

How to cite correctly

Citation in
scientific papers
-an introduction-

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Postgraduate Master's course „Drug Regulatory Affairs“



What is plagiarism?

Word origin:

Theft of intellectual property

- from Latin *plagium*: theft of human beings, sale of souls
- from Greek *plagios*: dishonest, deceitful (1)

Meaning:

Unlawful appropriation of another's thoughts, ideas or the like in the artistic or scientific field and their publication; theft of intellectual property (2)

Different forms of plagiarism:

Total plagiarism

Complete copying of another's work.

Ghostwriter plagiarism

Writing a paper by another person using one's own name, even if the citation guidelines are adhered to.

Structural plagiarism

The composition or structure of a paper is taken from existing works, whereby the sources used are not indicated.



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Patchwork plagiarism

(..) Piecing together several other people's work, even if the citation guidelines are adhered to.

Plagiarism of ideas

Essential ideas of a paper are taken over without indicating the sources used.

Poor citation (most frequent form of plagiarism)

Incorrect information about the sources used or incorrect use of the citation rules.

Translation plagiarism

Complete or partial copying by translating an original text into another language without citing the sources (3, offline).

Why do I need to cite?

In science, you work in a community and build on the findings of others. In addition, one refers to relevant work and the ideas of other scientists in order to avoid unnecessary repetition and to close gaps in knowledge. A scientific paper is a **part of the science**.

The reference must be **comprehensible, consistent and unique**. The relevant documents must be found in the bibliography and be available for the reader.

Taking over knowledge without mentioning the author used is intellectual theft; it is immoral and can have social and legal consequences (4).

Direct citation

Also referred to as „literal or verbatim citation“ / quotation.

It is a

words to the letter and literal adoption

from an original source.

Applies also to tables, figures, graphs, etc.

Direct citations (quotation) are used when the content and wording are significant. Otherwise, indirect citation should be used, which reproduces the content of the original source in someone's own words (4).

Direct citation (example)

Quotation:

„quotation marks“ or use *italics*.

Quotation within a quotation:

,single quotation marks‘

Long quoted passage

(40 words or more):

indentation/font/line spacing

Omission words or sections:

must not change the meaning!

(..) resp.. (...) or [...] resp. [...]

Error in the original text:

[sic!] after the error/typo (5).

write a short text about pharmaceuticals with quotation marks, a citation within a citation, indention passage, omission of words or text, implement (sic!)

- Pharmaceuticals play a crucial role in modern medicine, providing treatments for a wide range of conditions. As Dr. Sarah Lee notes, "The development of new drugs has revolutionized healthcare, allowing for more effective management of diseases" (Lee, 2022). This sentiment is echoed by Dr. James Carter, who states, "The impact of pharmaceuticals on public health cannot be overstated; they have saved countless lives" (Carter, 2021).



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<> Code Code Kopieren  
"However, the pharmaceutical industry is not without its controversies. Issues such as pricing, accessibility, and ethical practices have raised significant concerns. For instance, 'the high cost of medications often leaves patients struggling to afford their treatments, leading to (...) adverse health outcomes' (Lee, 2022, p. 45)."
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Moreover, it is essential to recognize that "while pharmaceuticals are vital, they should not be viewed as a panacea" (Carter, 2021, p. 78). As Lee (2022) points out, "the reliance on medication can sometimes overshadow the importance of lifestyle changes and preventive care" (sic!). This highlights the need for a balanced approach to health that incorporates both pharmaceuticals and holistic practices.

Indirect citation

Citation of content/meaning/ideas of an original text

with someone's own words.

Indirect citations do not have to be placed in quotation marks, but they must be clearly verifiable and relateable by citing the source.

Modified tables, figures, graphics, etc. must be cited too (5).



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Second hand citation:

If you want using words/text of an author A, which has been cited in a text by an author B, but you don't have access to the original source of A, you could cite 'second-hand' by quoting source B and not the original source. This method of citation is **not recommended and should be avoided** because of its prone to errors concerning the content (limited verification). However, it is tolerated if it is not possible or only very difficult to obtain access to the original source of author A.

Citation:

Source A quoted/cited from: Source B (5).

No citation needed

Generally known knowledge from e.g. encyclopaedia and Duden does not have to be cited, unless it is taken verbatim/literally -> quotation.



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Where to find appropriate sources?

Scientific writing includes searching/finding, evaluating/assessing and citing other works (texts, tables, graphics,...).

The sources can be found in libraries and on the internet (books, journals/papers, legal texts, guidelines, regulations, directives, etc.).

Please check the services of
the [Bonn University and State Library](#).

During the evaluation and assessment, the relevance and above all the credibility of the source must be checked. Especially for sources from the WorldWideWeb.

Referencing

- **Footnote style:** „text¹“ or „text^A“ is the reference at the end of the page or text (4).
 - **Harvard style (author-year-style):** Cite the author and year directly in the text after the respective words/parts (author, year, page if applicable), and list full source details in a reference list (alphabetical order) at the end of the entire paper/thesis etc.. The reading flow is well maintained (4).
 - **Vancouver style (citation-sequence system):**
recommended citation style
- **Important:**
The citation style must be **consistent** throughout the study paper/thesis.

Referencing (example)

Vancouver style (citation-sequence system) (6):

- Citations are numbered in the text in the order in which the citations appear for the first time. **Same source – same number throughout the entire text.**
- The number correspond to the entry in the reference list, where full source details are listed.

Use one citation style only!

write a short text about pharmaceuticals using vancouver style

- Pharmaceuticals are essential in modern healthcare, providing treatments that improve patient outcomes and enhance quality of life. The development of new medications has significantly advanced the management of chronic diseases, infectious diseases, and various health conditions. According to Lee S, "The pharmaceutical industry has revolutionized the way we approach health and disease management" (1). However, the industry faces challenges, including high drug prices and accessibility issues. Carter J emphasizes that "the cost of medications can be a barrier for many patients, leading to non-adherence and worsening health outcomes" (2). Moreover, while pharmaceuticals are crucial, they should not be seen as the sole solution. Lee S notes that "integrating lifestyle changes and preventive measures is vital for comprehensive healthcare" (1). This balanced approach is necessary to ensure optimal health outcomes for patients.

References

1. Lee S. The impact of pharmaceuticals on healthcare. J Health Policy. 2022;15(3):45-50.
2. Carter J. Challenges in the pharmaceutical industry. Med Ethics. 2021;12(2):78-82.

Referencing sources from the internet

**Name, first name and/or title. Complete URL (date of access)
(7, offline!)**

- To make it easier to find the listed source of the quoted/cited content
- To avoid a long list of cryptic URLs

Examples:

- 1) European Network of Centres for Pharmacoepidemiology and Pharmacovigilance. European bivalirudin utilisation in practice 2. <https://www.encepp.eu/encepp/viewResource.htm?id=30897> (last accessed 11 July 2022).
- 2) European Medicines Agency, EU Clinical Trials Register, <https://www.clinicaltrialsregister.eu/ctr-search/search/> (last accessed 02 April 2022).

Minimum requirement: Complete URL, (date of access)



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Referencing sources from the internet

Problem:

- Dynamic web pages can change frequently
- Some pages will be deleted
- Other content will suddenly be available

Solution?:

- A **permanent link** can be generated as a reference. However, the operator of the website is responsible for the allocation and persistence.
- A web page can be stored free of charge with a service. The reference in the text refers to an URL of the archiving web page (8).

List of references

- (1) <https://www.wissen.de/wortherkunft/plagiat> (accessed 15.09.2022)
- (2) <https://www.duden.de/rechtschreibung/Plagiat> (accessed 15.09.2022)
- (3) Plagiate, Infobroschüre, Vizerektorat für Lehre, Qualitätsmanagement & Program Delivery, Juni 2009 (accessed 23.05.2011, offline 24.09.2019)
- (4) <http://de.wikipedia.org/wiki/Zitat> (accessed 16.09.2020)
- (5) <http://www.wissenschaftliches-arbeiten.org/zitieren/direkte-und-indirekte-zitate.html> (accessed 16.09.2020)
- (6) <https://www.scribbr.co.uk/referencing/vancouver-style/> (accessed 12.09.2023)
- (7) http://de.wikipedia.org/wiki/Zitieren_von_Internetquellen (accessed 14.09.2018, offline 24.09.2019)
- (8) <https://de.wikipedia.org/wiki/Permalink> (accessed 16.09.2020)



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Helpful links/Literature

Stefan Bagusche: Richtig Zitieren – eine Einführung

https://www.umwelt-campus.de/fileadmin/Umwelt-Campus/Bibliothek/Download-Dokumente/Ratgeber_Bibliothek_-_Doppelung_bei_HT/Zitieren/Zitieren__Crashkurs__-_2013-02-28.pdf (accessed 15.09.2022)

Studis Online: Referate, Haus- und Abschlussarbeiten, Tipps zum wissenschaftlichen Schreiben

https://www.studis-online.de/Studieren/Wissenschaftliche_Texte/ (accessed 15.09.2022)

Jele, Harald (2012): Wissenschaftliches Arbeiten: Zitieren, Taschenbuch, 3. Auflage, W. Kohlhammer GmbH

Träger, Thomas (2018): Zitieren 2.0: Elektronische Quellen und Projektmaterialien richtig zitieren, Taschenbuch, 2. Auflage, Vahlen Verlag

Time for questions!