

Your Research is Completed, Now for The Hard Part

Getting Your Paper Successfully Peer Reviewed and Published

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Disclosure

- Sam Goldstein: I have developed tests marketed by Multi- Health Systems, Pro-Ed and Western Psychological Services. I have authored books marketed by Springer, Wiley, Guilford, Double Day, McGraw Hill, Brookes, Kluwer and Specialty Press. I am Editor in Chief of the Journal of Attention Disorders (Sage) and Co-Editor of the Encyclopedia of Child Development (Springer).
- Jeffrey M. Halperin: I developed a scale marketed by Psychological Assessment Resources (PAR) and serve as Joint Editor of the Journal of Child Psychology and Psychiatry (JCPP).

Goals for this Workshop

- How to conduct publishable research
 - Adequate research design
 - Is the sample appropriate?
 - Data analyses that can pass peer review
 - Making sure data and analyses answer the research question
 - A well-written manuscript
 - Introduction
 - Methods
 - Results
 - Discussion
 - Knowing the Journal
 - Topics that are of current interest
 - Operations of the journal
 - Make the most of feedback and reviewers comments

Adequate Research Design

- All research designs have strengths and limitations
 - Can your design optimally address your research question(s)?
 - Compelling questions and intriguing results can sometimes result in publication of studies with sub-optimal designs
 - Poorly designed research will almost never be published in a peer-reviewed journal

The Sample

- There are many types of samples
 - Convenience sample
 - Clinical sample
 - Community sample
 - Epidemiological sample
- Which type of sample works best for answering your question?
- There are pluses and minuses to different sampling strategies
- What populations can your findings be generalized to?

Data Analysis

- Sample size/power
 - Unless it is a very unique study, small samples rarely pass muster anymore
 - Negative/non-significant findings are hard to interpret
 - Positive findings are frequently not replicated
- Does the data analysis answer your research question?
- Can your data analyses pass peer review?
 - Appropriate statistics
 - Control for multiple testing
 - Handling of missing data

A well-written manuscript

In the eyes of your readers--editors and reviewers included--the quality of the paper you send in directly reflects the quality of the science behind it.

It is critical that the paper is written clearly and that it contains no spelling or grammatical errors, and that the logic is crisp and clean.

Show your paper to your most critical friends and colleagues and take their advice seriously.

Make sure that all authors have seen and approved the submission

The Introduction

- Review of relevant literature
 - Be sure to cover key and most up-to-date papers – this will not only improve the impact of your paper, but authors of those papers may be reviewers of your paper
- How does your research fit-in or add to the literature?
 - Provide a systematic and logical review of prior research that establishes the rationale for your study
 - Why is your study important and of interest?
 - What's new?
 - Replication? Why is it needed?
- Formulating hypotheses
 - Must be testable (with your design)
 - Should be a logical outgrowth of the literature reviewed
 - Although hypotheses are not factual, they should be based on theory and facts

Methods

- Need enough detail so that others can evaluate the quality of your work and replicate the study.
- Describe the sample
 - Who they are
 - How recruited
 - Basic descriptive/demographic information (often in a Table)
 - How groups are formed/defined
- Measures
 - Name and describe all measures used in study.
 - Address reliability and validity of measures.
- Procedures
 - Provide detail description of how everything was done.
 - Describe data analytic strategy in detail.
- When space is restricted (e.g., limited word or page count), some details can go in an appendix or on-line material.

Results

- Provide results of key analyses in narrative form.
- Supplement with Tables and Figures.
- Include measures of association (t, F, r, etc.), indices of significance (e.g., p-values) and effect sizes.
- Results that are important, but not central to your hypotheses, can be presented in appendices or as on-line supplements, often as additional Tables and Figures.
- All related data not included in the main body of the paper should be clearly accessible to the reviewers, either as an appendix or through a publicly available database.

A Few Tips on Figures

- Figures are your best ally to convey your story, so make them easy to understand.
- Each figure should make only one or a few related points, and together they should make all the paper's important points in an easy-to-grasp manner.
- Put as much information about the data and the conditions of the experiment directly on the figure as you can. The figure legend is important, but the less the reader has to refer back and forth to it, the better.
- Check and recheck that all information is consistent, that images and graphs represent what you say they represent.

Discussion

- Briefly summarize the key findings and how they do or do not support your hypotheses.
- Do not merely restate the results.
- Relate your findings to key points and issues raised in the Introduction.
- Make clear statements about what the study adds to the literature.
- All research has limitations. If you don't point them out, most likely, the reviewers will.
- What is still unknown and where to go from here
- If possible, end on a strong note, placing your findings in the broad context of the field.

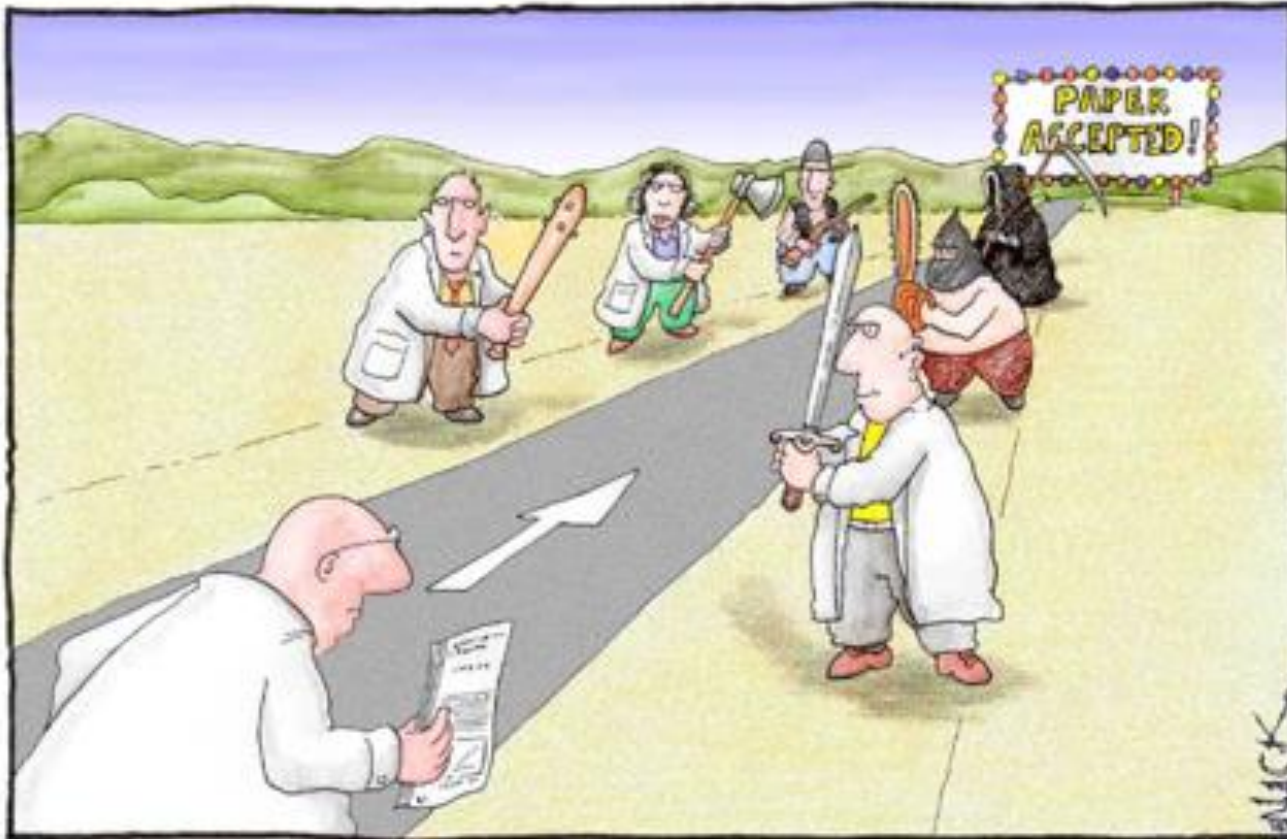
Finding the right journal

- Review aims and scope on the web site
 - Is the journal a good match for your paper?
 - Is the topic of your paper similar to others published in the journal?
 - Know the editorial goals of the journal--sometimes journals decide that certain areas are of particular upcoming or lessening interest—if you are not sure, contact the Editor.
- Does impact factor matter?
 - We would all love to publish in *Science* (IF=37.205) or *World Psychiatry* (IF=26.561), but be realistic.
- What is the acceptance rate for the journal?

Knowing the Operations of the Journal

- Carefully examine and follow procedures/guidelines for submitting a paper
 - Length restrictions
 - Required sections
 - Structure for abstract
 - Format for Tables, Figures and References
 - Statement about conflicts of interest and funding
- Virtually all journals will require a statement about ethical, IRB and/or institutional human subjects approval of the study and whether consent was obtained.

The Review Process



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

Cover Letter

- A cover letter helps the review process go smoothly.
 - Provide a concise description of the logic of the paper that makes clear its importance and context.
- Many journals require
 - A statement that the research has not been submitted or published elsewhere.
 - A statement about overlap with previously published papers.
 - A statement about human subjects approval.

After the paper is submitted

- Many journals have an initial screening step
 - Papers unlikely to make it through the review process are rejected without review.
 - These decisions are usually made by the Editor-in-Chief and/or other scientists who serve in an Editorial capacity for the journal.
- Reviewers are chosen by Editors on the basis of their expertise
 - Most journals utilize extensive databases assembled by the journal, publishers and the Editors.
 - Some reviewers are better than others--they are more thoughtful, critical and thorough, a fact that quickly becomes known to Editors.
- Increasingly, authors are asked to submit names, absent conflict, that they think would be appropriate reviewers
 - Some journals solicit names of individuals who you would not want to review your paper.

Surviving the review process

- The review process can take anywhere from a few days to several months and, occasionally, much longer.
- After review, the Editor makes a decision about publication, taking into account the feedback he or she has received.
 - All reviewers may not agree about the merits of the paper
 - The Editor makes the decision
 - Authors almost always receive the reviewer reports
- Although there is considerable variability across journals, most papers are not accepted following the first round of reviews.
 - Don't be discouraged if a revised manuscript is requested!

Surviving the Review Process

- When providing feedback, the Editor and reviewers are interested in advancing their journal and the field, and make decisions with that goal in mind
 - If the topic is new or makes an important contribution they want to see it improved and published
 - You will increase the chances of your paper being accepted if you make the assumption that the reviewers are offering their suggestions as constructive criticism.
 - Make all possible attempts to comply with their requests, including performing extra experiments and analyses, even if you think they are unnecessary.

When sending your revised paper back to the journal...

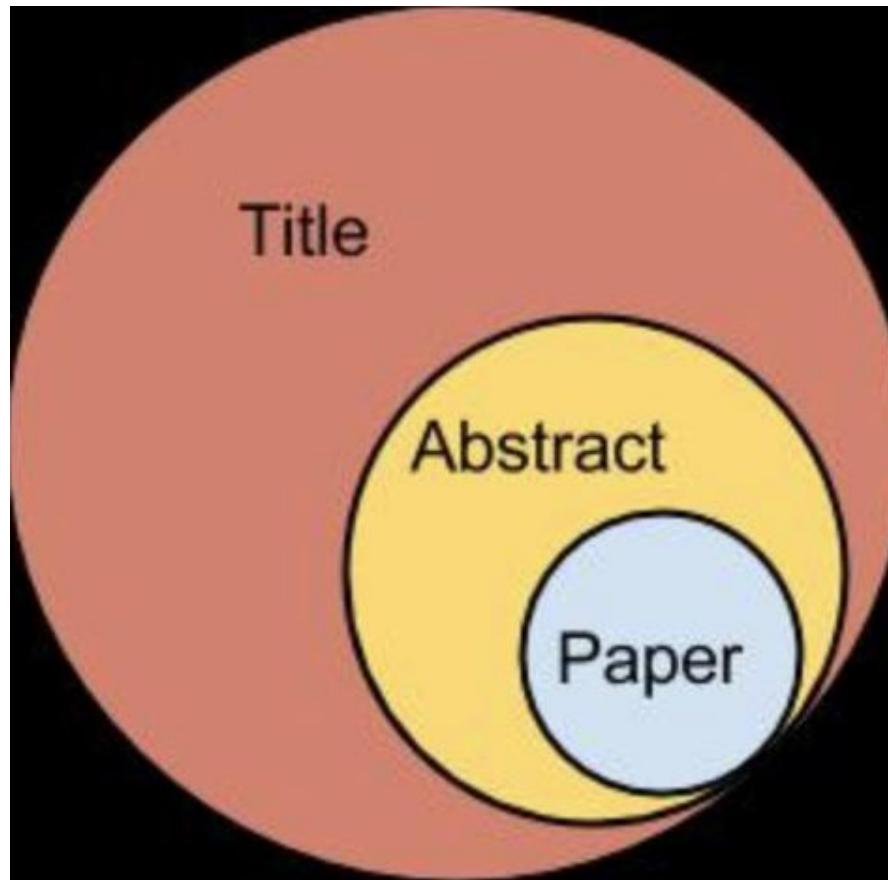
- Include a detailed, point-by-point explanation of how you have addressed each of the reviewers' and Editor's comments
- It's okay to disagree with points raised by the Editor or reviewers, politely state your position – be respectful
- Remember that the editor may send your responses to the reviewers, so if you are refusing to address one of the referees' comments, you should word your argument carefully to be clear but not offensive

Dealing with rejection

- A rejection can be upsetting.
 - Give it a day or two before deciding your next steps
 - Discuss reviews with co-authors and other knowledgeable colleagues
 - It is not a good idea to fire off an angry e-mail to the Editor explaining why the journal's process was unfair and biased
 - If, after careful consideration, you think there has been a misunderstanding or error, some journals will entertain a request for reconsideration, usually in the form of a clear letter or message explaining your point of view.
- In most cases, the best and most time-efficient course is to reassess your choice of journal, fix weaknesses pointed out in the review process, reformat the paper for another journal.
- Even a submission that ends in rejection is an opportunity to hone your writing and editing skills.

Quick Tips

- Don't rush submitting your paper.
- Select an appropriate journal.
- Know the aims, scope and guidelines of the journal you choose
- Create the best title and abstract as this is the editor's first impression.
- If English is a second language use an editing service.
- Address every reviewer comment.
- Shorter is better.
- Address limitations thoroughly.



The relative amount of views different sections of a paper receive. A good title and abstract will lead to more people reading the paper itself.

IMAGE CREDIT, MACMILLAN SCIENCE COMMUNICATION

Questions

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