Principles of publishing

Issues of authorship, duplicate publication and plagiarism in scientific journal papers can cause considerable conflict among members of research teams and embarrassment for both authors and editors. Accordingly, the British Psychological Society has produced the following set of guidelines for prospective authors who are also members of the Society. Five core issues are covered by the recommendations on the principles of publishing outlined below: authorship, duplicate publication, plagiarism, accuracy of reporting, and the role of reviewers.

Authorship

The overriding principle of the recommendations on authorship is that only those collaborators who have made a significant scientific contribution should be credited as authors. It is not only the writers of the paper who are entitled to authorship. Inclusion is merited if an individual has made a major scientific contribution to the research project as a whole and/or the writing of the paper. Specifically, significant contributions are:

- Origination and formulation of the research idea and hypotheses
- Design of the research
- Designing and conducting major analysis
- Interpreting findings
- Writing a major section of the journal article

A number of other contributions essential to the smooth running of the research endeavour do not merit authorship, but nevertheless should be acknowledged in a note. Minor contributions are generally considered as technical activities that provide no significant intellectual/scientific input into the research process. Authorship is not warranted if these are the sole activities undertaken by an individual. Examples of minor contributions include:

- Collection of data (including interviewing) and data entry, if these do not include a significant intellectual/scientific input
- Supervised data analysis
- Designing or building research apparatus
- Recruiting research participants and other administrative duties
- Advising on statistical issues

The order in which authors' names appear should be determined by the relative size of each individual's contribution. Thus, an individual who is judged consensually to have made the most significant contribution to the paper would normally be the first named author. A collaborator who has been a major contributor to the research overall, but has a lesser role in writing a journal article would not qualify for principal authorship, but should be listed as a co-author. In cases where two or more authors have had equal roles in the research and writing processes, names can be ordered randomly, or

alphabetically, with an author's note as explanation for the reader. If a project leads to several journal articles in which all authors made a demonstrably equal contribution to both the research and writing for every paper, authors can decide to alternate first authorship. In many medical journals it is now required that authors specify in their letters of submission the relative weight and content of the contributions of each named author.

Neither the inclusion nor ordering of names should be influenced by the relative status of the collaborating individuals. Authorship is not merited by virtue of being, for example, the head of the research group or department in which the research was undertaken. In the case of student-supervisor collaborations, the student should usually be the principal author when the article is substantially based on the student's research. Supervisors should therefore seek to ensure that the student is enabled to make the major contribution in order to merit first authorship. Exceptions to the rule should be made only if:

- All of the ideas and the design for the research were the supervisor's (for example, if undergraduates or MSc students elect to do their dissertation research on 'ready-made' projects proposed by their supervisors)
- Extremely close supervision was required in order to produce the paper
- The supervisor conducted (or closely guided) further extensive analysis
 that was beyond the scope of the original research and had made a
 sustained and major contribution to the research prior to that.

Prior agreement must be reached with the student if the supervisor intends to publish under any of the above provisos. Since students may often lack knowledge and power in these situations, supervisors are obliged to manage each case fairly and openly, in accordance with the ethical guidelines, ideally seeking the opinion of senior colleagues who should be provided with a copy of these principles.

Equitable and accurate attribution of authorship will be facilitated if clear task requirements and task allocations are established at the outset. Explicit discussion of which tasks will be worthy of which level of credit should be included in the design phase of the research. However, decisions should be reviewed and revised as appropriate in the light of changes during the course of the project.

It is often the case that writing continues long after the original research team has disbanded. The same rules of authorship should apply to post-project output. At a minimum, no work should be undertaken, or authorship assumed, without prior consultation with all former collaborators. Careful co-ordination and communication can prevent the misappropriation of credit for the original research, and reduce the possibility of duplicate publication.

Duplicate publication

Duplicate publication occurs when authors pass off, as original, research that has been published either substantially or in its entirety elsewhere. Duplicate papers have shared hypotheses, data, discussion points, or conclusions, but do not cross-reference the prior publication. Not only does duplicate publication constitute a possible copyright violation, it also deceives the scientific community as to the extent of knowledge in a given field. While ultimately the decision to publish lies with the journal editor, the burden of responsibility for preventing duplication falls to the author(s).

Authors should not submit identical or substantially similar work if it has already been published in another outlet. Examples of alternative outlets include book chapters and published conference proceedings of whole papers (as opposed to abstracts). If the work has previously been published only as a conference abstract or as a working paper, this does not constitute duplicate publication since these tend to have a limited audience. Indeed, many institutions actively encourage the use of conferences and working paper series as routes to developing ideas for journal articles.

The prior publication of any similar work (e.g. other papers based on the same data and methods, or using the same sample) should be clearly referenced in the manuscript. Authors should also inform the editor of any such work already existing, or about to be published. The editor must then decide whether the manuscript includes enough new information to warrant publication. Authors should avoid 'cutting and pasting' (i.e. copying verbatim) substantial chunks of text from their own previously published work. Moderate duplication, involving no more than a few paragraphs throughout the paper, is acceptable provided that reference is made to the publication in which the material first appeared.

Re-publication of a paper in another language does not constitute duplication, provided that information concerning the original source is disclosed to the editor at the time of submission. The published paper should be clearly labelled as a translation.

Authors should submit manuscripts to only one publisher at a time, and the content of papers submitted to different publishers before any decision has been reached should not have substantial overlap. Only if rejected should the manuscript be sent to another publisher. Whilst this substantially increases the lead-time from writing to publication, it is a fundamental measure that will help to ensure that copyright infringements and duplications do not occur.

Authors who fragment their work into a series of papers must be able to justify doing so on the grounds that it enhances scientific communication. Maximizing quantity of publications at the expense of providing a complete and coherent contribution to psychological knowledge is strongly discouraged.

Plagiarism

Plagiarism is defined as taking another person's ideas or writings and using them as if they were one's own. Plagiarism applies to both published and unpublished ideas, and electronic (e.g. internet publications, e-mail) as well as print versions of material. It may occur at any point in the research process: from planning to writing for publication.

When another's written words are lifted directly from a text, whether published or unpublished, quotation marks should be used and the source of the quotation cited. If paraphrasing is used (summarising or slightly altering the original exposition of a written idea), the source of the paraphrase must be credited. All sources of ideas that were not conceived by the author(s) should be acknowledged in the paper. This includes ideas received in the form of personal communications and comments from reviewers, colleagues, or peers. Meticulous note-taking and record-keeping are recommended in order to ensure that all ideas are accurately attributed to the correct sources.

Accuracy of reporting

Accuracy of reporting forms the cornerstone of advances in psychological theory and knowledge of its applications. Hence, authors are ethically obligated to present a true and accurate account of their research process and findings.

Full explanation of all data collection methods, and the tools and techniques used in analysis, should be included in the report. Data should be available for inspection at the request of the editor. Researchers should not falsify or modify data to make the results fit the research hypotheses. Data that does not fit neatly into the predicted patterns must not be omitted from the write-up. If any errors are discovered in the data following publication, they should be made public as soon as possible (e.g. via correction, retraction or erratum procedures, according to circumstances and the publisher's protocol). Ideally, data should be kept on file (or deposited in an appropriate archive) for five years following completion of the study except where this endangers the anonymity of research participants or contravenes data protection legislation. This enables future researchers to replicate findings or re-analyse the data in the light of recent theoretical advances.

Authors should also report the source of funding for research, especially where this may conceivably have led to a perceived conflict of interest e.g., where research into the psychometric properties of a test is funded by the commercial publishers of that test.

Role of reviewers

Editors appoint external experts as peer reviewers. Their role is to evaluate the submitted paper and provide written feedback to the authors. The aim is to ensure that the published work will be as accurate, comprehensive, and scientifically valuable as possible. Reviewers and editors are placed in a position of trust during this process, and as such, must adhere to ethical standards of conduct regarding the treatment of the submitted work.

Reviewers and editors must maintain the confidentiality of the author(s) while assessing the manuscript. This would also apply should it be necessary to consult a colleague regarding a particular section of the paper.

The ownership rights of the author(s) must be respected throughout the process. To this end:

- The work should not be circulated, or quoted except as is necessary for the review.
- The permission of the author(s) must be obtained if editors or reviewers wish to use any part of the submitted manuscript (e.g. data, arguments, or interpretations) in their own work prior to publication of the paper.
- Reviewers may contact the authors via the editor after the review process is concluded.

Should reviewers suspect ethical misconduct by the author(s), following an assessment of the manuscript, or by other reviewers during the review process, they must inform the editor in confidence. It is the responsibility of the editor to ensure that the review process is conducted according to the highest ethical standards.

References

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