

A Manual on How to Write Your Thesis for the BA Psychology Programme

A short manual on writing a thesis for the BA in Psychology degree (behavioural analyst).

Requirements for content

The purpose of the thesis

The thesis is a portfolio which consists of the four research papers from each of the fields of psychology (Developmental Psychology, General Psychology, Personality Psychology, and Social Psychology). The purpose of the research papers is for the student to show the way they are able to apply their theoretical knowledge and methodological skills, which they have acquired in the relevant field of psychology, for research on a scientific topic.

Types and topics

Out of the four research papers at least two should be a complete study based on empirical research (an experiment, a survey, an observation, a case study etc.). Only in a maximum of two fields can the research paper be a written summary about completing a research task, a research skill about which task you must write a report (e.g. collecting references, collecting data, data analysis, preparing a poster, presentation skills). Part of the portfolio are also the teachers' evaluations of the full research papers as well as the presentation of one of the full research papers. In the portfolio the original full research papers and research skill papers are completed by adding the experience gained during working on them, which gives the opportunity for a self-reflection. The purpose of the presentation is for the student to show their aptitude in summarizing and professionally communicating their results as a behavioural analyst.

The self-reflection on the student's own work (in the space of 3-5 pages) should contain a self-evaluation of each of the separate works and should also connect them to one another and give them an overall evaluation. Its purpose is for the student to review their own professional development, strengths, skills to be developed and possible weaknesses. Thus the portfolio allows for tracking of the process of becoming a behavioural analyst and also for recording the student's reflection related to that process.

Required structural text units of the portfolio

Title page (Cover of the binding)

See under Requirements for form, Binding.

Inner title page

The name of the institute, the name of the faculty and the name of the programme should appear at the top of the inner title page. The title of the portfolio with a subtitle „behaviour analyst portfolio” should be under them. The name of the student should be on the left side of the lower third of the page, the name and post of the supervisor should be on the right side. The year should be at the bottom of the page, in the middle.

Declaration of originality

The page after the inner title page should contain the student’s declaration of originality (which has fixed form and content) which states that the work is their own intellectual product and it should be signed by the student. The declaration can be downloaded from the website.

The thesis is the student’s independent work, which should comply with the rules for references and citations. If the author is suspected of plagiarism, a disciplinary proceeding can be initiated against them.

Index/Table of contents, page numbering

The thesis should be submitted with a continuous numbering of the pages, with one table of contents, which should list the full research papers (at least two), the summaries (reports) related to the research skill development, the outline of the presentation of the chosen full research paper (in a maximum of 8-10 slides) and the experiences and self-reflection related to them as separate chapters. The table of contents should be completed with a list of the diagrams and the tables.

The structure of the study, chapters

Preface: an introduction to the problem, the overall purpose of the study, the motivation of the researcher briefly.

Introduction/Theory: introduction to the research topic, the relevant theories, a summary and evaluation of the relevant theories and research, conceptualizing the relations to be examined.

Hypothesis: theoretically based statements about the studied phenomenon and relations, which can be verified or falsified empirically.

Method: introduction of the stages of the research, especially the participants in the study, the applied research instruments and the procedure of collecting of the empirical data. The number of cases processed (data base) should be sufficient for examining the hypothesis

with the chosen method. The Method chapter should also show how the research complied with the requirements of research ethics (e.g. informed consent, the option for withdrawal, confidentiality etc.).

Results: quantitative (or qualitative) introduction of the empirical data, which responds to the used methodology which starts with descriptive analysis (characteristics of the participants on the study, distribution of measured variables), and ends with a statistical (or other) testing of the hypothesis. If the processing of the data is not common (e.g. analysis of content, scale preparation, significant data transformation), then it should be introduced in a separate subchapter.

Discussion, conclusions: the interpretation of the results, which should include how they relate to previous research, the questions which were answered, the new problems raised by the study, and an evaluation of the completed study and its strengths and weaknesses.

Notes, references: whenever using a statement in the text which was taken from another source, you should indicate the source. You only need to give a reference to the source work in the text (name of author(s) and year of publishing), its exact data should be given in the reference list.

Reference list: The in-text references and the reference list should be written according to the rules of the Hungarian Psychological Review (Magyar Pszichológiai Szemle), which can be viewed in the detailed manual below. Only source works which were referenced in the text can appear on the reference list as well.

Preparation and submitting

Choosing and submitting a topic

The research paper supervisors announce the research papers as courses on the relevant course list. The topics of the research papers are divided according to the fields of psychology and are adjusted to current researches at the institute and to the research topics of the supervisors. The students receive information about with which supervisor, on what topics and with what methods they can do their research paper at the time of course announcement, and can choose a supervisor according to that.

Supervisors

The supervisor may schedule the research paper in the form of a class in which everyone participates, or in the form of individual meetings, or both. The supervisor will inform the students about the detailed requirements at the beginning of the semester. The research paper is individual work, so in case of a research done by a team, the work done by each student should be well defined/separated in the paper.

Consultation

Regular (at least once a month) consultation or regular (weekly) group meetings with the supervisor help preparing the research paper.

Submission

The thesis should be submitted by the student in one printed and bound copy as well as in an electronic format, as specified by the Educational Board Committee, at the Educational Office before the exam period when the student would like to have their final exam.

Deadline for thesis submission:

in the autumn semester: **2nd January**

in the spring semester: **2nd June**

Evaluation

Evaluators, evaluating process: The research papers are evaluated by the relevant supervisors, the presentation (the presentation of one of the full research papers and an oral summary of the self-reflection) is evaluated by the final exam committee. Each full research paper receives a short written evaluation by the supervisor, which the student should receive in writing by the first week of the exam period at the latest. These evaluations should be attached to the research papers within the portfolio.

Points of evaluation of the research paper/portfolio

- the chosen topic and a justification of the paper's goal;
- the presentation of the referenced literature, the level of analysis-interpretation-application;
- the justification and novelty of the examined question, the accurate statement of the hypothesis (hypotheses);
- the choice of relevant research method(s) and statistical procedure(s) for verifying the hypothesis, and a clear presentation of their application;
- the presentation of the results in a transparent and justified from statistical methodological and professional point of view way;
- the placing one's own results within the research topic, reflection on the strengths and weaknesses of the study.

Points of evaluation of the oral presentation

- the presentation of the research and its relations to earlier research on the topic through communication during the oral examination which should be open, consistent in its arguments, effective, and paying attention to the time, form and thematic limits.
- the presentation of the self-reflection on the whole work in connection with the written evaluations of the full research papers and the feedback related to the partial research papers.

Requirements for form

Length

The length of the thesis should be 28-60 pages (80 000-160 000 characters with spaces) without the appendices and without the reference list. It can be either in single-sided or duplex printing.

Font, font size, distance between the lines

Times Roman, 12pt, 1 (single) distance between the lines.

Margins

On the left side (at the binding) 3.5 cm, on the right, top and bottom side 2.5 cm margin.

Language

The research papers can be written in English or in Hungarian (or in any other language if the supervisor gives their permission).

Binding

The thesis should be submitted to the Educational Office in one printed and bound copy. On the cover's top there should be the name of the institute, the name of the faculty and the name of the programme. Under that there should be „Szakdolgozat” as title. On the cover's lower third, on the left side there should be the name of the student. At the bottom of the cover, in the middle there should be the year.

Electronic form

The thesis should also be submitted on an electronic storage device in a form specified by the Educational Board Committee.

BA in Psychology (Behaviour Analyst) Thesis

Detailed requirements, manual on how to prepare your research papers

About the theoretical introduction in detail

It is important to complete the related-to-the-topic theoretical summary with the presentation of the question examined by the researcher and with the conceptualization of the researched phenomenon. The goal is to show proper in-depth knowledge of the referenced literature based on the theoretical research as carried on in the relevant field, which evaluates earlier results and helps forming own professional position, as well as to present the theoretical support for the validity of the researched topic. Your own topic as presented in the paper is the focus of the literature summary, so the related literature should be presented in the light of this. Usually the theoretical introduction should gradually be narrowed down from the more general theoretical starting points and concept clarifications to the researched phenomenon.

About the hypotheses in detail

The hypothesis contains the researcher's idea about the variables of the researched question, about their relationship to one another, contributes to the more profound understanding of the examined phenomenon. The hypothesis may stem from practical experience or from the critical evaluation of theoretical topics. The result of a professionally formulated hypothesis: its explanatory power, its formulation as a clear, unambiguous, compact opinion, the possibility of verification (possibility of falsifying), the methodological possibility of realization. The hypotheses may depend on one another, and can even be organized in a hierarchical order.

About the method in detail

The description of the method is the detailed documentation of how the research plan was carried out, which should serve as a „user's guide” not only for reproducing the research or for its further development, but also for critical analysis of the results. In order to keep the description easy to follow, it is recommended to divide it into the following subchapters: *Participants in the experiment/research*; *Measurement tools* (scales, setup, stimulus material), *Procedure*. Besides these typical subchapters any other subchapters may be added.

Participants in the experiment/research

This subchapter contains the definitions and characterizations of the population of the research, of the unit of research/observation (average age, age range, sexes' proportion and anything else which is important in view of the specific research). It describes the manner of choosing the sample as well as the criteria. It is recommended to get data from a number of participants for the research paper which corresponds to the minimum requirements of the examined hypotheses and the applied statistical procedures, as well as to the specific circumstances of the chosen empirical method (even working together with other students, teachers, researchers). If the recorded sample's size is not sufficient for checking the formulated hypotheses, the hypotheses' testing will lose partially from its value.

Measurement tools (scales, setups, stimulus materials)

This subchapter contains the detailed description of the applied measurement tools, setups, stimulus materials. In case that a measurement tool (e.g. test, attitude scale) which is not related to the specific setup is used, the literature references related to how it was created have to be indicated in order for the reader to be able to obtain the same test or scale. If the setup which was used is in the commercial trade, the name of the manufacturer and the model's type number must be given (e.g. computer programmes). In the case of stimulus materials it is recommended to give their parameters (e.g. the parameters of the projected film parts or of the music serving as a stimulus material).

The tests and the surveys whose source can be stated (e.g., it is linked to copyright) do not have to be included in the appendices, referencing the source is sufficient. Only tests and surveys whose source is unknown must be presented in the appendix. If the tool was created especially for the research, then a detailed description must be given or in the case of a complicated tool it is recommended to attach a drawing or a photo. It is also recommended to include the stimulus material (pl. pictures) in the appendix.

Procedure

This subchapter contains the instructions given to the participants and/or the stimulus conditions and the way in which the registered reactions and data were recorded. An easy-to follow and to-the-point description of how the experiment/research was conducted. In the case of a survey this is where you have to present the reliability and validity of the method applied.

In case of a qualitative research (e.g. study of a focus group, in-depth interview) when presenting in detail the course of the procedure, the method of obtaining the data must be thoroughly described (what projective techniques, visual stimuli, narrative analysis techniques, symbols, fantasy pictures etc. the researcher worked with). If possible, they should be included in the appendix.

Statistical methods

Here you should present the method of data analysis of each hypothesis (in the case of computer data processing the name and version number of the used statistical programme, statistical tests). If the data processing is not trivial (e.g., content analysis; computing new variables from the measured data), you must describe that too. You do not have to describe the formula of the statistical test or the null hypothesis, but you must justify the choice of the particular test. Do not give personal data of the participants or raw data!

About presenting the results in detail

You should start the presentation of the results of the statistical processing with the descriptive statistics (e.g., average, standard deviation), and after that continue with the statistical tests for verifying your hypotheses. Beside the results described in the text (e.g. „...thus the field dependent group showed slower orientation in the environment than the field-independent group.”) or depicted on a chart or in a table, you should also indicate the value, the degree of freedom, and the significance level used as criterion in the statistical test for verifying the hypotheses (e.g. $t=2,2$; degree of freedom 42; $p<0,05$ or: $t(42)=2,2$; $p<0,05$). You do not need to elaborate on effects which are not significant – in this case it is sufficient to list, for example, which variables showed no statistically significant difference between the groups. You do not

have to justify the choice of statistical tests here as well. You do not have to include the original statistical outputs (e.g. SPSS correlational tables) either in the text or the appendix.

You should depict quantifiable data on a chart or present it as a table. In this case the chart's/table's title should show what data is depicted on/in it. The charts and the tables should be numbered in the order of their appearance (they should be referred to in the text according to this) and if there are too many, then it is a good idea to summarize them in a table or an index after the paper's index of content.

This chapter of the paper serves exclusively for presenting, describing the data and the results partially in numerical, partially in text format. Their interpretation should be in the *Discussion, Conclusions* chapter.

About the discussion and conclusions in detail

The goal of the discussion is to interpret and evaluate the results in such a way that the primary emphasis falls on the relationship between the presumption of the study and the results of the study. It is recommended to start with a summary of the results, which is followed by their interpretation and their integration in the theoretical-approach frame of the earlier research as referenced to in the theoretical introduction.

Here you should also discuss the strengths and weaknesses of the study. Only those specific errors should be discussed which significantly influence results. The negative results should be accepted and interpreted as negative results; you should avoid the methodological mistake of explaining them as conclusions, except in case this is justified.

About the in-text references and the reference list in detail (based on the rules of the Hungarian Psychological Review (Magyar Pszichológiai Szemle))

In the case of in-text references you have to indicate either the year of publishing in brackets after the surname of the author, or the surname of the author or the year of publishing in brackets, separated by a coma as well as the page number(s). If there was more than one paper published in the same year by the same author(s), they should be distinguished by writing an a,b,c after the year both in the text and in the reference list. The coordination of the in-text references and the reference list is worth special attention. All references which appear in the text should be found in the reference list, which on the other hand should not contain any other references.

In the case of co-authors when referring to their work within the text, you should write the surname of all the authors (e.g. Sekuler and Blake, 2000), but in case you refer to a paper of more than two authors more than once, it is sufficient to refer only to the first author by name (e.g. Atkinson et al., 1995) at the second reference. Naturally, in the reference list all of the authors' names should be listed in the same order as they appear on the paper.

In case that the in-text reference is related to more than one source works at the same time, it is recommended to list the referenced papers or books based on the year of publishing or the surname of the first author and separate them with a semicolon [e.g. „Numerous excellent summaries have been published on this topic (Norman and Nielsen, 1912; Loósz and Katona, 1904; Kovács, 1917).”].

If you summarize more than one of the works of the same author, the years of publishing should be given separated by a coma: „According to some researchers (Malter, 1987, 1989, 1996)...”

In case of using a direct reference, the use of quotation marks is compulsory and in the text, beside the surname of the referenced author and the year of publishing of the work, you should give the page number of the quoted text. For example: „The sucking rate of six-month old

infants increases if the sounds which come after one another can be found as two separate phonemes in any two languages..." (Atkinson et al., 1995, p. 261).

In case of a reference from a secondary source (if the writer of the paper has not read the article, book etc., to which they refer, but has read a reference by another author) within the text, after the data of the reference you have to write in brackets in which work of which author the reference can be found (as cited in X, year). For example: „According to Liberman’s (1982, as cited in Moore, 1997) theory..." In this case the most elegant solution is to write both works’ data in the reference list accurately, as separate items, and to indicate in brackets after the referenced work in whose work the reference can be found. E.g.:

Liberman, A. M. (1982). On finding that speech is special. *American Psychologist*, 37, 148–167.
(as cited in Moore, 1997)

Moore, B. C. J. (1997). *An Introduction to the Psychology of Hearing*. Academic Press, San Diego.
It is also acceptable to give only the work which appears as a source work for the secondary source reference (in the example above Moore’s book) in the reference list.

The form of the reference from a secondary source may differ from the ones above, if the exact reference cannot be found. In this case you can write „n.d.” (no date) after the author’s name in the brackets: „Liberman’s (n.d., as cited in Moore, 1997) theory ...”. In this case you should only include the reference’s source in the reference list (in the example above Moore’s book).

You should give all of the bibliographical data very accurately in the reference list. The source works in the reference list should be listed in a precise alphabetical order according to the name of the first author. If more than one work by the same author can be found on the reference list, then they should be listed in chronological order. If you used as in-text references more than one works by the same author which were also published in the same year, then you should use an a, b, c etc. after the year of publication and list them in alphabetical order according to this.

In a Hungarian reference there is no comma after the surname of the author. If the reference is in any other language, there should be a comma after the surname. Academic degrees (e.g. Dr., PhD) should not appear in the in-text references or in the reference list.

The location of the written works should be written in *Italics*: a „location” can be a book or a journal. In a case of a lecture you do not need to give a place.

One reference should be one paragraph and the paragraph’s type should be „hanging”.

• In the case of journals:

The surname and the first letter(s) of the author(s) (year of publication). The title of the article.

The title of the journal, volume(number), the pages of the referenced article from-to. Eg.:

Compton, W.C., Smith, M.L., Cornish, K.A. and Qualls, D.L. (1996) Factor Structure of Mental Health Measures. *Journal of Personality and Social Psychology*, 71(2), 406–413.

• In the case of books:

The surname and the first letter(s) of the author(s) (year of publication). *The title of the book.*

Publisher: Place of publication. E.g.:

Endler, N. S., Magnusson, D. (1976a) *Interactional psychology and personality*. Washington: Hemisphere.

• **In the case of a collection of works:**

von Bertalanffy, L. (1952) Theoretical models in biology and psychology. In Krech, D., Klein, G. S. (eds) *Theoretical models and personality theory*. 155–170. Duke University Press, Durnham.

• **In the case of on-line references:**

On-line journals

The surname and the first letter(s) of the author(s) (year of publication). The title of the article. *The title of the journal, volume(number)*, retrieved: date month year. full URL or DOI.

Online documents

The surname and the first letter(s) of the author(s) (year of publication). The title of the article. full URL or DOI. (retrieved: date month year).

Mead, G. H. (1913) The Social Self. URL: <http://psychclassics.yorku.ca/Mead/socialself.htm>
(retrieved: 9th March 2008)

• **In the case of conference or university lectures:**

The surname and the first letter(s) of the author(s) (year of holding the lecture). The title of the lecture. The precise name of the conference or event, its place, date (date month year).

Kállai J. (2010) Társas kapcsolatok kognitív idegtudományi alapmechanizmusai. Lecture at the 19th State Science Congress of the Hungarian Psychological Association. Pécs, 27th-29th May 2010.

Bányai É. (2010) Affective Psychology. Lecture from the BA in Psychology programme. Eötvös Loránd University. autumn semester 2010.