Happiness Research RUB

RUHR UNIVERSITÄT BOCHUM RUB

Information Sheet for Bachelor's and Master's Theses

at the Psychological Methods Group

Last updated: 06.10.2026

SUPERVISORS

In principle, all academic staff members of the chair are available to supervise Bachelor's and Master's theses. For Bachelor's theses, participation in the project-oriented seminar (POS) of the chair is mandatory. Master's theses can be supervised at any time, depending on the available capacities.

TOPIC SELECTION

You can either propose your own topic or work on one of the topics we offer. Additionally, it is possible to collect your own data or analyze secondary data. To ensure we can provide you with appropriate academic supervision, your proposed topic should be related to the research focuses of our group (see homepage). The exact research question will be developed in consultation with us before or during the creation of the proposal (see below).

EXTENT OF SUPERVISION

With a Bachelor's thesis, you should demonstrate that you are capable of conducting a scientific study under guidance. With a Master's thesis, you should demonstrate that you are capable of conducting a scientific study independently. Therefore, the supervision of a Bachelor's thesis is somewhat closer and more detailed, while more independence is expected for a Master's thesis. Of course, we will not leave you alone with your work. Especially in the early stages, when the topic is being narrowed down and the data collection is being planned, close coordination is beneficial. The exact extent of supervision depends on the specific challenges of the work, as well as the expectations of the supervising person and your own needs, and will be discussed and documented in a supervision agreement during the first meeting.

PROPOSAL

At the beginning, a proposal should be prepared. For Bachelor's theses, this often takes place within the framework of the project-oriented seminar (POS). In some Master's programs, the proposal is a graded examination requirement. Therefore, you should discuss the formal requirements, as well as the date and method of submission, with both your supervisor and the instructors of your POS.

A proposal typically has a length of up to 10 pages (including title page and references, font size 12pt, line spacing 1.5) and consists of the following parts:

- Abstract
- Theoretical background (but brief!)
- Research question, preferably with specific hypotheses

- Planned methods (study design and, if applicable, technical implementation, sample, measures, and, if applicable, other materials, statistical analyses)
- Timeline (e.g., table or Gantt chart; templates can also be found online)
- References

In consultation with the supervising person, it is also possible to write the proposal directly in the form of a preregistration (with a somewhat more detailed theoretical background). A suitable template (e.g., here) should be used for this.

The most important goal when writing the proposal or preregistration is to think through your work in advance and to specify the hypotheses and methods (including the planned statistical analyses). Additionally, you can always refer back to the proposal if you feel you are losing the thread.

Length and Language

Most Bachelor's and Master's theses are structured and sized similarly to articles in psychological journals and should generally not exceed 10,000 words (Bachelor's theses) or 15,000 words (Master's theses) (excluding tables, figures, references, and appendices). However, for certain research questions, a longer thesis may be appropriate after consultation. The thesis can be written in German or English. It is also possible, after consultation, to write the thesis directly in the form of a scientific journal article, which may then be submitted to a journal (see below).

Formal Design

- Use a serif font (e.g., Times New Roman) in size 12pt, with 1.5 to 2 line spacing for the main text.
- For headings, you can use a sans-serif font (e.g., Aptos). Number headings up to the 3rd level (e.g., 3.2.1 Sample). Avoid and do not number 4th level headings if possible.
- Ensure that all pages have a page number.
- For citing and formatting references, follow the guidelines of the APA or the DGPs. Be sure to use a reference management program such as Zotero, Citavi, or Endnote.

General Structure

Most Bachelor's and Master's theses are structured as follows:

Title page: Title of the thesis as registered, name, student ID number, degree program, faculty, reviewers, and date of submission
Optional: Acknowledgments
Table of contents
List of figures
List of tables
Abstract (ca. 150-250 words)

1. Introduction
2. Theoretical background (can be divided into multiple chapters)
3. Research questions and hypotheses
4. Methods
   4.1. Design and procedure
   4.2. Sample
   4.3. Materials and measurement instruments
   4.4. Statistical methods
5. Results
   5.1. If applicable: Preliminary analyses and data preparation
   5.2. Descriptive statistics (do not need to be interpreted but should be reported in tables at least)
   5.3. Statistical analyses for individual research questions and hypotheses
   5.4. If applicable: Subsequent exploratory analyses
6. Discussion
   6.1. Summary of results and critical discussion within theoretical and empirical context
   6.2. Strengths and limitations of the study
   6.3. Implications for theory and further research
   6.4. If applicable: Practical implications
   6.5. Conclusion
7. References

Appendix
Statutory declaration (Eigenstattliche Erklärung, in German)
Declaration on the use of AI tools

NOTES ON INDIVIDUAL SECTIONS

Theoretical background

The goal of the theoretical section is to present and critically discuss the current state of research on your topic. It is important to include and cite both fundamental theories and particularly relevant or recent empirical studies. By the end of this section, the reader should clearly understand what gaps exist in the current research, why these gaps are relevant, and how your study aims to fill these gaps. The theoretical background concludes with the presentation of your research questions and/or hypotheses, which should logically derive from the theoretical section. You can divide the theoretical section into multiple chapters. This helps prevent having too many subheadings, which can impair the readability of the thesis.

Methods

The components of the method section are clearly defined. Describe your design, your sample (method of data collection; justification of sample size or power analysis; sociodemographic information about the sample), the measurement instruments, and the statistical methods used. Tables with descriptive results (means, standard deviations, correlations between the collected variables) can be included either here or at the beginning of the results section, but they must not be omitted.

Results

As the author, your task is to guide the readers through the results. Therefore, make sure to describe your results not only statistically (e.g., "The correlation between shoe size and height is significant") but also substantively (e.g., "Taller people tend to have larger feet"). Always directly state what the results mean for your hypotheses (e.g., "… consistent with the hypothesis that there are positive correlations between the sizes of different body parts (Hypothesis 1) …"). If you report extensive result tables, you do not need to discuss every single value in the text. However, you should point out the most interesting or relevant results to your readers.

Discussion

The discussion section begins with a summary of the key results. Do not just repeat the statistical results, but interpret them substantively. A very good discussion section also integrates the study's results into the existing literature on the topic. Explain what implications your results have for the underlying theories and to what extent they align with or differ from already published empirical studies. It is also important not to draw conclusions that you cannot support with your data. Consider whether there might be alternative explanations for your results, especially if the results are unexpected. Perhaps you have some ideas on how these alternative explanations could be specifically tested in future studies? The discussion section should also include a discussion of the strengths and limitations of your study. Be constructive and make specific suggestions on how these limitations could be addressed in future studies. The discussion section usually concludes with a general conclusion, where you clearly state the take-home message of your study.

HANDLING REFERENCES

Make your life easier: Use a reference management software from the start – ideally when creating your proposal. There are various options available, such as Citavi, Zotero, or EndnoteWeb. In all these programs, you can automatically import literature from PsycInfo and other sources (no tedious manual entry), cite sources in Word with a click, and automatically generate your bibliography. But be careful: Sources are not always imported correctly. Pay attention to capitalization in titles and journal names, among other things.

HANDLING OF DATA AND ANALYSES

To ensure that your analyses can be reproduced and to generally increase research transparency, you must submit your raw data with an accompanying codebook and all necessary script files electronically along with your thesis. The files should be prepared in such a way that the individual analysis steps are understandable to outsiders. This means: Comment on each step in detail. Ensure that the submitted script files do not contain unnecessary commands, but only those necessary to reproduce the results reported in the thesis. Often, it is clearer (even for you) to split the commands into multiple files (e.g., one script for data preparation, one script for descriptive analyses, etc.) and enumerate these files so that it is clear in which order the scripts should be executed. Typically, analyses are conducted using R or specialized software (e.g., Mplus).

ETHICS

Many data collections at our group are already covered by existing ethics applications. However, clarify early with your supervisor whether this applies to your planned study. If not, a new ethics

application must be submitted together with the supervisor. The review of ethics applications often takes several months, so the application should be submitted as early as possible. For the analysis of secondary data, an ethics application is usually not necessary.

Open Science

Our department is committed to the principles of open science. This means that we generally make our data and other materials (e.g., questionnaires, stimulus materials, script files) publicly available to the scientific community, unless there are good reasons (e.g., data protection) against it. We use open repositories such as Zenodo (https://zenodo.org/) for this purpose. We encourage all students conducting studies with us to do the same.

Additionally, our studies are usually preregistered. This involves presenting your research project, including hypotheses and planned analyses. If you wish, you can also preregister your study. Your preregistration would then largely replace the proposal (except for the timeline). More information on preregistration can be found here: https://osf.io/k5wns/files/.

Artificial Intelligence (AI)

AI tools for research are rapidly developing and can facilitate many steps of the research process, from literature search to the generation of ideas, code, and texts. However, in your thesis, you also need to show that you are able to develop research questions, design appropriate studies, analyze data and write a report by yourself. Therefore, AI tools may only be used as assistants, but not to delegate the hard work. In addition, any use of AI must be documented in the thesis. For further information, see the guidelines by the Faculty of Psychology available in the Moodle course for psychology students.

Writing tips

If you find writing difficult (and even if you don't), we recommend the book "How to Write a Lot" by Paul J. Silvia. It includes tips on how to optimize your writing habits and environment to consistently produce a lot of text – exactly what is required for a Bachelor's or Master's thesis.

Colloquium

Our group organizes a regular research colloquium where current research projects and general topics related to scientific work are discussed.

Master's students are expected to regularly and actively participate in this colloquium during their Master's thesis phase and to present their Master's thesis at least once (30 minutes including discussion). The presentation should ideally take place either towards the end of your planning phase or towards the end of your analysis phase. Dates are coordinated at the beginning of each semester.

For **Bachelor's students**, we organize a session in the summer semester where they can present and discuss the current status of their Bachelor's theses in the form of digital posters. Participation in this session is mandatory for all students writing their Bachelor's thesis with us. Additionally, we encourage all Bachelor's students to attend the other sessions of the colloquium as well.

EVALUATION CRITERIA

The thesis will be evaluated based on the following criteria, among others. The current evaluation scheme can be obtained from your supervisor upon request. We recommend getting familiarized with the evaluation scheme early on.

- **Abstract:** Complete, understandable, adequate length
- **Introduction and theoretical background**: Clear structure, clear definition and delineation of central constructs, appropriate presentation of relevant theories and studies, critical examination of the state of research, clear justification of the research gap addressed in the thesis
- **Research questions and hypotheses**: Theoretically consistent derivation from the literature, justification of the contribution of this work to the state of research
- **Methods:** Research design is appropriate, methods are fully and comprehensibly described
- **Results**: Correct and justified choice of statistical methods, correct and appropriate presentation of results, comprehensible preparation of accompanying materials (e.g., R scripts)
- **Discussion**: Summary of results, references to the theoretical section, discussion of alternative explanations, limitations of the study, and outlook for further research
- **Formal aspects**: Linguistic presentation, content design (e.g., structure, cohesion), completeness and correctness of the bibliography
- **Work attitude**: Independence and initiative in topic selection, study planning, execution, and analysis; general engagement and diligence. (This criterion is weighted more heavily for Master's theses than for Bachelor's theses.)

PUBLICATION OF THE THESIS

The results of your thesis may be suitable for publication in an international peer-reviewed journal. Whether and in what form this can be implemented will be discussed between the supervisors and you at the latest after the evaluation. In the past, theses have been used for publications to varying extents: as an independent publication with you as the first author, as part of a larger paper with multiple studies (often as a co-author), or by using part of the dataset (as a co-author). The appropriate form for your thesis depends, among other things, on the nature of your study and your future time and life plans, and will be clarified in the joint discussion. In any case, the agreement on authorship follows the authorship guidelines of the Faculty of Psychology, which are available in the Moodle course for psychology students.

CONTACT AFTER COMPLETION OF YOUR STUDIES

To ensure we can reach you for potential publications even if you decide against an independent publication, we ask that you provide us with an alternative email address where you can definitely be reached.