential information can only be published (and marketed) with the company's consent.

Contracts with Enterprises
You must be aware of the far-reaching consequences of a transfer of rights to third parties. A non-disclosure clause can be rendered void by the university's right to your paper due to it being a part of the examination. If the exam regulations of your degree program demand that you give a public lecture, a contract between an enterprise and a student cannot prevent this.
Only sign contracts if and when you are certain that you will be in a position to fulfill your contractual obligations.

Copyrights of Third Parties When Composing Your Thesis
Writing an academic paper would be impossible if copyright law wasn't limited by, for example, the right to citation (art. 51, UrhG). It is essential for scientists to be able to cite a source without having to ask the author first. You must stay within very strict limits when using quotations, however.

The quotation has to serve a “special purpose” and, in the academic world, it should primarily serve as a reference. Quotations that only serve the purpose of “embellishing” your paper are not covered by art. 51, UrhG. Even though images, drawings or technical diagrams which are copyrighted can in theory be “cited”, you have to stay within the strict limits that define the purpose of using the citation, especially if you want to publish your paper. The “citation barrier” (art. 51, UrhG) is a serious encroachment on the proprietary rights of the author. If you “cite” a picture, this usually has repercussions on the future usability of the picture. Photographers or the copyright proprietors who earn money from the sale of their pictures will therefore check very thoroughly if a picture whose rights they own complies with the strict regulations of art. 51 UrhG.

Apart from having a good reason for the citation, you must also justify why you need to use exactly THIS particular picture. If you realize that you could use an alternative picture instead of this picture, then the necessity to cite that particular picture is no longer valid and it DOES NOT fulfill the requirements for a citation. If you want to illustrate a horse breed or a tractor or a particular architectural style with the help of a photograph and simply cite a picture from a magazine or a book, it is highly likely that you are in breach of copyright law. You could use a different photo for the illustration, one you took yourself for example. You should therefore be very careful when citing images, maps, diagrams etc.
Copyright infringements can ensue high fines, so in order to avoid legal disputes, you should consider the following alternatives:

- Produce the picture or diagram yourself
- Use license free pictures (e.g. Creative Commons license)
- Get the originator’s permission in writing to use the picture

Publication

You can publish your paper free of charge on the university’s server on the campus net (INTRANET). We do not currently offer to publish your paper on the INTERNET. You are not obliged to publish your paper.
The university reserves the right NOT to publish if the supervisor recommends this. Your right to publish the paper in a different location (also on the INTERNET) is not affected by this.
On principle, a thesis is citable regardless of whether it has been published or not. If a thesis has been published, publication can only be withdrawn in special circumstances (art. 42 UrhG, right of withdrawal due to a change in beliefs).

5 Academic Paper Formalities

by Dirk Funck and Christiane Fitzke

In this chapter we are dealing with layout issues and formal requirements – the decorative effects. You will learn how to present your academic paper to suit your target audience. Strategies for successful communication and the formal requirements regarding the layout of your paper will help you round off your paper to your best advantage.

5.1 The Components of an Academic Paper

An academic paper consists of different parts which are generally in the following order:[1]

Cover Sheet
Your cover sheet should always contain the following:

- Name of university
- Department and degree program
- Type of paper (seminar paper, thesis etc.)
- Name of lecturer (including name of the chair) or name and title of your supervisor
- In the case of seminar papers: your current semester and title of the seminar
- Topic of your paper
- Author (first and second name, name of degree program, subject-related semester, matriculation number)
- Due date

The cover sheet is included in your page count but no page number is marked on it. On the page following the cover sheet “II” is inserted. For a sample, please see appendix 1.

For some degree programs, standard cover sheets exist which must be used.

Preface or Preliminary Remark
A **Preface** is unusual in most university papers (seminar paper, assignment, Bachelor’s thesis) since the paper is normally not published. Prefaces are mostly used in dissertations (doctoral theses) and publications.

The preface comes before the table of contents and shouldn’t exceed 10% of the main text. Short prefaces, up to one page, are not called preface but **Preliminary Remarks**.

The preface is often used for acknowledgments. In some publications, it is also used to introduce the author.

The preface concludes with the date and the name of the author.

[1] see Poenick 1989, p.123 f./195 f.

Table of Contents
The table of contents contains all the different parts that follow it, i.e. cover sheet and preface are not mentioned in the table of contents. You will find more information on the structure and the table of contents in chapter 5.3.

Additional Lists
List of Abbreviations
All abbreviations which are not commonly known must be included in the 'list of abbreviations'.

List of Figures
All figures and diagrams inserted in your text are included in a 'list of figures' with reference to the appropriate page.

List of Tables:
All tables inserted in your text are included in a 'list of tables' with reference to the appropriate page.

Text
The actual text of your paper, which consists of the introduction, the main text and the conclusion, has been described in great detail in chapter 4.2.

Your supervisor will decide how long your paper should be. The recommended text length is as follows:

- Bachelor's Thesis: appr. 60 pages
- Master's Thesis: appr. 80 pages

If you include a lot of figures and tables in your text, the text length is increased accordingly.

Appendix
Additional material such as a collection of references, statistics, tables, interviews etc., which are essential to prove or illustrate the arguments put forward in your text, are included in the appendix at the end of the text.

Bibliography
There are two reasons why you must include cited sources in your bibliography: Firstly, the author discloses whose intellectual property he/she has harvested, thus protecting copyright. Secondly, the people who are reading the paper can find the sources themselves and read them, this will help them to better follow the author's train of thought and verify it.

It is very important that the citation in the text (Harvard style) can be positively identified in the citation reference in the bibliography. The author's second name and the year of publication which you have quoted in the citation have to exactly match the references in the bibliography.
To help the readers of an academic paper find the source without any major problems, the bibliography needs to contain additional information.
The bibliography contains all the literature used in the text and all other sources in alphabetical order. Unless you are using the short citation style (short reference or

Harvard style), you can divide the bibliography into different sections, i.e. monographs, passages from anthologies, magazines and newspapers, other sources. Within these divisions, the sources are again listed in alphabetical order.

Declaration on Honor
An original signed copy of a declaration on honor must always be included at the end of a seminar paper or a thesis. Do not give it a page number and do not add it to the table of contents. See appendix 2.

5.2 Formatting

You have to strictly adhere to the following formalities unless your supervisor has given you permission not to use them or has specified other formalities.

On the university homepage you will find guidelines on how to format your assignments. URL: https://www.hfwu.de/schreibberatung/. In neo you will find IBIS under “my institutes” in the respective department. A formatted template is available there for the business programs and for the natural science programs.

- You should help the reader by using a graphic text and page layout: paragraphs (make sure they are divided up into logical units!), bulleted lists, dashes, indentations, sketches, images etc. It is important, however, to find the right balance.
- Format: A4 (Check with supervisor if you may use recycled paper)
- Print only on one side of the paper
- Pagination (Arabic numerals from start of text, Roman numerals for table of contents and preceding lists).
- Page layout:
  - left margin: 3-4 cm
  - right margin: at least 2 cm
  - top/bottom margin: at least 2 cm
  - you may include a header with the title or the chapter
- Text layout:
  - recommended font size: 12
  - recommended line spacing: 1 to 1.5 spacing
  - recommended font: Arial or Times New Roman
  - line break: Hyphenation and justification
- Footnote layout:
  - Start afresh on each page or number them sequentially
  - recommended font size: 10
  - recommended line spacing: single spaced
- Finish:
  - seminar paper: flexi fastener, flat file or similar
  - thesis: bound

The amount of the bullet points and their wording must match the headings of the individual paragraphs in the main text of your paper. This means that the individual headings (bullet points) must be worded in such a way that they make sense if read in isolation (without the superordinate heading). Example:

Wrong	**Correct**
4.1 Employment policy	4.1 Employment policy
4.1.1 1970 to 1979	4.1.1 Employment policy from 1970 to 1979
4.1.2 1980 to 1989	4.1.2 Employment policy from 1980 to 1989

If you want to emphasize individual headings graphically, you can use different formatting options (e.g. different font sizes, bold, italics, underlining, letter-spacing etc.) In most PC word processing programs, it is best to use program or user defined style templates. This will ensure that your font formatting and spacing in a heading are always the same.

You should make sure that you always use the same line spacing, font size and font type for your headings, your main text and the other components of your paper. The safest way to do this is by using style templates. In bulleted lists, you should always use the same bullet points (e.g. *, -, •, ⇒ ...). The most common word processing programs offer templates (e.g. bulleted and numbered lists).

After the table of contents, everything has to be numbered sequentially. The following rules apply:

Roman Numerals	**Arabic Numerals**
Table of contents	Text (Page 1)
List of abbreviations	Appendix
List of figures	Bibliography and works cited
List of tables	

Avoid writing in the first person, but do not hesitate to include your personal suggestions and evaluations (with good justification and arguments) in your paper.

5.3 Table of Contents

The table of contents reflects the structure complete with page numbers (only the first page of the section, not from-to). Due to the fact that the page numbers can only be determined when everything else is complete, the table of contents is done at the end. If you refer to particular pages in your text, you should cross-check them to make sure that the references are correct. The following parts of your paper are included in the table of contents:

- List of abbreviations (Roman numerals)
- List of figures (Roman numerals)
- List of tables (Roman numerals)
- Text sections starting with the introduction (from here on Arabic numerals starting with page 1)
- Appendix
- Bibliography

The headings in your paper should be done in such a way that the structure of your paper becomes obvious at first glance.

If your table of contents is quite long (say more than two pages), you can precede it with a „**Content Summary“** or „Short Overview“. In this, the main headings of your paper, usually the first two headings on each level, are listed on one page.

5.4 Tables and Figures

If an academic paper contains tables or figures, the following rules apply:

- Tables and figures are numbered sequentially (simply or in relation to the chapter).
- The figures or tables have to be labelled either below or above, e.g. Figure 7: Graphic Representation of the Marketing Mix.
- Tables must contain text which should include the following criteria:[1]
  - a definition of ‘what, where and when’
  - headings including “by”, e.g. “Tax income in Germany 1977 by tax bracket and federal state”.
- The source must be cited (see citation rules). This also applies to tables and figures in the appendix. These sources must also be cited in the bibliography.
- If you turn several tables or figures by other authors into a new table or figure, you have to cite all the sources.
- If you refer to one of these charts in your paper, you have to include the table or figure’s number. To make it easier for the reader, you should also give the number of the page where the chart is to be found.
- The lists of figures and tables come after the table of contents and are numbered with Roman numerals.
- If you have made up or modified the table or figure yourself, this has to be marked with “author’s own”.

Example for the Layout of a Figure:

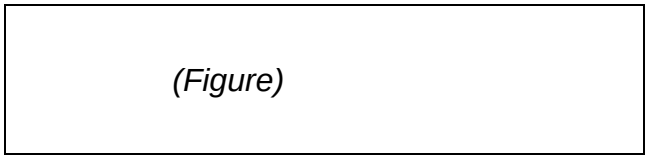

Figure 1: Graphic Representation of the Marketing Mix

Source: Second name, abbreviated first name (year of publication): Title, edition abbreviated, place of publication: Name of publisher, page abbreviated. page number

or

Source: Own diagram based on: Second name, abbreviated first name (year of publication): Title, edition abbreviated, place of publication: Name of publisher, year of publication, page abbreviated. page number

Example for the Layout of a Table

[1] see Deutsches Institut für Normung (Ed.) (1978): DIN 55301 Gestaltung statistischer Quellen, p. 3.

Table 1 Tax Income in Germany 1977 by Tax Bracket and Federal State

	Column header	*Column header*
Row heading	Xxx	xxx
Row heading	Xxx	xxx
Row heading	Xxx	xxx

Source: Second name, abbreviated first name. (Year of publication): Title. Complete URL (retrieved on: Date*).*

The rules for referencing sources are the same for figures and tables as for any other citations (see chapter 4.4).

5.5 Bibliography

„A bibliography contains the references of all the sources used in a scientific study, whether verbatim or paraphrased".[1] This means that those passages that you have read in your literature research but didn't use do not have to be included in the bibliography.

If you want to use short references in your text, your bibliography must be structured in such a way that the full reference can be found quickly. The easiest way to do this is to compile an alphabetic index[2]. In addition to the rules set out in chapter 4.4, you should also heed the following points:

- If several authors have the same second name, you have to index them using the first letters of the first names.
- If you are citing several works by the same author, they are indexed by their year of publication (starting with the oldest one).
- If you are citing several works by the same author which have been published in the same year, these are distinguished in the short reference by a lowercase letter (e.g. 1996a). In the bibliography, works are sorted by the lowercase letters.
- The author's first names may be written in full (not mandatory).
- Page numbers are not included with the exception of articles from anthologies and magazines, in which case the pages or columns of the articles used must be given in full, i.e. from/to.

There are no rules concerning the graphic layout. Usually, the relevant information for each work is printed in a single column. You can highlight the author's name in bold print or indent the second line.

Any individual references in the bibliography and list of references are structured in the same way as full references (see chapter 4.4). E.g. second name, abbreviated first name (year of publication): Title, edition, place of publication: Publisher

[1] DUDEN (Ed (1998): Wie verfasst man wissenschaftliche Arbeiten, 2nd ed., Mannheim: Dudenverlag, p. 146.
[2] see DUDEN (Ed.) 1998, p. 147.

Here are some examples of the different types of sources. You will find additional examples in the bibliography of these guidelines.

Monographs with one or more authors

FRIEDRICHS, J. (1990): Methoden empirischer Sozialforschung. 14th ed., Wiesbaden: VS Verlag

BEREKOVEN, L.; ECKERT, W.; ELLENRIEDER, P. (1991): Marktforschung. Methodische Grundlagen, 5th ed., Wiesbaden: Gabler

Anthologies

KRUSE, O. (2007): Schreibkompetenz und Studierfähigkeit. Mit welchen Schreibkompetenzen sollen die Schulen ihre Absolvent/innen ins Studium entlassen, in: Becker-Mrotzek, M.; Schindler, K. (Ed.) (2007): Köbes: Kölner Beiträge zur Sprachdidaktik. Reihe A Texte schreiben, Köln: Gilles&Francke, pp. 117-143

Online Sources

KASSEL, S.; THIELE, M.; BÖCK, M. (2006): Zitieren in wissenschaftlichen Arbeiten. URL: http://www.daf.tu-berlin.de/fileadmin/fg75/PDF/Zitieren.pdf (Last updated: 21 October 2015)

5.6 Appendices

As described earlier, additional material should be included in the appendix. This might be documents from the company that helped in the preparation of the paper as well as statistics, tables, the exact transcription of interviews and evaluations of surveys etc. You should only include appendices that you referred to in the main text of your paper. There are no rules on the order of the appendices. If the individual parts are not linked by any particular system, the order is usually determined by where they appear in the text. This means, the part of the appendix which is first mentioned in the text will also come first in the appendix. The individual parts of the appendix are numbered (e.g. Appendix 1). In your reference in the text, you should indicate the number and page of the appendix to help readers find it. In the table of contents the individual appendices are listed complete with their page numbers. The appendix is preceded by an index which lists each individual appendix.

5.7 Declaration on Honor

Academic papers have to be the author's own work and must not contain any plagiarism.
Therefore, the 'General Part' of our Course and Exam Regulations (Studien- und Prüfungsordnung, SPO) stipulates that students have to confirm in writing that they composed the paper themselves and that they have not used any other sources or means than the ones listed.

In the declaration on honor they confirm that the paper is entirely their own work.
The declaration on honor has to be signed stating the date and place.

5.8 Confidentiality

The author has sole copyright of the paper. Third parties are not allowed to use any of the content of the paper without a contract. Nuertingen-Geislingen University encourages publication of the paper by adding it to the library collection as this is a good way of acknowledging the effort that has gone into it. This requires an explicit consent to publication when the paper is handed up.

Information on online publication and a consent form can be found on the university's homepage under "library", "Hochschulschriftenserver":

https://www.hfwu.de/bibliothek/literatursuche/.html

Also, if you want to publish your thesis, an agreement needs to be signed between the author and the supervisor.

If, for some reason, there is a wish or an obligation to treat the thesis as confidential, this can be safeguarded by adding a non-disclosure clause. The university or the supervisors will not sign a separate confidentiality agreement in this case.

The following examples of non-disclosure clauses can be used on a separate sheet which will be inserted after the cover sheet.

Examples for non-disclosure clauses:

1. This thesis contains confidential information. Any publication or duplication - even in parts - is not permitted without the explicit consent of Company XYZ. The thesis may therefore only be made available to the examiners and members of the board of examiners.
2. This thesis contains internal information and confidential data of Company XYZ. Therefore it may only be used for exam purposes and neither made available to third parties without the explicit consent of Company XYZ nor be published as a whole or in part.
3. This thesis was written for Company XYZ. It contains internal data and information about the company. Therefore, this thesis has a non-disclosure clause and may only be read by the examiners of Nuertingen-Geislingen University and employees of Company XYZ. The thesis may only be duplicated, published or passed on to any third parties with the explicit consent of Company XYZ.

5.9 Cooperation with a Company

The opportunity to research a problem in-depth and in a highly focused way over several months does not arise very often during your training and even less often later on in your job. A thesis is therefore a wonderful chance to delve deeply into a specific topic and gain a certain expert status.

1. There are Many Good Reasons for a Practical Thesis!

A thesis is a long-distance run and not a sprint. Therefore, the essential factors of success are identification with your topic, motivation to work on the paper day after day and the ambition to systematically research the questions which continually come up. There are many good reasons for a practical thesis!

- **Your thesis serves a purpose!** If you manage to come up with reliable results, there is a good chance that they will be implemented in the company. This means your thesis will have an impact and instigate change. That is surely a much more motivating perspective than the prospect of writing a thesis which will end up in the archives without getting any attention whatsoever.
- **Your thesis is relevant for others**! Companies generally have an interest in the results you come up with in your thesis. You will be communicating with your company supervisor and other employees while you are working on your thesis. You become part of a social network and the project character of your work enables you to work as part of a team. This means that the sometimes lonely hours spent at the desk, which are common when writing a thesis, are less frequent.
- **Your thesis will qualify you to start out on your career path!** At Nuertingen-Geislingen University you are trained for your future career. If during the course of your thesis you have proven that you can apply what you have learned in the form of complex projects and topics relevant to companies, you will have a distinct advantage when you apply for a position after your degree.

2. You Will be Serving Two Masters: A Practical Thesis has Different Demands!

If you undertake a practical thesis, the normal two-way supervision relationship between university/professor and student is turned into a “menage à trois” with the inclusion of a company. This can mean that there are different expectations from the company than those of your supervising professor, at least as far as the emphasis placed on content as opposed to results is concerned. The main success factor of a practical thesis is being able to balance these sometimes conflicting objectives: generally valid results that are firmly grounded in the theory on the one hand and a company’s viewpoint with an immediate implementation potential on the other. If you notice that differences arise, you should encourage a telephone conversation or a personal meeting between the company supervisor and your supervising professor.

You should also bear in mind that practical theses are often more time-consuming than those without the involvement of a company. The above mentioned coordination process means that the student acts as project coordinator and is responsible for keeping both parties informed and often also for balancing the interests between the two parties.

You should also take into consideration that researching industry and company specific problems can be time-consuming as it often requires comprehensive primary and secondary research. When you are looking for a partner for a practical thesis, you should first consider the company where you did your internship or a similar company or one with connections to the same industry or with similar business activities. What you have learned in your major in your degree program will also be of

help. If you can build on what you have already learned and experienced, your preparation time will be shorter and the quality of your paper and your grade might improve.
Other possible access points for finding a company partner for a thesis are your supervising professor's contacts, homepages of relevant companies and also job portals, job search engines and career fairs.

3. Commitment and Confidentiality - Two Key Success Factors!

If you decide to do a practical thesis, the success of the project is largely dependent on the support you get from the company. If priorities there change or there is a change of staff, interest in your thesis might wane fast. During the planning stage of your project you should be aware of such issues and if possible safeguard yourself against them.
If you know the people and the company you are dealing with from your internship, you are in a better position to assess the situation. Conditions are even better if you undertake your thesis during your internship. Through your work with the company you will get to know the day-to-day business, get easy access to people and information and also get paid.
Even though you might do your thesis during your internship or know the company from previously working for them, it is still recommended to draw up an agreement in writing which is signed by both parties. You will have to specify the objectives and the content of the paper, the support and pay you get from the company, whether they cover any costs and how copyright is dealt with. In this context, companies usually ask for a limited non-disclosure clause together with a confidentiality agreement which is also to be signed by the supervising professor. In such cases saving the data outside of the area of work is usually frowned upon.

4. Your Supervisor in the Company Can Undertake the Second Review of the Thesis!

If you are doing a practical thesis, it is possible for your supervisor in the company to undertake the second review. This should first be discussed with your supervising professor. It is also a prerequisite that the company supervisor has at least a Bachelor's or Master's Degree or a similar qualification. This will need to be verified. It needs to be recorded in writing and a form needs to be filled in which the supervising professor must sign.
There is a lot of leeway in the form of the review. The grading criteria need to be plausible, however. A detailed second review is only required if there is a big difference in the grade both examiners want to award. In all other cases, a brief review is sufficient where only any differences to the first review are pointed out. The second examiner then awards his/her own grade in decimals of one third (x.0, x.3, x.7). The final grade is the mean of the first and second examiner's grades.

6 Possible Grading Criteria for Academic Papers

Composition	Cover sheet, lists, appendix, declaration on honor		
Main Task	**Macro Level (The Whole)**	**Meso Level (Sections)**	**Micro Level (Statements)**
Contents (Statements about the topic)	• Understanding of the topic: Up-to-dateness, level, complexity, completeness • Realistic objectives • Results that match the research question • Good summary / conclusion	• Does the text refer to the questions posed? • Concentration on what is essential • Correct definition of the problem • Well-founded arguments • No errors with regard to the content	• Does the text relate to the headings? • Definitions and delineations • Use of technical terms • Objectivity, neutrality • Critical distance
Scientific Methods (Appropriate use of sources)	• Quantity of the sources: Completeness • Quality of the sources: Validity • Are sources up-to-date?	• Were the sources related to the research question? Were they complete and did they match? • Were the sources structured into categories[1]?	• Correct format of citations • Correct format of works cited • Correct meaning • Occurrence of citations (no statement without reference)
Scientific Methods (Appropriate use of data and methods)	• Adequate, theory-based research design • Own solutions	• Suitable data, collection and analysis methods: Quantitative, qualitative, theory-based	• Correct presentation of outcome • Critical distance
Coherence (Structure and justification of the statements on the topic)	• Logical composition, common thread • A discerning structure suitable for the topic	• Sensible proportions of the individual sections • Logical linking of the individual sections through arguments • Verifiable conclusions	• Clarity and comprehensibility of the arguments • Do the arguments relate to each other and to the research question?
Practical Relevance (Relevance of the results)	• Do the questions and the arguments make sense? • Do the solutions have a practical value?	• Were all relevant aspects considered?	• Documentation of cooperation with a company
Presentation (Professional looking presentation)	• Layout: Font, page area, pagination, consistency throughout	• Clear structure: Headings, paragraphs • Tables, figures, diagrams with headers, sources	• Language: Style, expression, syntax, grammar, punctuation • Understandable sentences • Visualizations explained

We would like to point out once more that even though these criteria are generally recognized, lecturers might interpret and weight them individually. Before you start, you should check with **your supervisor**, if there are **different or additional specifications** that you should consider.

[1] Monographs, anthologies, periodicals, online sources.

Appendix

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Appendix 1 Template for Cover Sheet

Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen

Fakultät Wirtschaft und Recht

Bachelor's Thesis

in the Degree Program Name of Your Degree Program

leading to the Academic Degree of
Bachelor of Arts (B.A.)

Insert Title of Your Bachelor's Thesis

presented by:

Insert First Name and Second Name

Starting Date:

Closing Date:

First Examiner: Insert: Prof. Dr. First Name and Second Name
Second Examiner: Insert: Prof. Dr. First Name and Second Name

Appendix 2 Template for Declaration on Honor

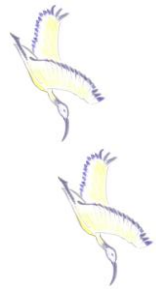
DECLARATION ON HONOR

I hereby declare on my word of honor:

1. The paper presented is my own work and was composed without any outside help.
2. Any direct quotations from the literature used as well as any ideas of other authors have been marked clearly in my paper.

I realize that if I give false evidence in this declaration I could be prevented from taking further examinations according to article 15 section 3 SPO – AT Bachelor or article 14 section 3 SPO – AT Master and might be de-registered from my degree program.

Place, (Date) (Signature)



Cross-Cultural Differences in the Perception of Group Entitativity and Autonomy

University of Nebraska Omaha

Koichi Kurebayashi & Carey S. Ryan

Introduction

Group entitativity is defined as the perceived "groupness" of groups (Campbell, 1958) and the meaningfulness of a group as a social category (Brewer et al., 2004). Several group properties are associated with perceived entitativity (Brewer et al., 2004; Lickel et al., 2000). Some are viewed as fixed and called *Essence Properties* (e.g., trait, physical appearance). Others are malleable and context dependent (e.g., common goal, motivation, cooperation); these are called *Dynamic Properties* .

Brewer et al. (2004) argued that entitativity helps people to interpret and predict groups and that different group properties help people in different cultures to estimate entitativity. These differences likely reflect cultural differences in implicit theories (Hong & Chiu, 2001). Essence theory, for example, refers to the assumption that people or groups have fixed characteristics that determine their behavior. People who hold an essence theory are likely to focus on the essence properties of groups. In contrast, people who hold a dynamic theory are likely to see context dependent factors as the determinants of behavior and may thus focus on dynamic properties.

Research has revealed differences between Americans and Japanese in a variety of domains, including self-structure, value orientation, attribution style, and social identity (e.g., Heine et al., 1999; Kasima, & Triandis, 1986; Kitayama et al., 1997; Yuki, 2003). Particularly relevant to the present research is the finding that Americans tend to rely on essence properties, whereas Japanese focus more on dynamic properties when making social judgments (e.g., attribution, identification). These tendencies were expected to be evident in the context of entitativity judgments.

Another cultural difference concerns group autonomy beliefs. Menon et al. (1999) showed that American news reports included more individual-level attributions, whereas Japanese news reports included more group-level attributions. They argued that these tendencies reflect cultural differences in implicit theories of the autonomy of individuals and groups; Japanese believe more strongly in the autonomy of groups than do Americans

However, it is likely that perceptions of group autonomy depend on the entitativity of the group that is judged. Groups that are seen as more entitative (i.e., as more meaningful) may be perceived as more autonomous. The association between entitativity and autonomy may also be stronger in Japan than in the U.S., because Americans tend not to believe in the autonomy of groups.

The Present Investigation

We examined differences between American and Japanese participants in the relative contribution of essence and dynamic group properties to perceived group entitativity. It was expected that essence properties would predict Americans' perceptions of group entitativity, whereas dynamic properties would predict Japanese participants' perceptions. It was also hypothesized that Japanese would exhibit stronger group autonomy beliefs than would Americans and that the relationship between group autonomy beliefs and entitativity would be stronger in Japan than in the U.S.

Method

Participants

Ninety-six American undergraduate students (36 male and 60 female, *M* age = 23.56) from the University of Nebraska at Omaha (UNO) and 99 Japanese undergraduate students (29 male and 70 females, *M* age = 20.51) from Osaka University participated in this study.

Procedure

American and Japanese participants completed a questionnaire in groups of about 10 to 25 at their respective universities. Instructions were given in participants' native languages. Each page of the questionnaire contained one item; participants provided ratings for 15 aggregates of people (see Table 1) with respect to the item on that page. Items assessed perceived group entitativity, essence properties, dynamic properties, and group autonomy beliefs. Participants provided ratings on 7-point Likert scales. Scales generally showed adequate reliability both in the U.S. and in Japan (αs ranged from .445 to .886).

Essence properties. Four items assessed essence properties. For example, participants rated the extent to which members in the group shared similar personality characteristics and the extent to which members in the group had similar backgrounds.

Dynamic properties. Four items assess dynamic properties. For example, participants rated the extent to which members in the group experienced the same outcomes and the extent to which members in the group shared the same goals.

Perceived group entitativity. Seven items assessed perceived entitativity. For example, participants rated the extent to which they perceived each group as a coherent unit, the extent to which they perceived people in each group to feel unified, and the extent to which they perceived the people in a group to be organized.

Group autonomy beliefs. Three items assessed group autonomy beliefs. Items included "In my society, this group takes control of the situations around them and exercises free will," "The norms in my society say that this group should take control of the situations around it and exercise free will," and "This group sets a course for itself independent of the influences surrounding it."

Results

Mean entitativity judgments were similar in the U.S. and Japan (see Table 1) and also similar to the findings in Lickel et al. (2000). Mean judgments of group properties, entitativity, and group autonomy beliefs (computed across the 15 groups for each subject and then across subjects) are reported in Table 2.

Following Lickel et al. (2000), within-subject correlational analyses were conducted. Specifically, a correlation matrix among two types of group properties and group entitativity was computed for each participant's ratings of the 15 groups. Mean correlation coefficients from the distribution of correlation coefficients (Fisher's z transformed) were then estimated for each variable pair separately for American and Japanese participants (see Tables 2 & 3).

As expected, essence and dynamic properties were positively related to entitativity for both American (*M*s=.719 and .782, *p*s<.05) and Japanese (*M*s=.688 and .800, *p*s<.05), indicating that groups with higher levels of essence and dynamic properties were perceived as more entitative.

We also estimated within-subject regression equations; entitativity was regressed on essence and dynamic properties and cultural differences in the mean unstandardized partial regression coefficients were tested. Both essence and dynamic properties were significant unique predictors of entitativity both in the U.S. (*M* slopes = .416 and .592, *p*s<.05) and in Japan (*M* slopes = .259 and .655, *p*s<.05). The interaction between culture and group property was significant, $F(1, 192) = 7.082$, $p = .008$. Specifically, dynamic properties predicted entitativity equally well in Japan and the U.S., whereas essence properties predicted entitativity better in the U.S. than in Japan, $t(192) = 3.163$, $p = .002$.

As the means in Table 2 indicate, overall, Americans showed stronger autonomy beliefs than did Japanese, $t(191) = 2.525$, $p = .012$. To test the relationship between group entitativity and group autonomy beliefs, within-subject correlations were computed. As expected, entitativity was positively related to group autonomy beliefs both in the U.S. ($M = .58$, $p < .05$) and in Japan ($M = .24$, $p < .05$). In short, more entitative groups were seen as more autonomous.

Finally, each individual's ratings of group autonomy beliefs for the 15 groups were regressed on their entitativity ratings. The mean unstandardized regression coefficients were .55 and .16 for American and Japanese participants, respectively. The difference between these coefficients was significant, $t(190) = 6.825$, $p = .000$. The result indicated that perceived entitativity was a significantly better predictor of group autonomy beliefs in the U.S.

Discussion

The results about the relationships between entitativity and two types of group properties are generally consistent with the results of Lickel et al. (2000) and Brewer et al. (2004). In short, both essence and dynamic properties were important for Americans. The results further indicate that the relationships of the two types of group properties to entitativity differs in the U.S. and Japan. As expected, essence properties were a better predictor of entitativity in the U.S. than in Japan. Additionally, the larger difference in the size of the unique contribution of essence versus dynamic properties in Japan indicates that Japanese people tend to focus on dynamic properties even when they make judgments about groups instead of individuals.

Other findings were that Americans' showed stronger group autonomy belief and entitativity was better predictor of group autonomy beliefs in the U.S. These findings are inconsistent with Menon et al.'s (1999) argument that Japanese people may hold stronger group autonomy beliefs. These results may imply the existence of a qualitative difference in the nature of entitativity between the two cultural groups. Japanese people judge entitativity based on dynamic properties, which may indicate that Japanese think of groups as context-dependent entities. Autonomy in this study was defined based on the concepts of "free will" and "independence from the environment." Clearly, the notion that groups are influenced by the context is inconsistent with this definition.

There are, of course, limitations to the present study. One is the lack of direct assessment of individual-level implicit theory. Data were also collected from university students; it is unclear whether these findings would generalize to the general population of Japanese or Americans.

In conclusion, this study suggests the existence of qualitative differences between Americans and Japanese in the concept of entitativity. Specifically, entitativity seems to be associated with the attribution of a fixed disposition to the group in the U.S., but this association appears to be weaker in Japan. The results also suggest that Japanese people are more likely than Americans to be dynamic theorists in both individual and group-level judgment processes.

Table1
Mean Entitativity Ratings for the Groups Selected for This Study

Group Category	Aggregate of People	Entitativity Ratings			
		American		Japanese	
		M	SD	M	SD
Intimacy Group	Members of a family	5.99	.80	5.71	.90
	Friend who do things together	5.20	.87	4.47	1.05
	Two people in romantic relationship	5.40	.93	4.76	1.30
Task Group	Members of an orchestra	5.45	1.13	6.02	.72
	Company committee that design new product	5.21	1.03	5.67	.86
	Airline flight crew	5.41	.97	4.85	1.40
Social Category	Women	3.86	1.33	3.27	1.28
	Teachers	4.59	1.04	3.94	1.23
	Doctors	4.45	1.14	4.26	1.31
Loose Association	People living in the same neighborhood	3.75	1.11	3.96	1.07
	People who enjoy classic music	3.07	1.05	3.34	1.15
	People living in a retirement home	4.09	1.05	4.59	1.08
Transitory Group	People at a bus stop	2.02	.97	1.73	.73
	People in line at a bank	1.85	.83	1.7	.73
	People in the audience at a movie	2.27	1.01	2.29	.97

Note. Group category is based on Lickel et al. (2000).

Table 2

Mean Ratings of Essence and Dynamic Properties, Entitativity, and Group Autonomy Belief

	Essence Properties	Dynamic Properties	Entitativity	Group Autonomy
American	3.07	4.16	4.17	4.15
	(1.47)	(1.63)	(1.65)	(1.55)
Japanese	3.50	4.04	4.04	3.87
	(1.59)	(1.75)	(1.07)	(1.42)

Table 3

Mean Correlation Coefficients among Essence and Dynamic Properties, Entitativity, and Group Autonomy Belief for American Participants

	Entitativity	Essence	Dynamic	Autonomy
Entitativity	-	.719	.782	.598
		(99)	(99)	(99)
Essence		-	.637	.524
			(99)	(19)
Dynamic			-	.532
				(91)
Autonomy				-

Note. All correlations were significant at .05 level.

Table 4

Mean Correlation Coefficients among Essence and Dynamic Properties, Entitativity, and Group Autonomy Belief for Japanese Participants

	Entitativity	Essence	Dynamic	Autonomy
Entitativity	-	.688	.800	.241
		(99)	(99)	(98)
Essence		-	.689	.272
			(99)	(98)
Dynamic			-	.217
				(98)
Autonomy				-

Note. All correlations were significant at .05 level

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Impaired visual conjunction search in children with developmental dyslexia

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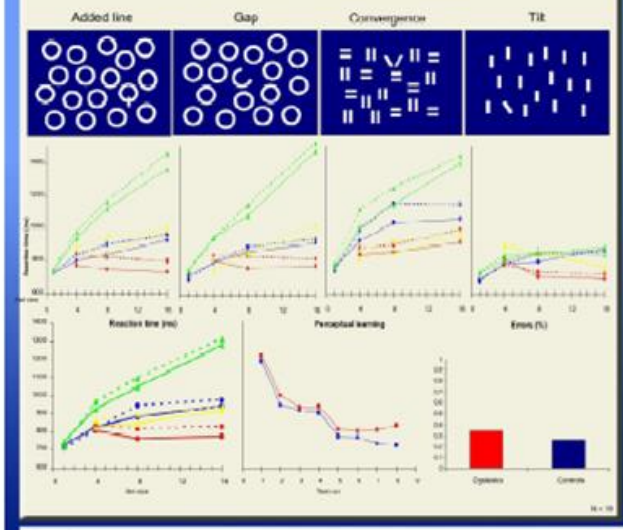
Aim

Developmental dyslexia is a neurological condition which affects about 10% of the school population and manifests itself as a deficit in reading and writing ability, without any impairment in general intelligence or schooling. Our aim was to investigate whether developmental dyslexia involves deficits in visual search tasks. We investigated the performance of dyslexic children of different ages in a number of visual search tasks, including attention-dependent and -independent tasks.

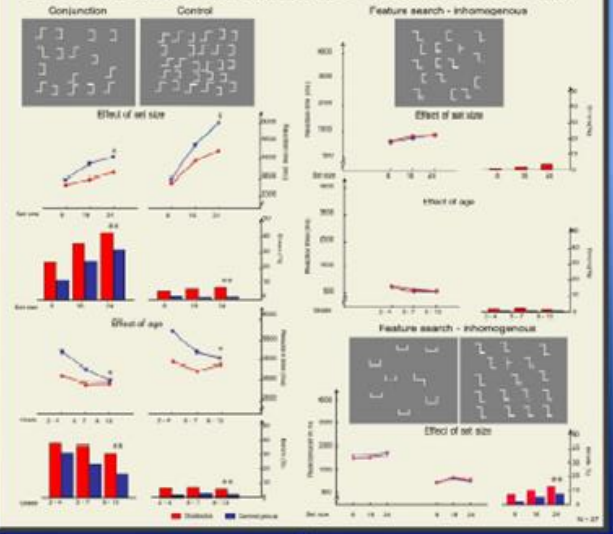
Methods

The experiments were performed with 64 dyslexic children aged 7 – 18 years in three age groups (8 – 12, 13 – 15 and 16 – 18 years) and an identical number of control children matched for age and gender to the experimental children. The task was to find a deviating target item amidst a number of distracting items. We investigated the following conditions: feature search for form; feature search for orientation and form; conjunction search for orientation and form; feature search for orientation or colour; conjunction search for orientation and colour. Response latencies and error rates were recorded.

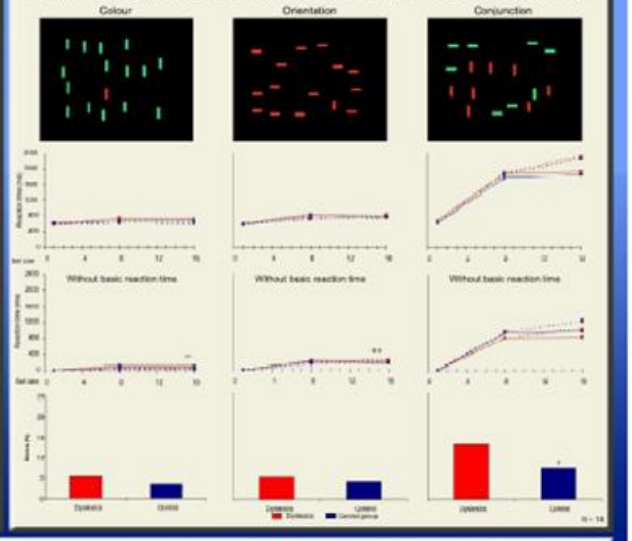
Experiment 1 (Basic feature search)



Experiment 2 (feature and conjunction search for orientation & form)



Experiment 3 (feature and conjunction search for colour & orientation)



Results

We found that the 8 – 12 year-old dyslexic children were similar to the control groups in feature search tasks for form, but significantly slower in the feature search tasks for color and orientation. Conjunction search tasks yielded shorter reaction times, but significantly increased error rates in the dyslexic in comparison to the control children, indicating that the search process might have been ended prematurely. These differences diminished in the older children. No differences were found in basic visual functions like eye alignment, refraction, visual acuity, or contrast sensitivity.

Conclusion

These results demonstrate that children with developmental dyslexia show remarkable attentional deficits, involving mainly goal-directed tasks. The deficits in visual search are more salient at younger ages, reflecting a possible developmental delay. We suggest that developmental dyslexics show deficits in an extended attentional cortical network, reported to involve structures in the dorsolateral prefrontal and the posterior parietal regions on the right side of the human brain.

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