

Say what you mean



All *Nature Reviews Psychology* articles are edited for clarity and consistency prior to publication. We encourage researchers to devote the same attention to precision when writing their empirical papers.

All *Nature Reviews Psychology* articles are thoroughly and heavily edited prior to formal acceptance, considering clarity, language, scientific correctness, consistency and house style. This line edit is an intensive process. Indeed, one of our mottos is ‘no one will ever read your paper as closely as a *Nature Reviews Psychology* editor’. Primary research articles require the same close attention to consistency and clarity.

Consider the following sentence: “People with aphantasia showed decreased engagement of visual attention during visual imagery”. At first glance, the meaning of this sentence seems clear. But a closer read reveals ambiguities: was there decreased engagement of visual attention during mental imagery relative to other tasks (for example, visual search), to other moments in time (for example, while not engaging in visual imagery) or to other people (for example, a group without aphantasia)? As another example, what does ‘particularly’ mean in the sentence, “Communicating the social benefits of vaccination increased vaccination willingness, particularly among participants from countries with an individualistic culture”? Did communicating social benefits increase vaccination willingness in all participants, but have a larger effect for participants from countries with an individualistic culture? Or was this effect observed only in participants from such countries? These examples illustrate a common failure to provide the comparator, which results in imprecise descriptions of study findings that might be interpreted in different ways by different readers.

Precision in terminology is also important, especially for a field such as psychology in which constructs are not physical entities that have unique scientific names, such as ‘cell’ or ‘atom’, but rather rely on terms that have colloquial meanings, such as ‘attention’ and ‘beliefs’. For example, is ‘conspiracy belief’ the same as ‘willingness to believe

conspiracy theories’? It might be, but it’s also possible that the former refers to a belief in a specific conspiracy theory whereas the latter refers to a general cognitive style. We suspect that many researchers vary the terms they use within an article in an effort to make the writing more interesting or less repetitive. However, the goal of scientific writing is to communicate empirical results and their implications clearly, accurately and unambiguously. When multiple terms are used for the same concept, it can leave the reader confused about what exactly the results of a study are or what they mean.

At the level of an entire literature, a lack of precision in terminology can raise questions about the consistency of findings across papers and their interpretation. For example, if one paper finds an effect of a certain manipulation on political polarization and another does not, the second paper could be a failure to replicate. Alternatively, these discrepant results might arise because one study defined political affiliation via self-identification (participants identify themselves as Democrat or Republican, or as liberal or conservative) whereas the other defined political affiliation on the basis of endorsement of conservative versus liberal ideology on a survey. This difference between studies is obscured if both articles simply refer to “conservatives and liberals” as shorthand when describing and discussing the results. Although the alternatives are wordier (“those who self-identified as Democrat or Republican”; “those who endorsed liberal versus conservative ideology”), they are more precise.

Importantly, we do not believe that precision leads to overly long and tedious articles. Quite the opposite: precise writing eases the cognitive burden on the reader. Indeed, a hallmark of a *Nature Reviews Psychology* article is that it is easy (and ideally enjoyable!) to read. Empirical papers can be similarly straightforward when care is taken to use terms unambiguously, consistently and with clear definitions where needed. Beyond reading ease, precision in language helps readers to extract the correct meaning from the article, ensuring that future scientific work is based on an accurate representation of what came before.

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