

A Brief Guide to Manuscript Reviewing

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The purpose of this article is to provide an overview of manuscript reviewing. This article will be informative for undergraduate and junior graduate students seeking to better understand the process of peer review. This article will be especially useful to senior graduate students, new faculty, and others who have the opportunity to review manuscripts but have not yet had much experience doing so. In addition, we hope this article will provide food for thought for all of those who review manuscripts regularly.

Why Review Manuscripts?

Reviewing manuscripts requires time and effort for which you receive no financial compensation. So why do it? Presumably, one of the primary reasons many enter "higher education" is the opportunity to contribute to science. Manuscript reviewing is a real opportunity for you to shape the literature and the direction of science. Manuscript reviews are one place in which paradigmatic battles are fought, and it is your opportunity to help influence the quality of the evidence supporting one camp or another. Reviewing also keeps you informed about what others in the field are doing. It is often difficult to find time to read new journal articles for which there is no external commitment. Committing to a manuscript review ensures that you will contact cuttingedge work and read it carefully.

In pointing out to others what is unclear or how topics might be better organized, we undoubtedly improve the clarity and organization of our own ideas. Thus, manuscript reviewing enhances the likelihood that one's own work will be published because it teaches us how to anticipate the kinds of things that are important to reviewers. Reviewing also provides you with perspective when reading and responding to reviews of your own work. Completing thoughtful reviews in a timely manner also cultivates good relations with editors, which may improve your chances of getting your own work published. Finally, manuscript reviewing demonstrates service to the field and builds your curriculum vitae. Example vita section:

EDITORIAL CONSULTATION

Ad hoc reviewer for the following journals:

Behavior Therapy Cognitive and Behavioral Practice Journal of Studies on Alcohol Psychology of Addictive Behaviors Psychological Bulletin Psychological Science

Requests for assistance in reviewing manuscripts are common. Advisors often use this as a mutually beneficial training tool. Colleagues may ask you to look over a review or they may ask your opinion about a specific aspect of a review (appropriateness of the methodology, whether the authors interpreted the literature in a fair and balanced way, statistics, etc.). Assisting with a review has all of the benefits noted above except, in some cases, recognition (we encourage mentors and editors to acknowledge students who assist in the review process). Helping review a manuscript also has additional benefits. Feedback from a mentor or senior colleague you have assisted should enhance your confidence in reviewing. As a bonus, you may receive some insight into your own reviewing style and obtain specific feedback regarding the issues you identify. Finally, a manuscript review on which more than one person works may well yield a better review. Although assisting with manuscript reviews as a student is not required in most programs, it is a valuable experience and, in many places, opportunities are readily available. Just ask, if someone doesn't ask you first.

Attitude

We propose that reviewers develop a style and attitude in reviewing that is consistent with motivational interviewing. In our experience, there is a tendency to be overly critical in writing reviews, especially among less experienced reviewers and young professionals who have not received many reviews of their own work. Few things are more discouraging to authors than a review detailing flaws without any practical suggestions for remediation. There are no perfect research studies or papers. We encourage you to conceptualize your role as helping the authors publish their research, whether in the journal you are re-

viewing for or elsewhere. Keep in mind that the universe in which you publish is smaller than you think and it is a good idea to play nice (think karma). Part of your job as a reviewer is to instruct. Pointing fingers and questioning abilities is unlikely to produce an improved manuscript. We suggest cultivating a certain amount of empathy in reviewing. You may be reviewing the first paper a junior graduate student has ever submitted for publication. Finally, an invitation by an editor to review a manuscript is a complement to you. Treat it as such.

Strategies for Becoming a Good Reviewer

Becoming a good reviewer involves some time and effort on your part. Writing a review shouldn't be something that you do at the last minute or give just an hour of your attention.

Keep to the Time Line

Journals typically give reviewers a specific date for turning in their reviews, which ranges from a couple of weeks to a few months, depending on the journal. It is important to avoid turning in your review late. Doing this repeatedly will likely frustrate the editor and reflect poorly on you professionally. More importantly, late reviews are discourteous to the researchers. We know of instances where manuscripts were rejected after being under review for over a year because of slow reviewers. Late reviews are not only unfair to researchers, who might have preferred to submit the paper elsewhere, they also have a detrimental impact on the reputation of the journal.

Objectivity

You may be "blind" to the identity of the authors in many, but not all, cases. Under some circumstances, even if authors are not listed, you may know who the authors are based on the sample characteristics, or where the research was conducted, especially as you become more familiar with an area of the literature. Regardless of authorship, it is important to write your review as objectively as possible and to maintain confidentiality re-

garding the manuscript. The main question you should ask yourself is whether you can be objective in reviewing the paper of a person you know. If the answer is yes, review the paper. If no, explain your dilemma briefly to the editor and decline to review the paper as promptly as possible.

Be aware that frequently rejecting offers to review manuscripts will lead to fewer offers in the future. By contrast, if you write helpful reviews, and do so in a timely fashion, you will receive more offers to review (and perhaps more than you'd like). After a few years of good scholarship and contributing helpful reviews, you may be invited to join an editorial board. Be aware than when you accept editorial board membership you are typically committing to reviewing at least four to six manuscripts per year.

Writing a Review: The Nuts and Bolts

There are probably as many ways to write a review as there are reviewers. The following are suggestions that we have found to be helpful. First, read through the manuscript entirely once. Form some general impressions about the manuscript: Is it well written? Does it address important issues of interest to readers of the journal? Then read the manuscript again, taking detailed notes concerning both strengths and weaknesses. In general, you are looking for things that indicate high quality (a thorough literature review, sound methodology, clear results and conclusions). You are also looking for things that require clarification and revision. An exhaustive list of specific issues you might address is beyond the scope of this article, but some specific things you might want to focus on are as follows: How does the manuscript fit with the journal? Is relevant literature cited? Are the aims/hypotheses clearly laid out? Is the sample and procedure adequately described and appropriate to the aims of the study? Are the analyses appropriate? Do the conclusions and discussion follow from the results? Are limitations noted? When you have compiled your notes, it is time to begin writing your review.

Length

Different journals have different forms and/or formats for you to submit your review. Regardless of whether there are forms or not, most journals require that you write a narrative summarizing your impressions of the manuscript. In general, one to two pages is a good rule of thumb. Less than half a page probably indicates a lack of effort, and is less likely to be helpful in improving the quality of the manuscript. Even when publication is recommended with few suggestions for revision, it would be helpful for the editor to know your impression of the strengths of the manuscript. While more detail is better than less detail, re-

views in excess of three pages (single-spaced) are probably excessive. For articles that are seriously flawed, it is worth describing the major problems and taking less time and space for minor issues. However, generous reviewers often provide substantial commentary that may be invaluable to young researchers in need of guidance and critical feedback. While the present manuscript may not be publishable, such efforts may be vital for improving future research. As noted above, the tone of the review is critical to whether the recommendations facilitate improvements in the manuscript.

Organization

It is generally a good rule of thumb to begin the review with a summary of the purpose of the manuscript and your overall thoughts about the manuscript, including weaknesses, strengths and novelty, importance, methodological rigor, and interest level. Summary statements are generally helpful for highlighting key recommendations for the editor and authors. For example: "Overall, the paper is well written and pending clarification of a few issues potentially makes a good contribution to the literature" or "Overall, I think this manuscript has potential, but there are some critical issues that give me pause. I have attempted to provide constructive comments and suggestions that will be helpful in disseminating this research, even if not in XYZ journal."

There are several ways to format a review. One way is to present things in order of importance, having major issues followed by minor issues. By beginning with the primary concerns, the authors know immediately which issues are the most critical to address in a resubmission. A second way to organize your review is to follow the format of the manuscript—beginning with general comments, then moving to the introduction, methods, results, and discussion. A third way to organize would be to use an outline format (A1, A2, B3) . . .), where the review is arranged around themes (e.g., recruitment issues, interpretation of results). Finally, as suggested above, if the paper is fundamentally weak, it is appropriate to focus on more global issues, without too much worry about smaller details. It is helpful to end with a conclusion/summary. Briefly summarize the major points and comment on the importance of the work. Reiterate strengths, especially if you are recommending rejection.

We suggest keeping two goals of a review in mind. First, a review helps give the editor enough information to make a decision about the manuscript for that particular journal. Second, the review is meant to be a guide for the author to revise his or her manuscript and provide suggestions for improving the quality of the article. As such, a review should be written with the goal of helping authors identify the opportunities for modification, new analyses, etc.

Examples

Many new reviewers ask how to write comments that are appropriate and helpful. There are several ways a comment can be written in a positive and helpful way. First, provide clear examples of ways the authors can revise their manuscript. An example of a less helpful comment would be, "The authors did a poor job of reviewing the literature and missed important citations." While this may be true, a more fruitful approach would be to provide specific examples of important citations and perhaps suggest a few authors that have done important work in the field. Other things to remember: Be cautious about telling people to cite your own work. It's hard to be objective about the importance of your own work. If it's really that critical, another reviewer may suggest it. Tell the authors why incorporating certain ideas would improve the manuscript. Though authors must acknowledge your role as a reviewer, the authors need guidance concerning how to prioritize the feedback of multiple reviewers. Indeed, they are unlikely to be able to incorporate all of the suggestions for improvement they receive. You want to write your review in a way that persuades the authors that your comments will improve the manuscript.

Another example of a less helpful comment: "At present the graphs are misleading and hard to follow. The authors should think of a better way to present their results." It would be more helpful to give the authors specific information concerning how the graphs were misleading and hard to follow. For example, a reviewer might ask, "Were those standard errors or 95% confidence intervals?" Helpful reviewers might even offer a more descriptive title or suggest a line graph instead of a bar graph to show interactions. In summary, the best reviews raise important issues or concerns and make clear, specific recommendations for addressing them.

One way to look at writing reviews is to remember the golden rule: Do unto others as you would have them do unto you. Think about the comments that are most helpful to vou when you receive a review of your own work. Have you ever received negative, nonspecific feedback that was discouraging? Avoid such comments. Ultimately, a review should provide specific feedback that renders the manuscript more suitable for publication in that journal or elsewhere. Even if the editor recommends rejection, your efforts have not been wasted. It is important to remember that the authors may benefit from the feedback you provided when submitting to another journal. Good reviews ensure that authors become better scientists and communicators

and, ultimately, that high-quality work is published in our journals.