

Bachelor Thesis Guidelines

Professorship of Public Health and Prevention
TUM School of Medicine and Health
Department Health and Sport Sciences

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The guidelines described in this document (chapter 1, 2 and 3) apply to students of the Bachelor in Health Science. Please note that for students of other faculties or institutions other regulations may apply. Please check these in advance and discuss them with your supervisor.

1. Introduction & requirements

The bachelor thesis constitutes the final examination in a bachelor program. During the project, the student should identify, answer and discuss one research question and should present the thesis using appropriate scientific methods. This comprises a compelling and consequent red thread throughout the thesis, correct citation and referencing collation of relevant sources, and an own intellectual contribution that goes beyond a mere juxtaposition of contents from different sources.

2. Application, topic identification & registration

Application

You can apply for a bachelor thesis at the Professorship of Public Health and Prevention by the 1st of March and by the 1st of October. Approximately one month before the application deadline, we will publish a list of bachelor thesis topics offered by us in the coming semester on our homepage. Please refer to the offered topics in your application and let us know your preferences. Please use the Excel template provided at the website for this purpose. After the respective deadline, we will contact you within approximately two weeks to let you know whether we can offer you supervision or not.

If you are interested in writing a bachelor thesis at our professorship, please send your application including the following documents to info.php@mh.tum.de:

- Curriculum Vitae
- Current transcript of grades
- A letter of motivation of maximum one page (including which topics and methods interest you the most)
- Completed Excel template showing your topic preferences
- If you already have a specific topic idea yourself, please also attach a short exposé (max. 1 page) with literature sources. The exposé should cover the following content:
 - (1) What is your research question?
 - (2) Why is this question relevant from a Public Health perspective?
 - (3) Which steps/contents should the thesis cover, in order to answer such research question?

Topic identification

If we decide to offer you supervision, your potential supervisor will contact you and offer you a topic according to the preferences you indicated. If you accept this topic, you finalize the details of the topic together with your supervisor. As soon as the topic has been finalized the thesis should be officially registered (details are described below). Thereafter, as first steps, a concrete thesis outline should be developed by the candidate in close communication with the assigned supervisor. In addition, the candidate should specify the planned steps he/she will take to answer the research question, as well as a rough schedule with a timeline of execution of the work.

Registration

After agreeing on the topic, the registration will be performed by your supervisor in the Koinon portal. For the registration the supervisor needs to know the thesis title in German and in English. For more information please see the respective faculty guidelines (can be found [here](#) and [here](#)).

Additionally, at the Professorship of Public Health and Prevention, we ask all students to sign a transparency agreement (downloadable from our website) to clarify important aspects and mutual responsibilities during the supervision process. The agreement should be signed by both the supervisor and the student upon registration (a digital signature of both parties is sufficient).

Processing time

For students of the Bachelor in Health Science, the thesis is usually written in the sixth semester and the processing time is 12 weeks starting with the registration date.

For students of other faculties or institutions other regulations may apply.

3. Submission

For students of the Bachelor in Health Science, the thesis should be submitted to both the examination board secretary (Ms. Hufnagel) and the chair. Please submit a digital version of the thesis (PDF format) via the LRZ Sync & Share Cloud to both Ms. Hufnagel (secretary of the examination board) (pruefung.gsw.sto@mh.tum.de) and your supervisor. If it is not a binding requirement of your program's regulations, we ask you to refrain from submitting additional printed copies of your thesis to us.

4. Format & Layout

Please use the template provided by the Professorship of Public Health and Prevention. The final thesis should respect the following guidelines.

Language

Bachelor theses should be written in German or English.

Layout

Paper format	A4
Page numbering	bottom of page (footer); the title page should not be numbered; the rest should be numbered consecutively.
Main font	Arial, Times New Roman, or similar
Font size	11, justifies alignment
Line spacing	1.5/double spaced
Borders	2.5 cm left and right

Length

The length of the thesis should be individually discussed with the supervisor. Bachelor theses usually consist of 8,000-12,000 words and 3-5 Tables and Figures in the main text (excluding references and appendices).

References

All references (direct or indirect) to previously published contents should be appropriately cited in the thesis using a consistent citation method (APA, Harvard, Vancouver, etc). The chosen method should be applied consistently in both the citations throughout text/appendix and to the reference list. All cited sources in text should appear in the reference list and vice-versa. The references should include primary sources, current scientific literature and textbooks. Other sources (such as web pages, non-scientific articles, etc.) should be cited only when no scientific resource is available. Great care should be taken in citing them sparingly and correctly.

For the correct use of e.g. the APA citation method, please refer to the [TUM citation guidelines](#). You are strongly recommended to use a literature management program and to manage citations and bibliography automatically via the same program. Your supervisor will advise you on this.

Please note that failure to acknowledge the work of others is considered as plagiarism and is a serious offense, which might result in candidates failing the bachelor thesis module.

5. Structure

Please use the provided template. The following structure applies:

- Title page
- Table of contents
- Index of tables, figures, list of abbreviations used in the thesis
- Main text body (more information below)
- Appendix (more information below)
- Declaration of Authorship (more information below)

For the title page please refer to the provided template.

The main text body should be structured like a scientific text, including:

- Abstract
- 1. Introduction
- 2. Main Part (e.g. methods and materials, results)
- 3. Discussion
- References

The **abstract** is a concise and short summary of the background, research question, methods and materials, results and conclusion of your thesis. It should be no longer than 250/300 words. On the same page, a word count of the abstract and the main text (excluding tables and final references) should be included.

In the **introduction** the general context and the problem investigated in the study should be presented, sustained by compelling references. Furthermore, the research question should be clearly stated and explained, alongside an overview of the existing evidence on the same topic and existing evidence gaps. The public health relevance of the study should also be briefly stated and discussed.

The content of the **main part** should be clearly structured, with the appropriate structure strongly depending on the research question and the applied methodology. Oftentimes, an important component of a bachelor thesis is a narrative review of existing (scientific) literature. Quality criteria for these types of reviews have been lined out in the SANRA Scale ([Scale for the Assessment of Narrative Review Articles](#)).

In every bachelor thesis, a brief section (minimum 1 page) outlining **methodological aspects** is required. This section should comprise an explanation of how you approached your search

for relevant literature (the “search strategy”, e.g. keywords used, databases / websites searched, types of articles considered, eligibility criteria with regard to language or quality, publication year etc.). Also, it should explain your approach to synthesizing and presenting information in your thesis. In an empirical study, the data sources or data collection **methods and materials**, the study population and the selection criteria should be clearly stated, together with a description of relevant variables and analytic methods employed.

The **results** should be presented in a neutral fashion, i.e. without any interpretative additions and, where suitable, the presentation should be supported by compelling and informative tables and graphs. In both a literature review and an empirical study, the main findings should be clearly described. Creating your own informative results tables and figures will support you in ensuring your thesis contains an own intellectual contribution, because drafting them usually requires synthesis beyond collation of literature sources. In a quantitative analysis, the text-based results description should help the reader understand the content of the tables and should not be redundant. Tables should include a title (above) and a caption (below), while figures should include both a title and a caption below. Tables and figures should be self-explanatory. Each figure and table should be referenced in the text. Figures should usually not be copied from other sources, but if so, these sources need to be cited correctly. The reporting guidelines of the EQUATOR Network (<https://www.equator-network.org/reporting-guidelines/>), even though often not entirely applicable to a bachelor thesis, may provide some orientation regarding potential relevant information and possible structures of the main body and can be discussed with the supervisor.

The **discussion** section should summarize your findings in the context of the research question and should offer an interpretation for them, also in light of comparable evidence. This part of the study should also include a thorough and honest discussion of the strengths and especially the limitations of the thesis (including drawbacks of the selected methodological approach, and an assessment of the generalizability of the results) and offer some implications for further research and policy practice. Therefore, the discussion section also offers the opportunity to bring in a paragraph on own reflections, thoughts and ideas without necessarily requiring external references for each statement. The conclusions however should be solely based on the results of the thesis.

The **appendix** should include all further important documents and information necessary to understand the study and to transparently disclose as much information as possible regarding the data/material and research methods employed (e.g. questionnaires used, protocols,

search strategies, additional tables and figures, additional analyses, etc.). All appended additional material should be appropriately cross-referenced in the text.

6. Guidelines for the use of AI tools (e.g. ChatGPT) in the thesis process

Benefits of using AI tools: AI tools can be helpful in various parts of the work on the thesis, such as generating ideas, structuring content, organizing data, coding, proof reading, grammar checks, translations etc. It is permissible to use such tools as an aid in the work, but it must be emphasized that this is only an aid and that you are responsible for everything included in your thesis.

Risks of relying on AI-generated content: Generative AI may provide incorrect or false information, contain text from sources that cannot be included without reference, and which may thereby lead to plagiarism, and/or provide unbalanced, non-academic, or incomplete analyses. It is always the user who is responsible for ensuring that everything that is written is correct and in accordance with norms of research ethics. Including whole sentences or paragraphs that were generated by an AI tool bears the risk of including text or information that stems from other sources, and which would thereby be considered plagiarism without proper source references. Hence, it is prohibited to simply copy and paste complete text passages, graphics, illustrations etc. that were created by an AI tool into your thesis text. Furthermore, confidential information and personal data should never be shared with AI tools. This applies to both own information and personal data collected in connection with the work on the thesis.

Documentation of used AI tools: If AI tools are used in the work on the thesis, this must be clearly stated in the thesis. This should be done in form of a „Statement on the use of AI tools” that follows the reference list. The statement should include information on the AI tools that were used and the purpose of the use. For more information, please see the respective part in the thesis template.

The role and responsibilities of the supervisor: The supervisor can be a good help for the students in assessing permitted and effective use of AI-based tools, and it is strongly recommended to discuss such questions with your supervisor. However, it is the students' responsibility to follow these guidelines; the supervisor can give advice but cannot take responsibility for compliance with the guidelines.

7. Declaration of authorship

Finally, the thesis should be accompanied by a declaration of authorship, where the candidate declares that he/she conducted the work independently and in compliance with good scientific practice (including plagiarism). Please refer to the provided template.