What to Do When Your Paper Is Rejected

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Rejection happens to all of us, and it can be a salutatory experience. In the case of submitted papers, authors who are early, as well as those established in their careers, will experience rejection. In response to a rejection letter, one should not react by ripping the letter to shreds or, in today's electronic world, permanently deleting the message. Similarly, one should avoid the decision never to write another paper. Many papers originally rejected may ultimately find a home, with rewrites or better targeting to a more suitable journal. This article will explore feasible options for writers eager for their papers to find such a home.

Take Your Pulse

First and foremost, deal with your feelings. Although it never is easy to take, rejection is particularly hard at the beginning of your career. It is best to identify your emotions and employ your best coping mechanisms: relax with your favorite tea or coffee, vent to your friends or family, exercise, or get a hug from your kids. After you have achieved a calm frame of mind, you are ready to rationally evaluate why your paper was not accepted. Hopefully, over time, this first step becomes automatic and you regain equilibrium swiftly.

Reading the Rejection Letter

The rejection letter should be read as carefully as instructions to cash in a winning lottery ticket. Never skim or read only the punch line (reject). It is surprising how many authors direct questions to me that have been explicitly answered in the rejection letter. It can be helpful for a colleague to read the letter if it appears confusing or unhelpful. As the number of submissions to journals rise—despite the exponential increase in the number of online and print journals[1]—more papers are rejected "internally" without external peer review. In this case, 1 or more journal editors will review the paper to determine relevance for the journal audience, balance with recent or upcoming accepted papers, and overall quality. Papers that do not pass this initial filter will be rejected without further review. Journals differ in the amount of information that is provided to the authors regarding the reasons for rejection. Some clinical journals do not provide any additional information. Many medical education journals, including the *Journal of Graduate Medical Education* (*JGME*), will provide a short explanation. Review these comments carefully because they should provide helpful advice as to next steps.

Papers that pass this initial filter will be sent for peer review. Papers that are rejected after peer review usually have detailed comments about the strengths and weaknesses of the paper, as perceived by the reviewers. Editors may add additional summary comments that relate to the paper's relevance to the journal's audience, study validity, and overall importance in moving the field forward. This information is often extremely valuable for improving the paper or planning future projects.[2–4] Before asking for additional feedback from the journal editors, digest these comments thoroughly.

Finally, the peer review process has flaws. Editors strive for fairness and weed out reviewers who deliver inappropriate or harsh comments. Studies, most focused on biomedical research, have determined various problems with the peer review system; yet, the system appears to be the best available at this time.[5–7]

Following the Author Instructions

In the review process for many journals, papers that do not follow the author instructions carefully in terms of format, word count, number of figures and tables, and reference style will be rejected immediately. As author instructions continue to expand, they are not as "author-friendly" as one would wish. Despite their complexity, author instructions must be carefully followed; any deviance must be addressed clearly in the cover letter to the journal editors. Some journals will review papers that do not fit the prescribed format if there is a cover letter establishing the reason for the deviations; it is prudent to correspond separately with the journal office for these types of submissions. Usually, *JGME* avoids an initial rejection by requesting authors to resubmit their manuscript with the correct format or word count. Submitting a paper that does not follow author instructions risks annoying the journal editors and delaying the review of your paper. Thus, following author instructions exactly is your best strategy.

Matching Paper to Journal

A common reason for internal rejection of submitted papers is a mismatch between the paper and the scope of the journal, which is closely related to the journal's target

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audience. Although the title of a journal gives some information regarding its scope, more will be found on its website. There are at least 99 health professions education journals, in print and online, with a considerable degree of overlap in mission and scope. A perusal of 1 or 2 journal issues will enlighten authors as to the most common themes, research designs, and authors. Thus, reviewing a few journal issues for content and format, before submitting your paper, is highly recommended. In addition, websites exist that attempt to match article title, key words, or abstract to a particular journal.

For example, if I type in "Publishing Your Medical Education Research Projects" into Jane—the Journal/Author Name Estimator—website (http://www.biosemantics.org/jane), I can search by journals, authors, or articles found in MEDLINE.[8] Searching by "journals" produces a long list of potential journals as well as articles on this topic. My test yields *Medical Teacher* (No. 1), *Academic Medicine* (No. 3), *Journal of Surgical Education* (No. 8), and many others. Inserting your abstract or key words generates a better match with journals. If the first journal you chose rejected your paper on the grounds of a "poor fit," with better targeting, your manuscript may find a home.

Obtaining Additional Data or Reanalyzing Existing Data

Quantitative papers that explore a new educational intervention are often limited by the small "n" of subjects under study. Many of the populations we study—faculty, residents, students—are limited naturally, and we cannot recruit for additional subjects, as can be done in clinical trials. When an association between the outcomes of interest and the intervention is not found, the association may indeed exist. However, the sample size may have been too small to find an association (a type II error). With small sample sizes, all other things being equal, an association is found only when the effect size (size of the impact) is very large. Small samples will also greatly limit generalizability. These types of small "n" studies often fail to move the field forward because few credible conclusions can be drawn. However, collecting data on additional subjects, for example by repeating the intervention over multiple years, may yield more illuminating and credible results.

Often, investigators implement a new educational intervention as a pilot, to determine whether residents or faculty will find the experience enjoyable and to ensure the costs in time, effort, and materials are generally worthwhile. The first participants may be volunteers or represent a "convenience sample," in that they were available at the same time as the investigators needed subjects. This is a common and useful start, but selection bias may limit conclusions. However, negative findings can be important. If volunteer participants strongly dislike an intervention, it is unlikely to be accepted by a larger, more representative group, no matter how effective. Similarly, overly burdensome interventions may not be implemented without considerable modifications. Unless entirely novel, small pilot studies of this type are unlikely to provide guidance to others interested in the topic, and papers about those studies are more likely to be rejected.

The next step after a pilot run should be a more robust investigation of the intervention. Being *more robust* means larger numbers of participants, less selection bias in participants to improve generalizability, use of a reasonable comparison group that receives a different intervention, outcomes that go beyond self-assessment by participants and feasibility, and sustained outcomes, measured at some distance from the intervention. With information gleaned from the pilot project, investigators will be better able to lobby supervisors for time, estimate a meaningful effect size to calculate minimum sample size, determine credible yet practical outcome measures, and plan how and when to follow up with participants for sustained outcomes. Regardless of whether associations with outcomes of interest are found, this more robust study is likely to be helpful to others outside your institution, and thus, the report on these studies is more likely to be accepted for publication.

Occasionally, reviewers will suggest a qualitative study as the first step in untangling confusing research questions or findings. Although generalizability outside the group studied is a limitation, qualitative research studies can provide answers to the key question "why?" and are critical to understanding how learners learn. Many medical education researchers are unfamiliar with the methodology and terminology of qualitative research.[9–13] There may be experienced individuals at your institution or affiliated with your national society who would be delighted to share their expertise and join your investigating team. Before starting another quantitative study, consider whether qualitative approaches would inform the topic, particularly if the reviewers have suggested this may be valuable. Fortunately, qualitative studies require little funding for equipment or materials, although they will entail investigator time.

A sidebar is needed here. Qualitative approaches are rigorous and must be detailed in the Methods section of a paper such that others could replicate the same steps: an exact recipe, similar to the description of quantitative research steps. Feedback from participants, which has been reviewed and summarized by the authors, is not qualitative research and the word "qualitative" should not be employed to describe the results.

Resubmitting to the Same Journal

If the problems cited in the rejection letter refer to steps or results that you have done but, for some reason, were omitted from your paper, you may be able to resubmit your manuscript with the missing methods or data. It is best to check with the journal office first. Alternately, the reviews may suggest a different category for your manuscript. This will involve a complete rewrite of the paper to fit the author instructions for the new category. Before revising your paper to fit a different article category, consider whether another journal, with a different scope or target audience, is a better choice.

Resubmitting to a New Journal

Editors laugh when they receive a cover letter addressed to another journal—yes, this happens—and it is not the best way to announce your paper. No 2 journals have the same author instructions or format, and some revisions will be needed before you submit your paper to another journal. Not infrequently, the same reviewers may be requested to peruse your paper for the new journal. Thus, it is imperative to make all appropriate changes using the feedback already provided in the initial review. When you cannot make a substantial change—such as collection of new data—requested by the initial reviewers, it may be prudent to include your rationale in your cover letter or in a supplemental appendix to the paper for the second journal. A few medical education journals request information regarding any prior submissions and copies of all reviews your paper previously received. If this information is not provided accurately, the paper is rejected. However, most journals do not require details about the history of your orphan paper.

Editors are pleased to receive a manuscript that has been previously reviewed and revised because the paper is usually in better shape overall: more concise and clear. Use all the valuable feedback you have received from the first reviews, target your paper to the most suitable journal, and release your paper to find a good home.

Bottom Line

All of us receive rejection letters for submitted articles. Usually several individuals with expertise in the topic have donated substantial time to provide detailed advice to advance your paper and future work. Use this feedback to improve your paper for submission to another journal as well as your next, more robust study of the topic. Consider volunteering to 1 or more journals to review papers, both as a good citizen of the medical education world and to improve your own editing skills.[14] Above all, do not stop pondering and studying medical education topics, or writing papers.

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