

## Editorial

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The *Journal of Experimental Psychology (JEP): Applied* published its first issue in 1995. The inaugural editor was Ray Nickerson, who succeeded in establishing the journal as a high-quality outlet for experimental research that advanced both theory and practice. Phillip Ackerman took over the reins as editor in 2002 and the journal continued to flourish under his leadership. I am proud to be following in their footsteps, and I believe that the journal is on the threshold of substantial growth. One sign of our maturity and growth is that for the first time the American Psychological Association (APA) has allocated an Associate Editor to our journal. I am very pleased to report that Frank Durso has assumed this role.

### Journal Mission and Content

The mission of the journal has not changed significantly since the journal's inception.

The mission of the *Journal of Experimental Psychology: Applied* is to publish original empirical investigations in experimental psychology that bridge practically oriented problems and psychological theory. The journal also publishes research aimed at developing and testing of models of cognitive processing or behavior in applied situations, including laboratory and field settings. Occasionally, review articles are considered for publication if they contribute significantly to important topics within applied experimental psychology.

Areas of interest include applications of perception, attention, memory, decision making, reasoning, information processing, problem solving, learning, and skill acquisition. Settings may be industrial (such as human-computer interface design), academic (such as intelligent computer-aided instruction), forensic (such as eyewitness memory), or consumer oriented (such as product instructions).

For our journal to be the leading publisher of applied experimental psychology, authors must be specific in describing how their research is advancing both theory and practice. Our editorial office has been processing manuscripts since January 1, 2007. I have been impressed by the range of research topics that are submitted for consideration. However, I have also been a bit surprised at how some papers seem to miss the point of the journal. My view is that a successful *JEP: Applied* article will have three main characteristics: (a) it is experimental, (b) it advances theory, and (c) it has practical relevance.

What does it mean to be experimental? Generally speaking, it is an attempt to show a causal relationship between two or more variables. I intend to interpret this concept rather broadly to incorporate quasiexperimental manipulations as well as experimental manipulations. Modeling papers or review papers may also be appropriate if they primarily contribute to understanding critical issues in applied experimental psychology.

How does research advance theory? The key here is to present the research first in a theoretical context; namely, what is the present understanding of the issue under study? What is known, where are there controversies, and what are the unknowns that lead to the research question being posed? The discussion of the article should then clearly show how the results have contributed to the theoretical framework either in a general sense or perhaps in a very specific way.

What makes research practically relevant? According to Fisk and Kirlik (1996), "to have practical relevance, research should derive from real, practical problems with the intent to solve those problems, but the work should also be designed to incorporate, build on, and advance theory" (pp. 2–3). It is also important to recognize that a single study does not a theory make (usually), and a single study will not necessarily yield a specific solution. But good applied research will move us toward more theoretical understanding and toward a solution space.

Hallmarks of any good research are internal and external validity, and this may be especially important to consider in the context of applied research (see Shadish, Cook, & Campbell, 2002). One issue that is particularly important to the concept of external validity is representative design. Egon Brunswik is credited with delineating the importance of representative design for psychological research and developing the

concept of ecological validity to describe the “trustworthiness” or predictive validity of environmental cues (for a review see Hammond & Stewart, 2001, *The Essential Brunswik*). Unfortunately, since the original work was published (e.g., Brunswik, 1949) those terms have somehow become merged in the psychologist’s lexicon. In the interest of historical purity, if authors mean that their experimental context resembles the situation to which they wish to generalize, they should use the term “representative.”

A disturbingly frequent phrase that I have observed in submissions to *JEP: Applied* is “the real world” or “in real life.” These expressions are empty. Hammond and Stewart (2001) said it best: “The real trouble with introducing the terms *real world* or *real life* and the reason that they should be abandoned is that they are simply low-grade escape mechanisms; their use makes it unnecessary to define the conditions toward which the generalization is intended. One need only assume (without evidence) that everyone knows what these terms entail” (pp. 7–8). Instead, authors should be specific about the situations to which they expect their results to generalize.

*JEP: Applied* should be the leading publication for experimental psychology with an applied focus. We should set the standard and illustrate how research can have both practical relevance and contribute to the fundamental knowledge base of the discipline. *JEP: Applied* should also illustrate the range of applied experimental research that is conducted in psychology. The breadth and depth of the researched published in the journal should represent the current and emerging foci of the field of applied experimental psychology.

In addition to serving the needs of current researchers, the journal has the potential to excite students about the role experimental psychology has in solving challenging, important problems, thus helping them to identify alternative types of research questions available to an experimental psychologist. Moreover, applied research, done well, has an impact on society—in the workplace, in education, for homeland security, for health care, and in many other arenas. *JEP: Applied* research articles should provide abundant materials for APA press releases and should be used as illustrations of how we “give psychology away” (to borrow a phrase from Miller, 1969).

### Pragmatics

#### *APA Format*

*JEP: Applied* is an APA journal and it is incumbent upon authors to follow the guidelines that are provided for format and style of papers (American Psychological Association, 2001, *Publication Manual of the American Psychological Association*, 5th ed.). The manual has a wealth of information that can improve the presentation of the details of a research study.

Authors should also ensure that they write an abstract that adequately conveys the key findings of their study (see APA, 2001, pp. 12–13); note that the accepted abstract length has been extended to 180 words. In today’s world of online search tools and databases, the abstract serves as the primary source by which a potential reader will determine whether your paper is worth reading in more depth. Too many authors seem to give short shrift to the abstract when it really deserves substantial attention.

#### *Statistical Reporting*

The most general advice I can provide is to follow the guidance of the *APA Manual* (2001) for providing statistical information and review the concepts discussed in Wilkinson (1999) for specific ideas about effect sizes and practical significance.

Authors should keep in mind that there are several general goals of reporting statistical results. One is to provide an index of statistical significance in the context of the hypotheses of interest. The *APA Manual* provides guidance about the minimally acceptable statistics that should be provided for different types of analyses (2001, Section 1.10, pp. 20–26). Reliability information should be provided for the measures used to assess constructs of interest.

Second is to provide some indication of the size of the effect and the practical significance of the findings. Information about the magnitude and meaningfulness of effects can be presented via effect sizes, confidence intervals, graphical displays, and analogies.

Third is to enable researchers in the future to do follow-up analyses such as a meta-analysis. To that end it is important to provide the number of observations, the mean, and the variability (e.g., the standard deviation or standard error) for each group and each condition in the study. For correlational analyses raw correlations should be reported. It is also important to provide relevant details about the samples such as age, gender, and education levels.

### Student Review Program

During his tenure as Editor, Phillip Ackerman initiated a Student Review Program for the journal, which I intend to continue. The idea is that a student can serve as a reviewer for a paper in conjunction with his or her advisor. The student reviewer then has the opportunity to see the decision letter, the other reviewers' comments, and perhaps continue to participate if the paper is revised. Student reviewers are acknowledged in the final issue of each volume. If you are asked to review a paper and wish to involve a student, simply let me know and I will coordinate the process. If you are a student who wishes to participate, tell your advisor and you may also contact me.

### Supplemental Materials

APA has developed a protocol for publishing supplemental materials that are associated with specific articles. For example, if you want to provide a link to a computer program, a model or simulation, experimental stimuli, additional statistics, raw data, or something else that is related to the research being presented in the article, that can be arranged. When the paper is accessed via PsycArticles there will be a direct link to the supplemental materials. Within the published article the link will also be provided.

### Proceedings Papers and Other Types of Prior Reporting

Many researchers in this general field present their research at conferences that are accompanied by proceedings papers or that perhaps result in technical reports. A long-standing question is whether it is appropriate to submit data that have been published previously in one of these outlets to *JEP: Applied* for consideration.

Perhaps the first thing to be determined is what it means to have been previously published. Generally there is no concern if the paper has only been published in abstracted form or in a publication with limited circulation or availability (e.g., a laboratory report). However, if the publication was publicly available (e.g., conference proceedings or book chapters) then concerns about duplicate publication may arise (APA, 2001, pp. 351–325).

The general policy of APA is that duplicate publication be avoided. Specifically, the relevant ethical principle on Duplicate Publication of Data states that: "Psychologists do not publish, as original data, data that have been previously published. This does not preclude republishing data when they are accompanied by proper acknowledgment" (APA, 2001, p. 396). Consequently, a journal article that contains data previously published in a proceedings paper must be substantially unique—in terms of the theoretical background and research motivation provided, the data and/or the analyses, and the interpretation—and the appropriate attribution to the previous publication must be made.

The general policy I have implemented is as follows. First, upon submission, all authors are asked if any portions of the data have been previously published. If so, they must provide the previous publication. I will then make an initial determination about whether the submission meets the standard of being "substantially unique" and in some cases I will request the opinion either of the Associate Editor or perhaps the reviewers of the paper. Second, authors must specifically acknowledge in their *JEP: Applied* paper that portions of the data have been previously published and provide the complete reference. In addition, authors must make clear which data have been previously published so as to enable subsequent researchers doing a meta-analysis for example, to differentiate data sets as appropriate.

### Plans and Goals

I believe the Editor serves multiple roles:

1. Standard-bearer for quality of the journal—the editor (along with the editorial board) sets the standard for the quality of the research that is published in the journal. The expectation is that, as an APA journal and as one of the JEP journals, the research published will be scientifically rigorous and provide a contribution to the understanding of psychological issues. Given the unique goals of this journal the research should also have practical relevance.
2. Guidance and support person for authors—I believe that the editor should be supportive of the authors who are submitting their work to the journal. I recognize the effort required to prepare an article for submission to a premier journal. Authors deserve to be treated with respect and to receive constructive criticism and guidance. The peer-review process should not only ensure that

high-quality research is published but also provide guidance to help authors to present their work in the clearest and most concise manner.

3. Manager of operations—it is crucial that manuscripts be processed in a timely fashion, that reviews be constructive and informative, and that authors receive specific and detailed information about the status of their paper.
4. Publicist—the editor should be the advocate for the journal—promoting it to potential contributing authors, spreading the word about the research that is published, and generally being a publicist for the journal and its contributions.

My intention is to accomplish these roles as best as I can. I have assembled an impressive group of individuals to serve as members of the Editorial Board and I am excited to have Frank Durso as my right-hand man. We aim to continue to advance the success of the journal.

Please let me know if you would like to get more involved in the journal, perhaps as a reviewer. Also, if you have suggestions about the journal, I would love to hear them (wendy@gatech.edu).

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*Editor*

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