Writing a Thesis at the Bachelor or Master level
Department of Business Studies
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1. Introduction
This document is written in order to provide a basis for thesis-writing in the Department of Business Studies at Uppsala University. It is the outcome of study, personal experience with supervision of students, and discussions with colleagues at different universities but especially here at the Department in Uppsala. Students that write their Bachelor or Master thesis can use this report as guidelines of thesis-writing and supervisors can use it as a basis for their guiding. After the next section that discusses the aim of our course, this document presents some information highlights about the choice of a topic, how to formulate a research question, searching literature, the empirical study, data analysis and finally about drawing conclusions. As such, this report follows more or less the standard outline of a thesis.

2. What is the aim of a course in thesis writing?
During the course a student should learn how to write a thesis. At the end of the course a student should be able to write a finished piece of academic writing. Such an academic paper can have different formats, but a good suggestion is to follow the format of papers published in academic journals in the respective fields of interest. Although we do not actually expect the same level of rigor in terms of theory and empirics of our students as shown in these published papers, we want students to show that they are able to:

1. choose a topic interesting to both practice and academic audiences that is supported by a good motivation / argument;
2. formulate an academic research question;
3. find and review relevant academic literature;
4. design an empirical study in relation to the research question and grounded in the theory reviewed;
5. collect and analyse empirical data;
6. draw logical conclusions based on the above with a certain relevance for theory and practice.

Specific for this course is that it demands an active learning attitude from students, even more than other courses do. Students are fully responsible for the end product, the thesis, and also for the choices they make during the process of the thesis writing, like the choice of theoretical focus or choices regarding the empirical study. Teachers are supervisors and can

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1 This document was written in English by Rian Drogendijk because she is not a native speaker in Swedish. Students are allowed to write their thesis in Swedish or English, but seminars are normally held in Swedish.
guide and advice students, but should not interfere too much: the aim is explicitly that students learn to write their own thesis.

3. Topic choice

There are several ways to choose a topic for your thesis. You could get your inspiration from a newspaper article describing an event, a trend, or an organization or from an academic journal article that lists interesting further research suggestions. Another option is that you do your study on request of an organization, because they have a specific question that they would like to be investigated. Good thesis topics make you enthusiastic, so you want to know more about them. It may be the perfect timing of your study that makes it so interesting. Or perhaps your topic is very useful or relevant from a theoretical and/or a practice viewpoint. It may also be a good topic because you already know something about it and want to build on your knowledge. Most of all you should find it fun to investigate the topic you choose. Anything is possible! But, you should be able to explain why your topic is so interesting, relevant, and important. In other words: your topic should pass the “so what question”: why are we reading this? You should convince your reader that it is worth reading your thesis; that something interesting can be learned through reading it.

**Box 1: “An interesting topic”**

“I have chosen to study customer satisfaction among clients of [company X], because it is interesting.”

Why is it interesting? Well, maybe for company X, but that is not enough: it should also be interesting for some “larger” reason, like that many companies have a similar problem to company X (so the study is timely, follows from a documented problem). Perhaps company X is a frontrunner in its customer policy and testing whether that helps increase customer satisfaction is a relevant issue for other companies considering this approach. Or it is interesting from a theoretical point of view: most studies have focused on companies in different sectors than company X, so you could investigate whether the theory on customer satisfaction holds in this sector. Or finally, perhaps company X’ approach is totally different than the theory suggests; why does it work anyhow?

In order to convince the reader that your thesis is interesting you have to embed your topic in a larger discussion that gives it its salience and relevance. This larger discussion almost always has a component of practical relevance and theoretical relevance, though depending on the topic you can choose to focus more on one or the other.
4. Research question

From your research idea you distil (preferably) one research question that your study will answer. Your research question should most of all be clear. It should contain references to the context of your study (are you going to investigate a group of people, a certain type of organization, an economic phenomenon), and to the main concepts and whether and how these concepts are linked. The question also reflects the purpose of your study; whether it is

- exploratory (when you want to find out “what is happening” or “how things work”, when you want to understand a problem better),
- descriptive (when your study offers an accurate description of an organization, a process, or a situation), or
- explanatory (when your study seeks to explain relations between variables, in the context of an organization or a situation).

All of these aspects need further clarification in the text right before or following the presentation of the research question. For example, how do you define young entrepreneurial companies? And, what do you understand to be included in “leadership characteristics”; how do you define “success”? In you introduction chapter you do this very shortly; you can provide more depth in the literature review.
Box 4: Examples of problematic research questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Problems with this question</th>
<th>Better formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Are the customers of “Lidl Uppsala” satisfied?</em></td>
<td>• Too narrow: why would it be interesting to study clients of this particular supermarket in this one town? • Too specific: leads to a ‘yes-or no-answer’: avoid that!</td>
<td><em>Which factors determine customer satisfaction with low-budget supermarkets in comparison to high-end market supermarkets?</em></td>
</tr>
<tr>
<td><em>How do cultural differences affect international business?</em></td>
<td>• Too broad; no focus: ‘international business’ is a very broad field of study • No connection to context</td>
<td><em>How do national cultural differences affect small firms’ choice of entry mode in foreign markets?</em></td>
</tr>
</tbody>
</table>

Another characteristic of a good research question is that it is doable, “researchable”: you should be able to also do the empirical investigation within the short period given. Your question should further neither be too narrow, nor too broad (see box 4).

Finally, your research question should make a connection with established theories and research. You can do that through using relevant concepts in a good way, and through defining a relevant context for your study. A good thesis contributes to existing knowledge, whether theoretical or practical, but also if you contribute to a practical problem you should ground your study in existing theory. A smart way to make sure that your research question links to theory is using the literature in the research area of your interest to define potential research questions. Authors of articles in academic journals very often list suggestions for future research at the end of their papers. You can also replicate a study you read about, or vary a (small) part of its design. Below we discuss how you can find relevant literature, but first we shortly address purposes of research once more.

4.1 Purpose

In your introduction you need to formulate the purpose of your study precisely. In describing your purpose you build on your research question, and the clarifications you have given regarding the context and the concept definitions. Above we already mentioned the most important overlaying purposes: to explore, to describe and to explain. These overlaying purposes can result in several more refined formulations. In relation to the example above in box 3 you could for instance formulate: “The purpose of our study is to investigate the causal relationship between leadership characteristics like X, Y and Z and the success of young entrepreneurial companies in the Uppland region regarding their increase in market share.” Many alternative formulations are possible, also less specific ones like: “This study aims to provide an explanation for how leaders and their characteristics can influence the success of
young entrepreneurial companies”. Give some information about your empirical study; about how you will go about to fulfil this purpose. The more specific you can be the better.

**Box 5: Useful verbs and strings for formulating purposes:**

You can use verbs like:
- To investigate, examine, analyze, study, explain, etc …
- To describe, develop, test, present, explore, relate, etc … (these verbs give already a bit more content to your purpose than the first list)

Forming sentences like in the following suggestions:
- describe a phenomenon, an organizational process
- develop an understanding, a model, a more complete model …
- test the relationship between variables, the causal effect of …
- examine the influence of one factor on the other, how organizations behave in a certain context …
- explore the effect of a variable on something
- investigate certain behaviour in this particular context of …
- describe the characteristics of a phenomenon, a process …

Plus, usually you add a string beginning with:
- in order to, because
- how, whether, why, when, who, etc…

5. **Find relevant literature**

Before discussing strategies for literature searches, we first need to make a distinction between background information and academic literature. You will most probably need both for your study, but there are important differences between them.

Background information can concern descriptions and factual information about events, situations, societal problems, trends or companies, organizations, countries, persons. You need such information to clarify or maybe even justify the context of your study. A good background description further provides the reader with the necessary details needed for understanding the choices you make in your review of academic literature and of the choices you make in your empirical study. Academic literature is always the result of academic research; that is, research based on questions grounded in theory, seeking to add to theory, using systematic research designs.

Sources for background information are consequently more varied: they range from daily or weekly newspapers, books, professional journals, Internet, and also include academic publications. Academic literature, in contrast, is published in academic books or journals.
5.1 Search strategies

There are several ways in which you can search for relevant literature, be it background information or academic literature. In the following we describe three important strategies:

- Following recommendations
- Using keywords in search machines
- “Scanning” recent issues of regulars (mainly academic journals)

The simplest way to find literature is to follow the recommendations of people that have knowledge about your field of study. This includes practitioners in the field you happen to know, teachers, colleague students, literature lists of courses in the field (!), old theses, etc. Of course, it remains your own responsibility to check the real value of the recommended sources for your study!!

When you want to use keywords in order to search literature, the first choice you make is the search machine to use. A good start is the collection of search machines as offered by our own library’s services (library personnel is available to support your search!). More general search machines are for example DISA, for books, and Samsök, for journal articles. But the library also offers many more specialized options: visit http://www.ub.uu.se/sg/fek. Depending on your need you can choose the database(s) in which you search.

The next important choice to make is which keywords to use. Keep in mind that your keywords should be neither too specific (“naturally coloured wool export”), nor too broad (“international business”). Make smart combinations of two or three words or strings and vary those in order to maximize your reach. Tip: use the literature you already have for selection of keywords!

Box 6: “I couldn’t find any literature…”

“We have tried to find literature about our topic, but we found no single publication!”.

This cannot be true! If you do not find anything, you did not search well. Normally, your problem is which sources to select among the pile of literature available.

Take the following example: when a research question would be “How should Swedbank adapt its HRM policies in its newly established Albanian unit”, you will probably not find literature when you use the keywords “Swedbank” + “Albania” + “HRM”.

Obviously you will have to broaden your search. For instance, you should start using combinations of keywords like “Service firms” + “international” + “HRM”, or “International HRM” + “adaptation”, or “Eastern Europe” + “managing people”, or a variation of such broader terms. Use the ‘hits’ you get in first searchers to define keywords for more focused searches, but never expect anyone to have exactly written about the same thing that you plan to do: if the perfect publication already exists, what are you writing then?
A journal scan is a focused way to search for academic literature in a certain area. You could use this strategy also when you develop your research problem and need input from current academic literature. A journal scan follows the following steps: 1) select the main journal(s) in the field. You can find a list with top journals per field of study at our department on our course website. You can also use journals that frequently recurred on course literature lists in the field of interest. 2) Read abstracts of all articles in the most recent issues of the selected journal. Go back one or two years as a start, but take more years, or more journals, if that does not result in enough “hits”. 3) Read through the most interesting articles. Remember that they most likely will not deal with the exact topic that you are interested in, but they may for instance use a theory or a model that you think could be relevant, or they may be set in a similar context (industry, country, organization). 4) Evaluate which articles or parts of them are most valuable to your study. 5) Follow the most promising references that are made in those articles to expand your search.

In most cases you will probably use a combination of the search strategies described.

**Box 7: “When to stop adding literature?”**

"My pile of literature is growing and growing and it all seems relevant for my study: I don’t know when to stop searching and adding new literature."

The simple answer to the question “when do I stop” is “when you know enough!” A more informing answer is that you should first of all check the value of the literature on your pile in relation to the research question your thesis needs to answer. Many interesting articles can be put aside because they lie outside the core of your ‘story’. Further, you have to set strict deadlines in terms of time and quantity. Look at your schedule and your planning and decide how much you can digest in the time given, and up to what date you will not add anything new.

Finally, some general guidelines with regard to the literature:

- Read original sources as much as possible! If you find a reference to a source in a paper you have read and you want to use the information related to that reference, you should do your best to read the original book or paper and avoid references like “Johanson (2003) in Höglund (2006) stated that …”.
- Books often cover broader subjects than journal articles, but articles are more specialized and offer often more depth on a particular small topic.
- Articles more often than books disclose the results of the most recent and current research. Books can cover research conducted over a longer period or describe theory development over a longer period of time.
• We find that a **minimum** number of readings is around ten different sources
• Among your readings, you should at **least** list two top journal articles (four for Master thesis / magisteruppsats; see a list of suggested top journals per field on the course website)

### 5.3 Result of your literature study

In your thesis you present your review of the literature. Normally, you will start with embedding your study in a bit broader field of research, stepwise taking the reader down to literature (theory, models, and empirical tests if available) that concern the core issue of your work. A good literature review shows critical reflection: we want to see that you have not simply taken for granted the theories, models and tests discussed but that at least an attempt is made to criticize them, see their flaws, restrictions, or incompleteness.

Your literature review should end with a result: a summary of the most important factors, a model of concepts and the relationships between them, a hypothesis, etc. You can present this in the form of a graph, table or picture or in words. Argue clearly how you arrived at that collection of factors, model, hypothesis, etc: a good literature review leads the reader straight to the result. This ‘result’ of your literature review is also called the operationalization of the theory: you develop a “work-model” out of all the literature you studied. This operationalization will be the basis for your empirical study.

### 6. The empirical study

A very important part of your thesis project is your empirical study: the part in which you collect data and analyze those in order to find an answer to your research question. For extensive information about data collection and analysis we refer to our lectures, seminars and to course literature: here we only collected a number of important observations that we want you to be aware of from the beginning of your thesis project.

Your empirical design begins with the link you make between research question and aim of your study: basically your question and aim define whether your study aims to describe, explore, or explain a phenomenon or object (see above). As explained, your literature review gives you a “work-model”: the operationalization of your theory leads to a set of factors or concepts that you will work with now and that you need to collect data about. Given your research question, the study’s purpose and your theoretical operationalization, and given the time restrictions (!) you consider which research strategy fits best. The research strategies that are used most often in thesis projects are survey research case study research, but other
possible strategies that could be used very well include experiments and archival research. We discuss the two most used strategies separately.

6.1 Survey research
Survey research can be used for many different purposes. They allow you to collect a large amount of data, using a standardized instrument which results in quantitative data that allows you to perform basic statistical analyses like calculating means, variance, and correlations, but also more advanced statistical techniques. The standardized data allows you further to compare among responding persons / organizations. Normally, you will select a sample from the population of interest for your study (there are several logics for how to select a sample: see the literature). With larger samples you can use more and more sophisticated statistical techniques for your analyses, and can draw more accurate conclusions about the population. In survey research data are most often collected through mail questionnaires, structured and semi-structured interviews, or from secondary data sources (or a combination of these).

6.2 Case study research
Also the case study strategy can be used for different purposes. The most distinguishing characteristic of a case study is that you collect much information about a restricted number (sometimes even 1) objects in its existing context and in real time. Cases are mostly selected because they are specific, not because they are representative for a certain population. This type of research results in rich, often qualitative (but definitely not exclusively so!!) information and is particularly suitable for investigating “how-questions”. In order to collect this rich data you should use different data collection methods and collect data from different sources (in methodological terminology this is called triangulation). Case studies therefore often result in both qualitative and quantitative data that should all be compared and combined in the analyses in order to arrive at that richness that is so typical for case study research.

Box 8: NOT a case study:
In the past we have often experienced that students who chose a case study strategy restrict their data collection to one or a few open interviews with respondents from the organization of interest. This, however, is NOT a case study. Case studies very explicitly make use of data collected from different sources using different methods! Doing a number of interviews is actually more close to a survey strategy: using the same instrument for a number of respondents. Keep this in mind when writing your methods section!
In most cases, this research strategy does not allow you to generalize towards the population, although you can generalize in terms of theory; for instance, formulate a typology that needs further testing, add a new factor to a theoretical model or challenge existing models based on the unique insights your case study has provided.

6.3 Credibility issues
When designing your empirical study you should make sure that your study is reliable and valid. Reliability refers to the replicability of your study: would your study lead to the same results when other researchers would do it, and when it would be done at another point in time? You show that you preserve reliability through giving as much as possible information about how you went about in the design of your instruments, in collecting the data, and in the selection of your sample and respondents. You should present that information in your methods section.

Validity refers to whether your findings are actually credible. We often distinguish among internal and external validity. Internal validity includes questions like whether the findings make sense, whether your measures measured what they aimed to measure, and whether alternative explanations for your findings are ruled out convincingly. External validity refers to whether your findings can be transferred to other contexts, whether they are generalizable. The validity of your study is improved through anchoring your measurements in the theory reviewed (see the next section on operationalization), but also through clear argumentation and reasoning in the analysis chapter. Show that we can “trust” your findings and that you have considered eventual alternative explanations for your findings.

6.4 Operationalization of variables
An extremely important, and too often neglected, step in your empirical research is the operationalization of the variables. No matter what research strategy or data collection method you use: you always have to translate the concepts used in your theoretical model (the theoretical operationalization, see 5.3) into variables and measurements. In the methods section you explain (normally repeat from the literature section) how you define a certain concept based on the theory you use and show how you intent to measure that concept and its different aspects, for instance with questions in an interview or a questionnaire, or through collecting certain figures or numbers. In many cases, prior studies can help you to define your measures: it adds to the validity of your study if you use measures that have been used before and are accepted in the research community. There can be good reasons, however, to adapt
existing measures or design your own. You address operationalization of your variables in your methods section.

Box 9: Operationalization of variables:

Say that my study would aim to investigate the interest of Bachelor students in methods issues (and assume that that would be a worthwhile academic issue). In my literature study I discover that one aspect of students’ interest is how much fun my classes are and another how useful they are for students’ thesis work. I operationalize Interest to be composed of two factors: Fun and Practical. This is presented at the end of my literature study.

In the methods section I explain how I measure these two factors Fun and Practical. If I decide to collect my data with structured questionnaires, I give the exact formulation of the questions I will ask in my questionnaire and explain why these measure Fun and Practical. The same holds if I would do semi-structured interviews: I then should present the questions I ask respondents and argue why these measure Fun and Practical. I could also decide to collect data by observing how often students laugh in my classes (to measure Fun) and to what extent I see they use the information given in my classes in their thesis (to measure Practical). I describe these (and perhaps other) observation measures exactly and again explain why these observations will be valid measures for Fun and Practical.

### Concept Interest (consisting of the factors fun and practicality)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Fun</th>
<th>Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire items, scale from 1 to 5</td>
<td>1. I liked going to the methods classes</td>
<td>1. I learned a lot in the methods classes</td>
</tr>
<tr>
<td></td>
<td>2. I was bored during the methods classes (reversed coding)</td>
<td>2. I used the information from the methods classes in my thesis work</td>
</tr>
<tr>
<td></td>
<td>3. ... (etc?)</td>
<td>3. I had practical use of the what I learned in the methods classes</td>
</tr>
<tr>
<td>Alternative measurement: observations</td>
<td>1. Number of times students laugh during class</td>
<td>1. Number of theses referring to a methods book</td>
</tr>
<tr>
<td></td>
<td>2. # of students yawning during class (reversed coding)</td>
<td>2. # of theses including theoretical operationalization</td>
</tr>
<tr>
<td></td>
<td>3. ... (etc?)</td>
<td>3. # of theses including empirical operationalization</td>
</tr>
</tbody>
</table>

6.5 Data collection methods

In your study you can use secondary data or use one of the following –main– data collection methods for collecting primary data: observation, interviews, or questionnaires, or a mix of these. All data collection methods (also when you use secondary data) can be more structured and result in quantitative data or less structured, which leads to qualitative data. The data collection method that is by far most often chosen by students at our department is the semi-
structured interview. However, we encourage you to think broad in your design and really consider what is the best way to collect your data: what do you want to know, what to measure and where can you find that information; who can you ask and how? Review critically whether interviews are the best way to collect the piece of information you need. Maybe you should actually do experiments for testing a causal effect of one variable on another. Or perhaps your exploratory research question should result in the use of focus interviews in groups. We will discuss these issues, as well as advantages and disadvantages of different methods in class, and you can ask your advisor and consult methods books as well.

7. Analysis
Your data collection process results in a “pile” of information in a quantitative form (basically numbers) or a qualitative form (oral accounts, descriptions, texts, images, etc) and very often in a combination of both. In a first stage, and during the data collection process, you systemize and organize the data so you can work with it and analyze it to come to an answer to your research question. In your thesis you should present this systemized data that is the basis of your analysis. How you systemize data and what you show in your thesis depends upon your research question and the model you have developed to study. If you have selected to study the relationship between two concepts, it makes sense to present the data you collected related to these concepts consecutively. If your study aims to describe a phenomenon in several aspects, you can organize the presentation of your data according to the aspects to be covered. Obviously, this follows the theoretical and empirical operationalization presented before in your thesis. Do not present complete interview transcripts or excel spreadsheets of quantitative data without logical organization that fits the research question and operationalization.

How you analyze the data depends on the purpose of your study and on the nature of your data, quantitative or qualitative. For the analysis of quantitative data you use statistical techniques of analysis, from very simple techniques (taking an average, making tables and compare different groups of respondents, calculating correlations) to more advanced techniques (like regression analysis, factor analysis or structural equations modelling). It goes too far to give more instructions on these techniques on these pages and we will not have time to do so in the general methods lectures either. However, many teachers either know themselves how to use do these analyses or they can direct you to someone who does.

The analysis of qualitative data is however not less systemized, something that many students find hard to understand. Also qualitative data should be coded, categorized,
compared, etc.: you need to connect raw material like interview quotes or text fragments to the concepts and variables you include in your study. Important tools for making sense of qualitative data are tables, flow-charts or figures, just as for quantitative material, only the content of these are words, not so much numbers. Again, for more information and guidance on how to do this we refer to your advisors.

8. Conclusions and discussion
Your analysis directly leads to the conclusions. In a good thesis the conclusions do not come as a surprise because of what has been presented before from research question to theory to empirical study. You can go one step further than “just” concluding what your study’s findings are in relation to the research question defined in the beginning of your thesis. You can use the insights you have acquired to contribute to a larger problem (an academic or a practical discussion) than the focused question of your study. This can include a discussion of whether the results of your study would be valid in a wider context than the one you chose for your thesis. You can even throw up one or more questions resulting from your study, or observations made in your study, that could lead to future research. If you check academic papers in leading journals you will see that researchers at the end of their papers very often present conclusions, a discussion of their results in a wider context, limitations of their study (very often related to the empirical design, or to the focus on a single theoretical perspective) and suggestions for future research. Students that end their theses with all these aspects show that they can fully participate in an academic debate.

9. Start early and seriously
An obvious, but nevertheless proven good piece of advice: start early and start well. You have very short time to do your thesis study and write the thesis as well. Do start right from the start and work on your thesis seriously: it is after all the last public result of your Bachelor study. And once again: you will need your time!!

10. Suggested Research Methods textbooks: