Referencing and quoting in scientific writing

1-Referencing

Referencing in scientific writing is a crucial aspect that ensures the credibility, traceability, and integrity of the work. It involves acknowledging the sources of information, ideas, data, or theories that you have used in your research. Proper referencing helps avoid plagiarism, allows readers to verify your claims, and situates your work within the broader scientific context. Academic work depends on the research and ideas of others, so it is vital to show which sources you have used in your work, in an acceptable manner.

1.1. Why use references?

There are three principal reasons for providing references and citations:

a) To show that you have read some of the authorities on the subject, which will give added weight to your writing

b) To allow readers to find the source, if they wish to examine the topic in more detail

c) To avoid plagiarism and show that you understand the rules of the academic community.

1.2. Importance of Referencing

- Avoids Plagiarism: Properly citing sources ensures that you give credit to the original authors and avoid presenting someone else's work as your own.
- **Supports Claims**: References provide evidence for your arguments and demonstrate that your work is grounded in existing research.
- Enables Verification: Readers can locate and verify the sources you used.
- **Shows Scholarly Engagement**: Referencing demonstrates that you are familiar with the literature and have built upon existing knowledge.

1.3. Types of Sources to Reference

- Primary Sources: Original research articles, experiments, or data.
- Secondary Sources: Reviews, meta-analyses, or summaries of primary research.
- Tertiary Sources: Textbooks, encyclopedias, or general overviews.
- Other Sources: Patents, conference proceedings, theses, or online resources.

1.4. Referencing Styles

Different disciplines and journals use specific referencing styles. Some common styles include:

- **APA (American Psychological Association)**: Used in social sciences, psychology, and education.
- MLA (Modern Language Association): Common in humanities and literature.
- Chicago/Turabian: Used in history, arts, and some social sciences.
- Vancouver: Common in medical and scientific fields.
- **IEEE** (Institute of Electrical and Electronics Engineers): Used in engineering and computer science.
- Harvard: Widely used across disciplines.

Each style has specific rules for formatting in-text citations and reference lists.

1.5. Components of a Reference

A typical reference includes:

- Author(s): Last name followed by initials.
- **Publication Year**: The year the work was published.
- **Title**: The title of the article, book, or chapter.
- **Source**: Journal name, book title, or website.
- Volume, Issue, and Page Numbers: For journal articles.
- **DOI** (**Digital Object Identifier**): A unique identifier for online sources.

1.6. In-Text Citations

In-text citations are used within the body of your text to indicate where information comes from. Examples:

- APA: (Smith, 2020) or Smith (2020) found that...
- Vancouver: [1] or Smith et al. [1] reported...
- Harvard: (Smith 2020) or Smith (2020) stated...

1.7. Reference List or Bibliography

• A reference list includes only the sources cited in your text.

- A **bibliography** includes all sources consulted, even if not cited.
- Entries should be alphabetized and formatted according to the required style.

1.8. Tips for Effective Referencing

- **Be Consistent**: Use the same referencing style throughout your document.
- Cite as You Write: Avoid adding references at the last minute.
- Use Reference Management Tools: Tools like EndNote, Zotero, or Mendeley can help organize and format references.
- **Check Journal Guidelines**: Follow the specific referencing style required by the journal or institution.

1.9. Common Mistakes to Avoid

- Incomplete References: Missing authors, publication dates, or page numbers.
- Incorrect Formatting: Not following the required style guidelines.
- **Overciting**: Citing common knowledge or excessively citing the same source.
- Underciting: Failing to cite sources for ideas or data that are not your own.

1.10. Examples of References

APA Style:

- Journal Article: Smith, J. A., & Brown, L. M. (2020). The effects of climate change on biodiversity. *Environmental Science Journal*, 15(3), 123-130. <u>https://doi.org/10.xxxx</u>
- Book: Johnson, P. (2019). Ecology and evolution. Cambridge University Press.

Vancouver Style:

- <u>Journal Article</u>: Smith JA, Brown LM. The effects of climate change on biodiversity. Environ Sci J. 2020;15(3):123-30.
- <u>Book</u>: Johnson P. Ecology and evolution. Cambridge: Cambridge University Press; 2019.

2. Using quotations

Using a quotation means bringing the original words of a writer into your work. Quotations are effective in some situations but must not be overused (e.g. to pad out your work). They can be valuable:

a) when the original words express an idea in a distinctive way

- b) when the original is more concise than your summary could be
- c) when the original version is well known

All quotations should be introduced by a phrase which shows the source and also explains how this quotation fits into your argument:

Introductory phrase	Author	Reference verb	Quotation	Citation
This view is widely shared;	as Friedman	stated:	'Inflation is the one form of taxation that can be imposed without legislation'	(Friedman, 1974:93).

It is important to refer correctly to the work of other writers which you have used. You may present these sources as a summary or paraphrase, as a quotation, or use both. In each case a citation is included to provide a link to the list of references at the end of your paper:

Smith (2009) argues that the popularity of the Sports Utility Vehicle (SUV) is irrational, as despite their high cost most are never driven off-road. In his view 'they are bad for road safety, the environment and road congestion' (Smith, 2009:37).

References

Smith, M. (2009) Power and the State. Basingstoke: Palgrave Macmillan

a) Short quotations (1–2 lines) are shown by single quotation marks.

Quotations inside quotations (nested quotations) use double quotation marks:

As Kauffman remarked: 'his concept of 'internal space' requires close analysis'.

b) **Longer quotations** (3 or more lines) are either indented (given a wider margin) and/or are printed in smaller type. In this case, quotations marks are not needed:

Similarly, she says:

One of the many things that people need to be able to do, if their life is to be worthy of human

dignity, is to have access to the legal system on terms of equality with other people The due

process rights ... are also fundamental opportunities to act and be treated as a fully equal citizen.

(Nussbaum, 2011a, p. 28)

a) Page numbers should be given after the date.

b) Care must be taken to ensure that quotations are the exact words of the original. If it is necessary to delete some words which are irrelevant, use dots (...) to show where the missing section was:

'Few inventions ... have been as significant as the mobile phone'.

c) It may be necessary to insert a word or phrase into the quotation to clarify a point. This can be done by using square brackets []:

'... modern ideas [of freedom] differ radically from those of the ancient world...'

d) If you want to point out a mistake in the original use [*sic*]:

He claimed that 'the company was to [sic] big to fail'.

e) If a writer has published more than one book or article in a year, it is necessary to add a/b/c to the date:

(Nussbaum, 2011a, p. 28)

2.1. Reference verbs

Summaries and quotations are usually introduced by a reference verb:

Smith (2009) argues that ...

Janovic (1972) claimed that ...

These verbs can be either in the present or the past tense. Normally the use of the present tense suggests that the source is recent and still valid, while the past indicates that the source is older and may be out of date, but there are no hard and fast rules. In some disciplines an older source may still be relevant.

2.2. Using verbs of reference

Referring verbs are used to summarise another writer's ideas:

Previn argued that global warming was mainly caused by the solar cycle.

Bakewell (1992) found that most managers tended to use traditional terms.

They may also be used to introduce a quotation.

As Scott **observed**: 'Comment is free, but facts are sacred'.

Most of these verbs are followed by a noun clause beginning with 'that'.

a) The following mean that the writer is presenting a case:

argue claim consider hypothesise suggest believe think state Melville (2007) suggested that eating raw eggs could be harmful. b) A second group describe a reaction to a previously stated position:

accept	admit	agree with	deny	doubt

Handlesmith *doubts* Melville's suggestion that eating raw eggs could be harmful.

c) Others include:

assume	conclude	discover	explain	imply	maintain
presume	reveal	show			

Patel (2013) assumes that inflation will remain low.

Repor	ting something	
the author did		
٠	observe	
•	discover	
•	notice	
•	demonstrate	
•	find	
•	report	
•	describe	
•	determine	
•	discern	
٠	show	
٠	assess	
٠	study	
٠	analyse	
٠	calculate	
٠	examine	
•	investigate	
٠	identify	
٠	prove	
•	establish	
•	conclude	

Reporting something the author stated			
Acceptable	Stronger		
 comment describe discuss point out note remark write 	affirm emphasise stress maintain stipulate explain conclude clarify identify		

Reporting the author's opinion Acceptable	Stronger
 accept believe consider view see question query think suggest propose suspect speculate 	 argue assert claim contend deny recommend reject advocate maintain conclude

Examples of using verbs of referencing.

You can use reporting verbs in the present tense or past tense, as long as you are consistent throughout your assignment.

Many of the verbs in this table are used with the conjunction 'that'. For example:

- Mahoney (1998, pp.10–12) established that this reaction is in fact...
- When Smith and Sampson (1989, p.98) contended that this position was untenable, they were...

However, verbs that cannot be used with 'that' include:

• Martin and Baker (1980) examined the issue from a different perspective.

Words like 'view' are used with the conjunction 'as', after the subject of the sentence:

• Hui (2001, p.49) views this explanation as too simplistic. She maintains that...

All the above examples use reporting verbs actively, but you can also use verbs passively. Both following sentences are acceptable:

- Dominguez (2002, pp.76-79) suggested three possible interpretations of these results.
- Three possible interpretations of these results have been suggested (Dominguez, 2002, pp.76–79).

Other examples of using reporting verbs in the passive form:

- It has been claimed (O'Shea, 1997, p.45) that...
- It has been shown that this is not the case (Akabi, 1979, pp.310–319).
- The practice of...has been questioned (Chopra, 1990, p.92) because of its...

• These findings have been extensively analysed (e.g. by Stamford, 2001a, 2001b; Ma, 2002) and interpretations vary from...

You can add adverbs to your reporting verbs if appropriate. These also need to accurately reflect the original material. In the above example, you would need to be sure that the findings had been 'extensively' analysed.

The passive from is often used when citing several authors to back up a single point. The example above uses two works by Stamford and one by Ma.

You can also cite an author without using a reporting verb by restating the author's point or using the phrase 'according to'. For example:

- Study skills are increasingly used by Higher Education institutions (Malley, 1998, p.28)
- According to Malley (1998, p.28), study skills are increasingly used by Higher Education institutions.

2.3. Citation Software

If you are going to write reports and assignments that will require a number of references then it can be a good idea to use citation software to help you manage those references. There are a number of different citation programs; some are free and others cost money to use.

4 There are a variety of reference management software tools available. Use the University of Otago Library's Managing references guide to find out which will suit you best <u>http://otago.libguides.com/</u> managingreferences

4 EndNote is a widely used program and is supported by the Library and ITS. It is available for Mac and Windows platforms. EndNote is available free to all students via the Student desktop www.otago.ac.nz/studentdesktop. It is also possible to purchase Endnote for ITS for vour own computer through а small fee (see: http://www.otago.ac.nz/its/services/software/index.html) . ITS training run courses using EndNote (see: <u>http://www.otago.ac.nz/its/services/training/otago030141.html</u>) . Your Subject Librarian can also help you with Endnote.

- Zotero is free to use (<u>https://www.zotero.org</u>)
- Mendeley is free to use (<u>https://www.mendeley.com</u>)
- If you are using LaTex for your documents then you will have BibTex as your citation management software. You may find <u>http://www.bibsonomy.org/</u> useful for recording and sharing references