

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN





Citation guide for doctoral candidates at LMU's Faculty of Medicine

This Guideline explains how to cite correctly which is one element of good scientific conduct and is supplemented by the **Guideline to good scientific practice of the Faculty of Medicine of the LMU**.

This guideline is intended to help you prepare your own dissertation and, in particular, to prevent plagiarism. Although misconduct due to negligence or lack of care is evaluated differently than a deliberate and intentional breach of the rules (recognizable intention), it can nevertheless result in comparable consequences (e.g. non-acceptance of the dissertation, evaluation with "insufficient").

Incorrect citations and scientific misconduct

Scientific misconduct is committed "[...] if, in a scientifically relevant context, false information is deliberately or grossly negligently given, intellectual property of others is infringed or their research activity is otherwise impaired. The circumstances of the individual case are decisive in each case". (Deutsche Forschungsgemeinschaft, 2020).

This includes in particular with regard to correct citation:

- Improper referencing (e.g. "Source: <u>www.lmu.de</u>")
- Manipulation of illustrations without indication of the original and/or marking of the change
- Pretension of authorship (plagiarism)
- Purchase of works/texts or commissioning of ghostwriters

Plagiarism

A plagiarism is present if foreign thoughts are incorporated into one's own work without appropriate marking. It represents a form of scientific misconduct that is also and especially relevant in the field of doctoral studies. According to the Duden (Dudenredaktion (Hrsg.), o.J.), plagiarism is the "unlawful appropriation of someone else's thoughts, ideas or the like in the artistic or scientific field and their publication; theft of intellectual property".

Another definition of plagiarism is offered by Teddi Fishman (Fishman, 2009), director of the International Center for Academic Integrity:

- " Plagiarism occurs when someone
 - 1. Uses words, ideas, or work products,
 - 2. Attributable to another identifiable person or source,
 - 3. Without attributing the work to the source from which it was obtained,
 - 4. In a situation in which there is a legitimate expectation of original authorship,
 - 5. In order to obtain some benefit, credit, or gain which need not be monetary"

Original http://www.bmartin.cc/pubs/09-4apcei/4apcei-Fishman.pdf

From a legal point of view, plagiarism also exists if takeovers are made unknowingly or unintentionally. Inserting individual words or (partial) sentences of one's own into unmarked,

adopted passages or paraphrasing them does not change the existence of plagiarism. Plagiarism or scientific misconduct in general is not a trivial offence and has a completely different dimension than, for example, copying during school time: it is, among other things, a violation of official duties (Art. 6 (1) BayHSchG) and can have implications under labor, copyright and criminal law. Here, on the one hand, the quantity of plagiarized passages is considered, but of course also their level of creation.

Plagiarism is differentiated according to the type and scope of unmarked takeovers:

- Total plagiarism: takeover of a whole text
- Partial plagiarism: Transfer of individual parts of a text
- **Verbal plagiarism**: adoption of individual formulations or phrases
- **Plagiarism of ideas**: Taking over an idea or a thought and presenting it in one's own words (often in combination with paraphrasing)
- Translation plagiarism: literal translation from foreign literature
- **Self-plagiarism:** Taking over parts of one's own scientific work (this does not constitute an unauthorized takeover of the thoughts of third parties, but it does give the reader the unlawful impression of a first publication)

Detailed information on the various forms of plagiarism can be found at: https://en.wikipedia.org/wiki/Plagiarism.

Citations

When writing a scientific paper/dissertation, it is important to demonstrate one's own ability to work scientifically. This is regularly reflected in the originality and independence of the work in terms of design, analysis and evaluation of the research project. With regard to good scientific practice, a central aspect is therefore to correctly present the achievements of others. For this reason, ideas that do not originate from yourself should be identified.

Quotations serve several purposes - they make it clear where one's own work begins and the works of others end (boundaries), they refer to recognized procedures or standards and can thus prove or strengthen one's own results. A quotation must therefore be relevant to one's own statements and be embedded or explained in the context. It should not be used for embellishment (pure illustration) or to save work. Generally, only as much as necessary should be cited. Quotations should usually be given in the original language. If you use a translation of a text or make a translation yourself (e.g. in the case of non-standard languages), the latter should be marked with "[author's translation]" and in both cases should not be used without the original text, for example as a footnote.

On principle, two different types of citation - direct and indirect citation - are possible.

Direct quotations

Direct quotations mean that a part of an original text is reproduced literally. They are mainly used in the humanities, where they often deal with the exact wording of a source. In other disciplines, direct quotations should be used sparingly and only if a subject has been phrased particularly well and cannot be improved by re-phrasing it.

When citing directly, the following rules must be observed:

- Quotations must be taken word by word, i.e. also with e.g. errors. The quoted errors can be marked with [sic]
- The quote as a whole is placed in quotation marks. You can also indent a longer quote and display italics or a smaller/different font (without quotation marks)

- Ellipses are possible, but must not change the meaning of the text and must be marked with "[...]".
- Conversions or additions are possible to insert a quotation in a grammatically correct way
 into your text, converted or added words are put in square brackets, the meaning of the
 original text must be preserved
- Emphasis (e.g. *italics* or **bold**) or annotations within quotations are also possible, these should be marked with "[author's emphasis]" or "[author's annotation]".
- The source must always be indicated

Indirect (analogous) quotations

Indirect citation is the more common form of citation. It is characterized by the fact that the statement of an original text is reproduced (paraphrased) in its own words. They occur significantly more frequently in scientific papers in the STM (Science, Technology, Medicine) field than direct quotations and, unlike these, are not placed in quotation marks. Here, too, the source must be cited, with the addition of "see ..." or "see ...". is possible. However, a literal adoption from a source does not become an indirect quotation by simply exchanging or adding individual words; for this purpose, the entire meaning of the sentence or passage must be reproduced in one's own words. In the case of indirect quotation, a so-called multiple proof is also possible, e.g. to demonstrate the general acceptance of a theory (see also Mustermann, 2000, also Musterfrau, 2001).

Citations from secondary sources

Quotations from secondary sources are present when a work is cited from a work that in turn cites another work. In principle, whenever possible, direct quotations from original sources should be used. If this is not possible (e.g. because the original is no longer available), it is possible to quote from a secondary source in exceptional cases. In this case, both sources should be cited accordingly, e.g. Mustermann, 2000, quoted after Musterfrau, 2001.

Quoting graphics/images

Previously published illustrations are protected by copyright, as are copies of texts, and must be identified. It is often necessary to obtain **permission from the author/publisher** to use the illustration in the context of your work! Permission to use already published illustrations may also be required if you yourself are one of the authors of the publication (Dr. Karin Moll, 2020). Clarify in advance with the publisher in which context you may use illustrations. Without the consent of the author, illustrations may only be modified to the extent necessary for an appropriate graphic representation in your own work (e.g. change in size, color to black and white) (Dr. Karin Moll, 2020).

If you create your own new illustration based on an existing graphic, the source of the underlying original graphic must be indicated and the modifications must be mentioned (example: modified after Musterfrau 2015 or based on Mustermann et al. 2016). When using an independently created graphic, which is based on a previously published illustration and for which the source of the underlying original graphic is given, you do not need to obtain permission from the original author/publisher. Please note that this must be a newly created image or graphic, which is solely based on a published template. Merely changing the labeling or replotting the same data, a minimal shift of the image section or a change of color is not sufficient (Dr. Karin Moll, 2020)!

Dealing with own or joint publications and preparatory work

Especially in the context of a cumulative dissertation or a dissertation whose results have already been partially published, it is important to clearly mark all adoptions and references to one's own

publications in order to avoid falling into the realm of (self)plagiarism. In principle, everything that has been published must also be cited, even if you are the author of a text yourself. The introduction (or summary) of cumulative works should generally make it clear by which overriding question the individual publications are linked and which aspects are addressed in each of these publications - not consist of passages from these publications.

You must always cite all content from publications and preliminary work that you have participated in the creation of or that you have created independently in preliminary work and that you would like to use in your dissertation, otherwise self-plagiarism may occur. It does not matter whether it is a publication in a professional journal or unpublished term papers. In addition, your own contribution in publications and in preliminary work with several authors must be clearly stated. Neither the texts from preliminary work nor from publications may be copied unchanged into dissertations, but must be re-phrased and marked accordingly as indirect quotations (see above "Indirect quotations") (Dr. Karin Moll, 2020). This applies especially to the results and the discussion, as these are the central sections of a dissertation to demonstrate your ability to carry out independent scientific work. In the introduction, in which the current state of research is presented, as well as in the material and methods, there may be greater overlap with publications and preliminary work. However, even here, whole sections should not be reproduced verbatim.

If parts of the results of your dissertation have already been published in a journal or book, please clarify the rights of use of the illustrations with the publisher in good time (see "Quoting of illustrations and graphics").

Subject-specific general knowledge

Traditional knowledge (general knowledge), which is assumed to be basic knowledge for a particular discipline, does not necessarily have to be proven by quotations or references. However, what counts as general knowledge, must always be defined specifically from the perspective of the respective discipline. In case of doubt, please consult your supervisor.

Citation styles

From a design point of view, it is especially important that only one citation style is consistently in a work.

- 1. citation according to the Harvard convention or APA (author-year system): indication of author and year of publication in the continuous text (e.g. Mustermann, 2000), optionally with page reference
- 2. citation according to the Vancouver Convention or IEEE (numbering system): consecutive numbers in brackets in the continuous text and analogously also in the bibliography. If a literature reference is cited several times in the continuous text, the same number must always be used (e.g. [17] or alternatively superscript ¹⁷).

In the author-year system, the first and second author (Mustermann, 2000; Mustermann and Musterfrau, 2000) are named in a continuous text in addition to the year of the publication. In case of several authors, the first author is named followed by "et al." and the year (Mustermann et al., 2000), which is called a short document. If several works are cited at the same time in one place, they should be separated by commas (Mustermann 2000, Musterfrau 2001). Also with the numbering system, several sources can be cited at the same time, these are then separated by commas within the brackets ([17, 19, 24-26] bzw. ^{17, 19, 24-26}).

FURTHER ORGANIZATIONAL GUIDELINES

Basic structure of a medical work

The basic structure of a medical thesis, especially a dissertation, is based on the common scientific format and consists usually of the following elements:

- Introduction
- Main guestion
- Material & Methods
- Results
- Discussion
- Abstract/Summary
- Bibliography
- list of abbreviations (if applicable)
- list of figures/tables (if applicable)
- attachments (if applicable)

Please ask your supervisor or program coordinator for information on specific, additional or deviating requirements.

Tables/Figures

Tables and figures are numbered sequentially. If an illustration consists of several elements, they can be specifically named if necessary to facilitate the assignment (e.g. "Fig. 3a" and "Fig. 3b"). All tables and figures are labelled consistently, the labelling should show briefly and concisely what the respective table/figure shows.

Bibliography

In the bibliography, too, it applies that in a work, analogous to the way it is cited, only one of the possible styles should be used consistently. The bibliography contains all publications cited or referenced in your dissertation - but it should only contain those publications that are actually cited in the dissertation or referenced in the body of the text. In the bibliography, all authors must be named for each publication, the use of "et al." as in the continuous text is not sufficient here (i.e. a full reference is always required).

- 1. bibliography according to Harvard convention: The bibliography is sorted alphabetically by the surname of the first author and then chronologically by the year of publication
- 2. bibliography according to the Vancouver Convention: the bibliography is sorted in ascending order of the references in the continuous text, the reference number is prefixed as a number

Different sources (e.g. book, anthology, paper, journal, dissertation/habilitation, lecture) can be presented differently in the bibliography. Detailed examples can be found e.g. at www.nlm.nih.gov/bsd/uniform requirements.html. When using sources from the Internet, it is recommended to include the date of retrieval, ideally supplemented by a Digital Object Identifier (doi).

In order to create a bibliography, it is recommended to use appropriate literature management programs, which are provided free of charge by LMU (EndNote and Citavi, see also http://www.ub.uni-muenchen.de/schreiben/literaturverwaltung/index.html).

Literaturverzeichnis

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