



EDITOR'S NOTE

Telegraphing in Scientific Writing

I am a firm believer that the author or author team should provide the harshest criticism of any work being offered for publication. Manuscripts should be developed painstakingly, critically attacked from all sides, revised, and then attacked and revised repeatedly until there is nothing left to change, no holes to fill, and no questions left hanging. Only then are they ready for submission. Depending on your perspective in our increasingly polar world, this position may come across as either ludicrous or obvious.

Those in the ludicrous camp may care more about the publication credit than the actual publication. They are satisfied to put in the least amount of work needed to achieve the endpoint of getting a manuscript through peer review. If the research effort was sound and the writers skilled, the product may be fine. If the research effort had substantial flaws and/or the writers are less skilled, catastrophe lurks around many corners. Efforts to make peer review less troublesome can begin with reasonable intentions. It could start with the minimization of seemingly small weaknesses in study design or seemingly unimportant deviations in data collection. Skilled writers can craft text so well that many reviewers might miss the obfuscation.

The problem with ignoring seemingly small and unimportant problems, however, is that sometimes, individually or collectively, they can directly affect the data and/or the interpretations that are drawn from them.

Those in the obvious camp almost certainly care more about the publication than the simple credit. They accept that every research study and research report has flaws, but they take it as a challenge to fairly present what was planned, what was done, what was found, how any and all of the nuances might have influenced the data and/or the interpretations arising from them, and how the work might be most useful to future readers. These authors will often not see peer review as a hurdle. They will not submit work with fatal flaws or the possibility of fatal flaws. They will have enough confidence in their product to make peer review a welcome opportunity to get input from fresh eyes and minds. They will appreciate peer reviewer comments at the very least flagging areas where strengthening may be beneficial.

The quality of submitted manuscripts varies dramatically, both in the skill evident in content development and in the attention to detail. Shortcomings frequently indicate

some combination of poor design, weak execution, deficiencies in critical thinking, inexperience, incompetence, lack of basic effort, or language deficiencies. Although the product does not define the person or team, it can telegraph much about the creators.

Language deficiencies are often easy to spot, but they are also easy to forgive if the authors do their best to deliver what is asked of them. Great respect should be given to authors working hard to write professionally in another language. Although language issues can become fatal flaws, assistance is often available to those who demonstrate clear effort with a promising manuscript.

The other end of the forgiveness spectrum is populated by authors who develop material poorly and/or willfully ignore submission guidelines. If poor development reflects or masks a weak project, product, or analysis, the problems will hopefully be uncovered quickly in the peer review process. Marked violation of submission guidelines is more complicated. It could reflect inexperience, laziness, or pure sloppiness, any of which might be expected to spill over into research design and execution. It could reflect a failure to change format after rejection from another publication, which might raise questions about fundamental publishability. It could also simply reflect a sense of entitlement or lack of respect for others involved in the process, which might make one wonder what other corners have been cut. Inattention to reference format could indicate inattentiveness in the entire effort. Word count violations not matched by top-rate content will reflect badly on editing ability or capability.

It is usually not necessary to determine the motivation behind manuscript deficiencies, but it is important for authors to appreciate that each one can count against them. Single issues may be ignored, but the tone of reviews can darken and editorial decisions become more harsh as they accumulate.

Authors should also be aware that some deficiencies can loudly telegraph lapses in critical thinking, either acute or chronic. One such case is the reporting of numbers beyond meaningful levels of precision in text or tables. For example, the relevance of most percentages is usually in the whole number range at best. One decimal place is difficult to justify for numbers >1, and 2 decimal places simply cannot be defended. The concern stands for original work and for the reiteration of numbers reported by others. Sharing

meaningless numbers of any type reflects a basic failure that can negatively affect credibility. Similar messaging can result from content not located in the appropriate sections, unnecessary editorializing and self referencing, unnecessary (and particularly repeated) claims of novelty, overstatement of results, absence of an objective limitations section, and a mismatch between conclusions found in the abstract and in the main body.

Authors should take the time to craft every element of a manuscript, employing the best practices in scientific writing

and ensuring full compliance with submission guidelines. The effort will allow reviewers and editors to focus on the more important scientific content of a manuscript. This means that the work may either be moved forward more quickly or be met with a greater willingness to nurture it to the point of readiness. Either outcome is good for authors and for the published literature that marks our place.

Neal W. Pollock, PhD
Editor-in-Chief