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EDITORIAL

Experimental Psychology Generally, and the Journal Today

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From my perspective, there is no doubt that the well-being of humankind depends on mental processes, that the study of mental processes contributes to this well-being, and that a hub for this kind of study is the field of experimental psychology. It is therefore an honor and privilege to serve as Editor of the *Journal of Experimental Psychology: General*. Here are some thoughts that can help authors figure out what articles to submit to us, how an article will be handled, and what the journal might do for authors.

Interests of the Journal

It has happened many times that I mention to someone I meet in public that I teach and do research on memory and attention or am attending a conference in an area of experimental psychology, and often this statement is met with great interest and enthusiasm, if not envy. Although laypeople are unlikely to read the journal, they are the ones I most want to thank for my fortunate professional opportunities, and I want to deserve their tax dollars by helping to produce reports of research that are highly replicable, valid, and of broad interest and importance. The public often learns about discoveries in experimental psychology through various kinds of media, but these reports hopefully stem from leading, peer-reviewed scientific journals like ours.

What Do We Mean by Experimental Psychology and General?

The term experimental is taken broadly to mean based on controlled observations, no matter whether these are sufficient to establish a direction of causation or, instead, help illuminate some other aspect of the human mental condition in an important way (even if by correlations between measures, or by animal research). Psychology need not exclude neuroscience, provided that the results include a link to behavior. For me, the term general means of interest to a wide range of psychologists, who probably need a relevant scientific education to read the journal well but who—I hope—will enjoy reading outside the area of their own specialization. Although it is not an imperative that research for our journal must bridge two or more areas of experimental psychology, this does help. A finding within one area with enough scientific impact, and written in an accessible enough manner, could be judged to be sufficiently general for our journal if the case for that generality, for relevance to various kinds of research, and for broad interest can be made to our satisfaction. We are, however, very selective, with an acknowledged, inevitably subjective element to the decisions we must make.

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Are There Other Tips for Success?

Write Appropriately

Papers should be written succinctly, but what matters most is usually empirical findings that are based on carefully designed studies and are both strong (unambiguous, reliable) and important (advancing psychological theory, often also with practical implications). The manner and length of the article should seem appropriate for the ideas and necessary details to be articulated. Use integrated, supplemental online materials to support the main ideas without drawing out the main length excessively and to help you avoid diversions from the main line of thought.

On the journal's web page, we describe a recent innovation of the journal format to give readers more insight into the research. Specifically, it is the addition of a final paragraph to be labeled "Context of the Research." The paragraph should describe the broader context of the research by explaining such things as how the ideas originated, how the findings are related to the authors' research program, and how the research will be extended in the future, much as one provides in oral presentations, in a jargon-free manner.

Show and Confirm Findings

A wide range of statistical techniques can be used on their own merit, subject to peer review. It is usually very desirable to plot the data in several ways, at least one of them fine grained, for readers to gain a deep understanding of the data set. Estimates of variability (including error bars on the appropriate figures) and effect sizes are also very helpful and usually required. Replication of key results in more than one experiment and/or, especially when that is not possible, use of a large sample of participants, are important aspects of establishing a phenomenon to our satisfaction. Bayesian statistics can be helpful, especially when one wants to examine an effect for which a clean null finding is a theoretically meaningful outcome.

Posting of materials and data on an open source web site (such as the APA Open Science Repository, https://osf.io/view/apa/) is strongly encouraged, although not required. Some reviewers will

find the study more compelling when the materials are posted and the data are either posted or promised to be posted after publication, with the link to the posting preferably listed on the title page and author note and, in either case, with the data made available to reviewers upon request. More broadly, we suggest that you investigate the recent debate in the field on open science practices and give it enough thought to be able to use it to implement whatever improvements in your research practices you find appropriate (Center for Open Science, 2017; Center for Reproducible Neuroscience, 2017; Edelsbrunner, 2017; JASP, 2017; Lindsay, 2017; Lindsay, Simons, & Lilienfeld, 2016; Morey & Morey, 2016; Nosek, Ebersole, DeHaven, & Mellor, 2017; Open Science Collaboration, 2015). You should attend to journal article–reporting standards as recently articulated (Appelbaum et al., 2018; Levitt et al., 2018).

We publish replication reports, usually on-line only. A preregistration process can be set up so that the planned study can be prereviewed, after which the action editor may state that the resulting publication is to be considered equally valid for more than one possible outcome. We have, however, agreed not to issue in-principle acceptance because we want to maintain our editorial discretion throughout the review process rather than having to rely on what would need to be a flawless first-pass review process. If, for example, your replication is showing ceiling or floor effects, we do not want you to think that you should carry out the plan without revision; we want you to come back to us asking for an amendment to the plan.

Above All, Consider the Viewpoint of Your Readers

The most important principle in good writing is perhaps to try to anticipate what the reader can understand, or might misunderstand. For example, most experimental psychologists get used to specialized abbreviations, terms, and concepts to which they often must refer but which, for our general scientific audience, often will be unfamiliar. For this reason you should try to restate specialized points as much as possible in plain English, with definitions as appropriate. Dramatizing the problem with the use of jargon, Table 1 is a parody of some terms that you actually still need but for which outsiders do not know just what you mean. Although you are not writing for laypeople, the basic point is the same for scientists; terms and passages that have a clear meaning to you when you write them could actually be unclear if they also have other, unintended meanings that are not absolutely ruled out by the context. If you find the table fun it might help to remind you, at important moments, to think about the critical point that you must always consider what the reader knows and still needs to know.

Who Will Write the Action Letter?

My most important contribution to the journal so far is that I have been able to assemble a superb team of associate editors who are helping to shape the content of the journal and the field, with diverse interests in perception (D. Vaughn Becker, Andrew Conway, John Henderson, Melissa Kibbe, Robert Logie, Richard Morey), memory (Pierre Barrouillet, Conway, Tim Curran, Eddy Davelaar, Agneta Herlitz, Kibbe, Logie, Morey, Moshe Naveh-Benjamin, Jessica Payne), attention (Barrouillet, Henderson, Logie, Naveh-Benjamin), decision processes (Hal Arkes, Davelaar, Oriel FeldmanHall, Morey), reasoning and higher-level cognition (Arkes, Barrouillet, Robert Rehder), language and psycholinguistics (Debra Titone, Julie Van Dyke), motor processes (Henderson, Rehder), psychometrics and quantitative modeling (Conway, Davelaar, Morey), child development (Kibbe, Catherine Tamis-LeMonda), aging (Herlitz, Logie, Naveh-Benjamin), emotion (Becker, FeldmanHall, Kristen Lindquist), social processes (Becker, FeldmanHall, Kurt Gray, Tamis-LeMonda, Lindquist), and neuroscience (Curran, Lindquist, Logie, Payne). Perhaps additional associate editors will come on board. I also review a variety of submissions myself, with emphasis on working memory and attention but outside of that area as needed.

What Is a Journal for These Days?

Those of us who have been around for a while remember the days when a paper journal arrived in the mailbox and was perused from cover to cover. For many younger researchers, especially, those days do not exist. Moreover, there are now outlets that are entirely online, having no physical imprint at all. Some academics in midcareer still read journal tables of contents electronically, although there are currently some challenges in that method. (You can subscribe for free to *psycalerts* for APA journals of your choice, and if you cannot get to the articles immediately, save these electronic messages and return to them when your library

Table 1
What Our Statistical Terminology May Sound Like to Laypeople

Term	Apparent meaning
Bar graph	A picture sketched on a cocktail napkin
Confidence interval	The time after working up the nerve to try out and before getting rejected
Counterevidence	Hand-written note left behind by a convenience store robber
F ratio	The proportion of students who will not receive course credit
Normal distribution	Most of the money going to the top 1%
Null hypothesis	Cynicism regarding the worth of an extended warranty
Quantiles	Large ceramic squares
Random sample	Medicine the doctor passes on to you for free
Regression to the mean	Acting like malicious 11-year-old children
Scatter plot	The story of the diaspora
Standard deviation	Done in a strange way, as usual
Theoretical model	Someone who thinks he or she could make a living trying on clothes in front of a camera but has never actually tried
Supplementary Table 1	Where the younger kids sit during Thanksgiving dinner

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receives the issue within a few months.) Many rely on Twitter and other social media. Given the changing landscape of professional publishing, a journal may no longer serve as a compendium that brings to you a variety of new works that you peruse regularly to keep up with the field.

Nevertheless, a top-tier research outlet such as the *Journal of Experimental Psychology: General* continues to provide a service critical to a healthy science of the mind. In particular, the peer review process in which some of the most meaningful findings spanning experimental psychology are selected, improved, and showcased allows our field to progress and adapt to interesting and exciting times. With a venerable journal history spanning back to 1916, an accept rate of only about 15%, and a current 5-year impact factor of 5.88, the journal is clearly one of the few best venues for publication of empirically based, theoretically meaningful research to reach investigators in all areas of experimental psychology. Having an article published in the *Journal of Experimental Psychology: General* indeed remains a potent and meaningful endorsement of the finished work, helping greatly in its successful dissemination and impact on the field and beyond.

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