

Evaluating sources of information

When evaluating a source and deciding whether it is reliable enough to use in your research, here are a few “good signs” and “bad signs” as to whether it should be trusted. **REMEMBER:** just because one or more of these signs is true, it doesn’t mean that the source you have found is automatically trustworthy. You must look at the source as a whole, take into consideration multiple aspects, and only then conclude whether there are more good signs or bad signs overall.

Good signs:

The author provides their information sources (references) — This is a good sign because the author is not afraid of you checking the sources yourselves. This also shows that the information actually came from somewhere. However, you cannot automatically assume that the sources are real, reliable, or used correctly unless you check them yourself. It is also important to make sure that they are not misquoting the original information, either accidentally or in a manipulative way.

The author is well qualified to write about the topic — See what you can find out about the author of the information. Just because they might have a doctoral degree in economics doesn’t mean that they are an expert in medicine or public health. On the same note, just because they are a doctor doesn’t necessarily mean that all other doctors agree with them. Use a search engine and see what you can find out about the reputation of the author and the website on which their work is published.

The overall tone of the article is neutral and professional — Of course, it is possible to write all kinds of nonsense in a neutral and professional style. However, experts usually write in a neutral and professional tone as doing otherwise can harm their reputation (which is very important to them) and make them seem overly emotional.

The web address (URL) ends with .gov (government institution) or .edu (accredited educational institution) — Although you shouldn’t just automatically trust everything that a government says, governments provide a lot of funding for independent scientific research and are generally interested in informing their citizens with quality information. This, of course, depends on the government — the government of North Korea might have some strange information when it comes to human rights, whereas the government of Russia has a different idea about the history of Ukraine than most of the world does.

Educational institutions also fund high quality independent research and are freer of pressure to find results that fit a certain narrative than research funded by private companies — a study on the environmental impact of plastic bottles funded by the EU or the University of Latvia is likely to have more trustworthy results than a study funded by a company that makes plastic bottles. Make sure that what you are reading is not student work that has been uploaded, however.

Only governments can use the “.gov” top-level domain, and only accredited educational institutions can use the “.edu” one. Websites that use other domains, such as .com, .org, and .lv, can be created by pretty much anyone. Although there are plenty of trustworthy websites that use “.org” or “.co.uk”, be extra sure to check who is behind the website — search engines are very helpful for this purpose.

The information has been “peer reviewed” by other experts — this means that other people have checked the information and confirmed that it is correct. Articles that are published in scientific and academic journals generally must go through a peer review process which can take quite some time. This ensures that the results that they found are accurate and that their analysis is correct. Although it can be hard to read these sources since they are written for an academic and not a general audience, the information quality is usually very high. You can find peer reviewed articles on databases like EBSCO and via search engines like Google Scholar.

Bad signs:

The author or website is attempting to sell a product or service related to the topic — Some “experts” will write about how terrible and profit-driven the mainstream healthcare and medicine industry is, but at the same time are trying to sell “alternative products” such as herbal and homeopathic remedies. Although some of their criticisms might be legitimate, they have a financial interest in trying to get people to trust mainstream medicine less and use their own products more.

The author heavily uses anecdotal evidence — An example of this would be “my grandfather smoked a full pack of cigarettes every day and lived until he was 110, which is why I think that smoking isn’t actually bad”. Although it may be true that your grandfather smoked and lived a very long time, is this true of most people who smoke? Is one person’s experience, or even a few people’s, really strong evidence that smoking isn’t bad for you?

The author makes bold or extreme claims about the topic — Shocking headlines and extreme claims make it more likely that you will open a page or article, which is good for the website’s owner since more clicks means more money from advertisements. However, if something sounds too crazy to be real, your first instinct should be to pause and see if you can find that same information from other trustworthy sources as well. If you cannot, then it is a very bad sign that the information can be relied on.

The author attacks other people or organizations — If you notice that a source is attacking a person as much as or even more than they are attacking the points or arguments that that person is making, it is a sign that they might not actually have a good counter-argument. This is called “ad hominem” and is a common logical fallacy.

The author is interested in promoting themselves — Respectable authors, especially scientists, are extremely careful to focus on their work and not themselves. They even go so far as using the passive voice when they write or call themselves “the author of this paper” instead of using “I”. The more an author seems self-important and focuses on their supposedly impressive achievements and background, the less likely it is that this is actually a respected and credible expert in their field.

The information cannot be found anywhere else, or only in other suspicious sources — If there is some information that you find and really want to use in your research but cannot find it mentioned anywhere else, this might be a red flag that the information is not actually credible. However, you must be careful — just because there are many websites you can find that have “evidence” that the world is flat, it does not mean that this is credible information.

Paraphrasing and plagiarism

Although it’s easy to copy information from the internet and change a few words or phrases around, this is considered plagiarism even if you give the source of the information. This is because the information isn’t truly in your own words, and you are still using the sentence or paragraph structure of the original source while trying to hide that fact by changing some information around. Other examples of plagiarism include using a direct quote but not using quotation marks, and not giving the source of the information in the text.

The best way to paraphrase information without plagiarizing it is to read the information that you want to include in your own work, put it aside for a minute or so, and write the information in your text as well as you can remember from your memory. If you do it this way, it will almost certainly be in your own words. If you are worried about forgetting details such as exact numbers, don’t worry! Once you have written it, then you can check the original source again and make sure you have the information right.

Citing sources:

To cite sources, it is important to use the style required by your teacher, university, publication, etc. One common style of references which is widely used throughout the world is APA (American Psychological Association) format. Within the text, every time you mention information that came from a source you found, you should include in parenthesis the name of the author (or the name of the source if there is no author) and year in parenthesis — for example: (Horgan, 2022). You must do this regardless of if you have paraphrased the information or if it is a direct quote in quotation marks. The full information about each source should be written in the bibliography section at the end. The easiest way to format them is to use the website “[Citation Machine](#)” and select “APA”. The correct format for websites is:

Lastname, F. M. (Year, Month Date). *Title of page*. Site name. Retrieved Month Date, Year, from URL