

A graduate students' guide to
involvement in the peer review process

APA Science Student Council

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Introduction

The purpose of this document is to provide psychology students who aspire to research or academic careers with the background information necessary to understand the peer review process, and make informed decisions about when and how to become involved in it. This document is based on a symposium on this topic presented at the 2005 Annual Convention of the American Psychological Association and sponsored by the APA Science Student Council (Hoyle, Hall, & Tang, 2005).

What is the peer review process?

Quite often aspiring scientists think of the preparation of a manuscript as the final step in the research process; however, a finished manuscript is oftentimes only the beginning step in the process of having research findings published (Kazdin, 1995). Scholarly journals provide the usual outlet for research manuscripts, and most of these journals operate under the system of peer review. Generally speaking, this system involves the examination of a manuscript by a number of individuals with a record of publication in the substantive area that the manuscript addresses. (The *Guidelines for reviewing* section of this document further elaborates on the process that peer reviewers should follow when examining a document). Following a thorough review, each reviewer is asked to prepare a letter with suggested changes to a manuscript. In addition, the reviewer will make a recommendation about whether to accept a manuscript as is (a rare occurrence), accept with revisions, suggest that the author revise and re-submit the manuscript, or that the manuscript be rejected without the possibility of re-submission. An editor or assistant editor of the journal will then incorporate all of the reviewers' suggestions into an editorial decision letter. A sample decision letter that includes reviewers' comments is presented in Appendix A.

Why should graduate students become involved in peer review?

The development of skills in reviewing and the management of involvement in the review process are most often thought of as an early and mid-career process (Taylor & Martin, 2004). Indeed, some have suggested that individuals with established careers should be more selective in accepting invitations to review and pass some of these on to early to mid-career colleagues (Roediger & Balota, 2004). Graduate students who, having met all other expectations of their training, also obtain some experience with peer review may be able to more easily transition into the greater involvement with peer review that is necessary during their career. Experience with peer review may also be a distinguishing characteristic to an employer selecting among many candidates who are otherwise similarly qualified.

How can graduate students become involved in the peer review process?

The most typical ways in which students become involved in the peer review process is by being asked to review for a journal in which they have already been published, or by being asked to assist in an advisor's (or other faculty's) review. Students have also become involved as

reviewers by contacting an editor or associate editor about the possibility of doing so. It must be noted that the chances of being successful with this last approach increase when a student has prior experience publishing their own work. For this reason, it is most often advanced graduate students (i.e., post-master's or equivalent) that are involved in the peer review process.

There are also a number of journals, such as *Cultural Diversity and Ethnic Minority Psychology* and the *Journal of Social Issues*, that have student spots on their editorial board. These positions are often appointed by the current journal editor and are typically given to students with some publishing experience. Finally, there are some journals that are entirely student run. An excellent example is *Representative Research in Social Psychology*, a journal that for over thirty years has been run by graduate students at the University of North Carolina and includes graduate students from other institutions on its editorial board.

Guidelines for reviewing and managing involvement in the review process

Focus of the review

Reviews of psychological manuscripts should be focused on answering three main questions (Kazdin, 1998):

- A. Does this paper make an important substantive contribution to this area of research?
- B. Does the methodology (design and execution) permit one to draw the conclusions the author wishes to make?
- C. Is the paper well organized and complete in explaining what was done and why and how it was done?

Aside from answering these questions, a good review should point to specific revisions that are necessary in order for each of these answers to be in the affirmative. These revisions may be as minor as changes in the structure of an introduction or discussion, or as involved as the conduct of a follow-up study that will clarify limitations that can not be overlooked in the current study (see Sternberg, 1997, for a comprehensive guide to reviewing scientific works in psychology). The example presented in Appendix A is adapted from several actual reviews and may be a helpful guide for determining the tone and focus of a review.

Tone of the review

It is helpful to think of reviews as an opportunity to provide the authors with constructive feedback (Taylor & Martin, 2004). Good reviews are thorough and balanced, highlighting both the limitations and strengths of a paper. In addition, reviews should provide specific feedback as to changes that may improve upon the manuscript's limitations (Roedinger & Balota, 2004). For instance, the statement "the use of an analytical technique such as Latent Growth Modeling seems more appropriate for the authors' data, and would better support their conclusions" is descriptive and helpful. The statement, "the authors' use of an outdated and inadequate analytical technique such as cross-lagged analyses is an embarrassment" to address the same concern is more evaluative and not as helpful.

It is also important to avoid *ad hominem* attacks (Sternberg, 2004), which are imputations about an author's character based on the manuscript (e.g., "the authors use of arcane analytical methods and patent inability to grasp the most prevalent theoretical perspectives are an insult to this field of study"). Finally, it is worth noting that a common tendency of most new reviewers is to focus too much on grammar or spelling (Taylor & Martin, 2004). Reviewers are discouraged from attending to this aspect of the writing and encouraged instead to focus on answering the three main questions posed in the *Focus of the Review* section. Decisions about language use are typically the responsibility of the Editor or Associate Editor.

Managing involvement in the review process

One rule of thumb for early and mid-career scientists is to never be reviewing two manuscripts at the same time and to cap the number of reviews that one accepts at no more than 20 per year (Taylor & Martin, 2004). Most graduate students with aspirations to a research career may do well to consider having a much more reduced involvement in the peer review process and devoting most of their time to the production of scholarly output in the form of manuscripts (Hoyle et al., 2005).

Graduate students who chose to involve themselves in the peer review process should ensure that this involvement does not detract from their research and their educational requirements (such as qualifying / comprehensive examinations and the dissertation), as these have more influence toward the establishment of an academic career than involvement in peer review. Because of differences in training requirements and individual abilities, a rule of thumb is difficult to muster; however, involvement in one review per academic semester should be sufficient to provide an advanced graduate student adequate experience with the peer review process.

Students are urged to ensure that any decision about involvement in the peer review process is an informed one, and one that fosters, rather than detracts from, their professional development. This brief document has provided some of the basic information to consider. Consultation with advisors, other faculty, and senior colleagues may also be beneficial in gathering more information and in seeking reviewing opportunities.

References

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Appendix A
Sample Editorial Decision Letter

Month Date, Year

Graduate Student
Department of Psychology
Some University
Someplace, State 01234

Dear Mr. Student,

I have received two reviews of your manuscript “The geography of nowhere: Students’ experiences with the peer review process” (No. 12-2006) co-authored with Distinguished Advisor, PhD and Advisors Peer, PhD. Both reviewers are experts on students’ experiences with the peer review process, and both see strong potential behind this manuscript. One reviewer recommends accepting the manuscript pending revisions. The second reviewer suggests that the manuscript needs revision, but that it is probable that it will be accepted upon re-submission. Based on my own reading of this manuscript, I am confident that this manuscript can make an important contribution to our understanding of students’ experiences with the peer review process, but agree with the second reviewer that certain revisions must be conducted. For this reason, I am unable to accept your manuscript for publication at this time, but would be glad to reconsider this manuscript’s publication if you would address the reviewers’ comments on this manuscript. Should you send a revised manuscript, please include a letter outlining how you have addressed the reviewers’ and my suggestions.

I am attaching each reviewer’s suggestions to this letter. I concur with the both reviewers that you must include greater detail in describing the method used to collect your data, and urge you to put particular attention in addressing this concern. As highlighted by the second reviewer, you have not made any allusion to this study’s implications for the theory of planned behavior, despite the fact that it is the predominant theoretical perspective in this area. Finally, I would encourage you to include a table that summarizes some of the non-significant findings alluded to in the current version of the manuscript. Although they have no direct impact on your substantive findings, their inclusion in the manuscript would enable the incorporation of your study in any future meta-analyses of this area.

I encourage you to make the necessary revisions and resubmit this manuscript to *The Prestigious Journal of Psychology*, it addresses an interesting and timely topic.

Sincerely,

Venerable Senior-Colleague, PhD, MD, JD
Associate Editor
The Prestigious Journal of Psychology

Remarks by Reviewer 1:

1. Although the authors manage to successfully convey the importance of their study and the implications of their findings for graduate students' experiences with the review process, the lack of detail in describing their methodological approach prevents an adequate estimation of the accuracy of their interpretations. The authors must substantially increase the level of detail with which this method is described.

2. The authors' attempt to justify the use of their data as indicators of latent phobia and displacement; however, the measures used to obtain these data are more typically interpreted as measuring certain facets of anxiety. The authors are encouraged to either strengthen their argument for the use of their terms, or –preferably- do away with them altogether and use the standard interpretation for the type data they have obtained (see Mywork, 2003a for a helpful example).

3. Tables should be re-formatted to more closely match the typical presentation of introspective geospatial analyses results in this journal (see Mywork & Myhusbands, 2004 and Mywork, 2003b for helpful examples).

4. There are a variety of factors that limit the generalizability of this study's findings such as the age and gender distribution of the sample, the discussion section would be much improved by the consideration of these factors.

Remarks by Reviewer 2:

1. This study would be better explained and justified in the context of a conceptual/theoretical model. I strongly encourage the use of the theory of planned behavior for this purpose as this is the prevailing paradigm in this area of research.

2. Along with this first concern, in its current form the work presented seems to be too exploratory and would be strengthened by the incorporation of specific hypotheses to be tested under a new conceptual framework.

3. The writers have placed much of the persuasive burden in their description of their methods on the use of the phrase "introspective geospatial analyses." This approach is outside of the expertise of much of the journal's readership and must be described in greater detail.

4. The incorporation of a section on policy implications in the discussion of findings seems surprising given that this is the first time policy comes up in the manuscript. It is suggested that the authors either eliminate this section or present relevant background in the introduction.