EDITORIAL

Routledge Open Research: Removing Barriers to Publication
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Abstract
This editorial introduces the Routledge Open Research platform and discusses the process, advantages, and some examples of potential articles. Routledge Open Research is an Open Access, open-science, post-publication peer review journal. The major advantages are rapid publication and no editor to act as gatekeeper while still inviting transparent and useful peer review. While there are many manuscript types that will find this model inviting, some may find it particularly so. Crowdsourced projects, meta-science projects, and those that challenge the status quo are considered specifically, and all are invited to try a new publication process.

Keywords
Post-publication review, Open Science, Open Access, Publishing

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The iterative process of opening science

*Routledge Open Research* offers a novel publishing outlet where manuscripts are published before reviewers provide feedback and there is no editor to decide the outcome of the process. To assist readers in understanding this process, see the depiction of the publishing process here. This depicts the stages of this publication process. Manuscripts are first submitted to the platform where, once passing quality control checks, are published online. From this point, the manuscript is sent to five reviewers recommended by the authors. Once two reviewers endorse the manuscript, the article has passed peer review. For the remainder of this editorial, I will describe why the value of this publishing model while addressing some anticipated concerns. However, a brief history of the open science movement helps identify how this model represents a necessary step toward a fully open science.

My own angst with the field of psychology was naïve when I started to call for change. Increasingly frustrated with the discrepancy between what I taught as good science versus what I explained was necessary to get a paper published, I experienced a professional existential crisis. I felt no agency; that none of my scholarship would ever matter. I decided to focus on what I cared about, and that was advancing undergraduate research experiences (see Grahe et al., 2012). This led to the creation of multiple large scale research projects (e.g., Collaborative Replications and Education Project, Emerging Adulthood Measured at Multiple Institutions, Psi Chi’s Network for International Collaborative Exchange), but it also exposed me to the burgeoning open science movement. These undergraduate projects were developing alongside the Reproducibility Project: Psychology, the various Many Labs projects, among others. All of this work was centered on the principles of open science, which initially reflected publicly sharing data, materials, and preregistration. However, the open science movement represents a much broader system of changes.

Of course, frustrations about the state of the field were shared by many, and by now, the grim predictions from Ioannidis (2005) that most published findings are false, raises questions about what we should do to improve low rates of reproducibility, rather than whether or not there is publication bias. Large scale replications often display remarkably smaller effect sizes or no effects at all (e.g., Ebersole et al., 2020; Klein et al., 2014; Klein et al., 2018; Klein et al., 2019; Open Science Collaboration). Another seminal piece from Simmons et al. (2011) demonstrated that questionable research practices common at the time could lead to preposterous conclusions such as being randomly assigned to listen to certain song reduces the chronological age of the listener. Wicherts et al. (2015) later identified 32 possible questionable research practices across the research process. One might have become resigned to the demise of psychology as a science and demoralized, except that the open science movement offers hope through change.

Three Scientific Utopia manuscripts (Nosek & Bar-anon, 2012; Nosek et al., 2012; and Uhlmann et al., 2019) summarize both the challenges of engaging in research transparency, but also tools to help resolve these challenges. These manuscripts offered idealistic suggestions for systematic change by removing the barriers to being transparent, while using better rewards to encourage better science. Moreover, in the second decade of this century, many advances that were called for in the Scientific Utopia papers have been created with demonstrative success. The Center for Open Science (COS) offered the Open Science Framework (OSF) as a free project management software system to make it easy to share data and materials while date-stamping the research process for full transparency.

The COS further coordinated the development of Open Science badges which publishers could attach to manuscripts to highlight their sharing of Data, Material, and Preregistered hypotheses, analyses and workflow. At *The Journal of Social Psychology*, we immediately recognized the value of the badges, becoming the fourth journal to start awarding them (Grahe, 2014). A few years later, the Transparency and Openness Promotion Guidelines (Nosek et al., 2015) described eight categories where sharing could occur: citation standards, data, analytic methods, research materials, design and analysis, study preregistration, analysis plan preregistration, and replication. Journal editors and publishers were invited to audit their procedures and identify their own transparency expectations and consider how or whether to adjust. Another major development was the onset of large-scale projects or crowd-sourcing projects, and now there are so many different options that it is hard to keep track of how many are active at any one time. To reduce all barriers to publication, the COS also developed preprint systems, for psychology, the Psyrxiv. Preprint systems remove all barriers to publication because all research could be shared freely. While this allows anyone to publish their work without the bias from editors or reviewers, there is no quality control of what is published except that the readers can make comments allowing authors to improve and update their work.

Post-publication peer-review

*Routledge Open Research* is an open access, open science, post-publication peer review platform. While post-publication peer review was one of six the changes called for in the Scientific Utopia I paper (Nosek & Bar-Anan, 2012), *Routledge Open Research* offers the first journal to offer this model in the area of psychology, as well as the arts, humanities and social sciences. Before presenting this characteristic of the platform, here are descriptions of the other aspects. Being open access means there is an author’s processing charge (APC) ranging from $800 for short reports and opinion pieces to $1350 for full length reports. Though rare before, APCs are now common in highly respected open access journals, and the fees are less expensive than most other journals’ open access fees. Authors can also see the APC cost breakdown because the journal transparently shares this on the journal website. The open science characteristic requires authors to share their data and authors should also provide materials and pre-registered workflows where relevant.

The post-publication peer-review nature is manifested in two stages. In the first stage, authors submit their manuscripts
and a list of five reviewers to the Routledge Open Research platform. The manuscript then undergoes the editorial team’s pre-publication checks, assessing the availability of the data, ethics checks, language quality and authorship requirements and other such criteria, rather than the theoretical and conceptual depth a reviewer would pursue.

If the manuscript passes through these checks and has undergone a light copyedit, then it is published and receives a digital object identifier (DOI). At this point it can be recognized via online searches and would be picked up by Google Scholar. Author-suggested reviewers who meet Routledge Open Research’s reviewer criteria are then invited to review the article. When at least two reviewers endorse/approve the manuscript, the article will have passed peer review. Of course, all the reviews and authors’ responses to those reviews are made transparent, revealing the efforts made by both the reviewers and authors during the process. As the new platform applies for, and is accepted into, indexing sites such as Scopus, PsycInfo and Ebsco, it is at this point – when an article passes peer review – that the article gets deposited in those repositories.

Routledge Open Research models other Scientific Utopia I principles such as fully embracing digital communication, disentangling publication from evaluation, and publishing peer review. While digital communication is widely adopted by many today, one thing to remember about Routledge Open Research is that the platform and the manuscripts published there should not be evaluated together. One cost to removing barriers to publication will be increased variability in manuscript quality, even in the final published work. Publishing the review process provides an important quality control check, so that the reader can evaluate the conditions under which the manuscript was reviewed and published. As a signatory of DORA, Routledge Open Research focuses the value of the article rather than the reputation of the journal. Each manuscript will contain a set of altimetric scores that identify the number of reads, downloads, citations, media mentions, and policy paper mentions. The transparency of the review process and altimetric scores enable the reader to focus on the quality of the article itself, rather than the overall platform metrics.

Benefits of post-publication review

First, consider the benefits: no time delay to first publication and no editor. For authors who have a very exciting idea, or a timely research question, removing the barrier of time to first publication is critical. Uploading the manuscript to a preprint service offers a free alternative, but the preprint does not advance beyond a preprint. This model benefits authors who work in research areas that are not clearly situated within a discipline, or authors who have limited journal options.

But the most exciting benefit might be the lack of an editor. Editors certainly have benefits. I am proud of my nine years as Managing Executive Editor at The Journal of Social Psychology, and I believe my other editorial work benefited each associated project. However, my personal bias still impacted our judgements were guided by scope and common expectations, there were certainly times where my peers or I desk rejected a manuscript that could have been a fit, or could have surpassed the hurdles inherent in the manuscript that led to its rejection. I saw manuscripts get rejected after being reviewed that I would have accepted, but editors work in the space of ambiguity. Sometimes that benefits authors, like when editors override a problematic reviewer. However, it can also be a cost, like when editors veto comments from a supportive reviewer. Regardless, the removal of the editor, but the retention of reviewers, is a major benefit for Routledge Open Research.

Removing barriers and quality control

If you read my previous editorials where I called for Open Science advances (Grahe, 2014; Grahe, 2018; Grahe, 2021), my assumptions have always been that the majority of scientists are well-intentioned and honest. Good scientists can engage in questionable research unintentionally. Here again, I will argue that the vast majority of manuscripts submitted to Routledge Open Research will represent honest attempts to share meaningful science; while fully expecting a few bad actors to try to “game the system”. It is not clear that this is particularly different than traditional journals, nor are editors especially trained to catch unethical actions. When judging manuscripts published in Routledge Open Research, readers should review the quality of the review process, at least briefly. Did the reviewers offer a meaningful quality check? If not, the manuscript might not be worth more than the data that are deposited with it; and those data might have no value. On the other hand, we expect to see rich conversations between the authors and reviewers with strong, honest critiques presented in respectful and constructive manners. Reviewers should identify clear areas that need to be addressed, and be responsive to authors’ revisions. For manuscripts that follow the intended process, the manuscript offers strong effect estimates from well-researched questions.

While this multi-stage publication model is new in the field of psychology in particular, the F1000 platform has been in use for almost a decade with many organizations such as the Bill & Melinda Gates Foundation finding extensive usefulness in the methods of review and dissemination. F1000 developers even reviewed the quality of the review process and found no evidence that seeing prior reviews impacted following reviewers’ comments (Thelwall et al., 2021). The bottom-line message is that authors seeking a high-quality review can pick good reviewers and the system should work well.

Consider for a moment exemplar papers for Routledge Open Research. Generally, they would represent manuscripts that do not seek editors’ input, while still valuing reviewer feedback. While there are certainly more, there are three manuscript categories that seem evident to me: crowdsourced research projects, research that challenges status quo assumptions, and research that struggles to find a home in the scope of traditional journals. First and foremost, crowdsourcing research projects should find publishing in Routledge Open Research ideal. These projects go through extensive planning that might include dozens of experts checking and rechecking each step.
of the process. The manuscripts include authors who are acting as reviewers and editors during the writing period. Often, there is a main primary paper that is then followed by manuscripts focused secondary analyses. For these projects, waiting another year or many more can reduce the ability to share the data in a timely manner and reduce the impact that could be made with the data. They might have difficulty fitting into the rigid journal articles of scope as there are still limited options to publish replication and meta-science papers. And editors might add some insight into the manuscript, but they might add little or no added benefit after the extensive planning and writing process that involves so many. These are not the only form of manuscript that will find the Routledge Open Research model ideal. Others will also find the benefits of this new open science publishing model to meet their needs as they recognize the benefits of a post-publication peer review process.

Research that challenges status quo assumptions can face extra hurdles because editors and reviewers can maintain their own relative elevated status by restraining the advance of manuscripts that challenge their theories and findings. Finally, some manuscripts do not fit clearly into existing journals’ scope of research, or they are rejected from the limited available journals. For each of these examples, editors might represent overly strict gatekeepers and limit the advancement of science, and stall the programs of researchers seeking to advance their careers. Do the conclusions in a crowdsourced paper reflect the true nature of these effects given the extensive planning and editing? Do the challenges to the status quo require change? A reader can never be sure of the truth, but the data are shared for others to review and draw their own conclusions. Are the methods sufficiently rigorous to draw any inference at all? While any research project offers opportunity for improvement, extended delays in publication of earnest research impedes science and the scientist. Not all authors or manuscripts are a good fit for Routledge Open Research. Authors whose rank and tenure criteria include specific journal metrics for minimum qualifications might find extensive bias against manuscripts published here. Authors who will find Routledge Open Research appealing are those who are firmly committed to their topic and have faith in their own research quality. All the while the journal offers a faster route to publishing outlet with the promise of a strong review process to help improve the paper. It is just important to remember that the impact of the manuscripts in Routledge Open Research should be measured individually rather by collectively. 

Avenues without gates

This is a radical new approach to publishing with lightning-fast publication and a transparent review process that follows the initial publication. It is critical to remember that these changes are designed to allow high quality manuscripts to get published in a timely manner. All science should be shared, but that is not the current state of affairs. Sometimes very good research struggles to find a publication outlet restricting the development of science. Alternatively, sometimes researchers are motivated to share their work without waiting months or years before publication. Routledge Open Research could be a choice for any researcher, but it truly advantages authors seeking an avenue to share their work and are not motivated to face a gatekeeper who might arbitrarily delay or deny the possibility of publishing their work while still seeking feedback through a review process.

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Data availability

No data are associated with this article.

References
