Intellectual Honesty and Ethics: What is Right in Publishing

Over the past several months, I have received a number of questions and inquiries from prospective authors about appropriate topics to publish in the *International Journal of Aquatic Research and Education*. Specifically, one primary issue seemed to revolve around the permissibility or appropriateness of publishing work that has been previously presented or published in another venue. One might think the answer would be a clear cut “yes” or “no,” but it is not. I decided to address several ethical and intellectual honesty aspects of publishing in this editorial, partially to explicate and clarify my own thinking as well as perhaps answer questions contributing or prospective authors may have. I hope readers will find my discourse to be informative and interesting.

**Intellectual Property**

When one composes a manuscript, the written work represents a *product* (or *property*) that is similar to what any artisan or craftsperson might create, such as a sculpture, painting, piece of furniture, or an invention. Just as creators “own” their unique and one-of-a-kind pieces of art or invention, an author really “owns” not just the printed document, but also the ideas contained within the written document. Inventors patent their creations to document the authenticity of ownership. For the same reason, authors copyright their written works to indicate that these ideas are their own “intellectual property,” a product of their knowledge, imagination, or creativity.

Everyone recognizes that if someone picked up a piece of art or invention (or any other tangible object) and walked off without paying for it, that person would typically be guilty of theft. Strangely, not everyone readily recognizes that if one copies a written document without attribution (i.e., giving credit to the author) and within the limitations of “Fair Use” copyright laws, they are equally guilty of theft. It is not clear to me why theft of an object, a piece of property, is so easily recognized while absconding with someone’s ideas is not. Perhaps this difficulty is because *intellectual property* is such an abstract construct. As knowledge, it can actually expand, multiply, and be transformed as the information is shared from one person to the next. Unlike the sculpture, which is tangible and bound by the laws of conservation of matter, intellectual properties or “ideas” can so easily be disseminated broadly via a variety of modes (i.e., orally, visually, experientially).

**Intellectual Honesty and Plagiarism**

Because of the “multiplication” and “transmission” factors associated with knowledge and intellectual ideas or property, too often persons do not recognize ideas as belonging to the person or groups of people who originated them. Also, it is
clear that ideas are often built upon other ideas, so “ownership” can become quite complicated. Because of this lack of understanding about intellectual property, there is an incredible amount of mostly unintended plagiarism that occurs. I think in most cases, ideas are not attributed to their rightful owner more out of ignorance and thoughtlessness than out of a sense of dishonesty.

When one honors the ownership of ideas or information, they are exercising intellectual honesty. There are many facets of intellectual honesty: in addition to carefully documenting where ideas arise, it is equally important to accurately describe the method used, analyses, and results conducted in the study. The method (Note: according to the APA, “method” is singular, not the plural, “methods”) should carefully detail who the participants are (according to APA, the term, “participants,” is preferred instead of “subjects” for philosophical reasons), the procedures and assessment instruments, and the validity, reliability, and objectivity characteristics of variables. Along with these elements, authors need to verify that if the study involved human participants that the appropriate Institutional Review Board and informed consent procedures were used. The rule of thumb is that one should provide sufficient information so that someone could replicate the study with the information you provide in the manuscript.

For empirical research, the analyses of the results need to report at least the summary statistics, empirical statistics, and the statistical power (i.e., the degree of confidence one has in being able to find a statistically significant difference if it exists). Also, intellectual honesty means that authors have checked and rechecked the accuracy of their data. We have actually had one manuscript withdrawn temporarily because the authors discovered that one of their analyses had been done in error. Once they corrected the analysis, they resubmitted their manuscript. It has been one of the more important papers we have published in our first three volumes. It is doubly important because of the ethical conduct employed by the authors.

Like the concept of intellectual honesty, plagiarism is more complicated and poorly understood than one might otherwise appreciate. By definition, plagiarism is “the act of taking and passing off another’s ideas or writings as one’s own” (McKechnie, 1983). At first blush, plagiarism might appear to be straightforward and easy to understand: if someone downloads a paper from the Internet or copies verbatim phrases, sentences, or even paragraphs from someone’s paper, that’s obviously an act of plagiarism. But, what if, in writing a paper, you paraphrase ideas you have read? Is that plagiarism? What if you replicate a table or diagram from another paper? Is that plagiarism? Suppose you write a paper and copy sections from an earlier paper you have written? Is it possible to plagiarize yourself? What if you have a comprehensive data set? Can you write more than one paper on the data set from a study? What if you have created and presented a poster presentation on a study? Could you publish a paper using the poster presentation as its basis?

Paraphrasing ideas. Let’s explore each of these examples of possible plagiarism from the previous paragraph. In fact, even if you paraphrase ideas from someone else’s paper, it is plagiarism unless you give credit to the author by means of a citation. In the International Journal of Aquatic Research and Education, we use the American Psychological Association’s (APA) citation and reference format (American Psychological Association, 2001) which is common among social science and education disciplines. Other journals use different citation format styles such as that of the Modern Language Association (MLA) for the humanities.
disciplines or the American Medical Association (AMA) for the natural sciences and medicine. If you are someone who publishes in journals that require different citation styles, I recommend you employ a citation management tool such as RefWorks or Endnote that will allow you to modify your references with ease. It saves authors a lot of time and helps me from having to request authors to change their citations and references.

**Replicating figures, tables, or images.** Often, information and ideas are presented in the form of tables, figures, or images. Just as with textual information, tables and figures “belong” to the author of the paper as intellectual property. One is permitted to reprint a table, figure, or other image such as a photograph IF you give the author credit using a citation and if you have secured written permission from the author or copyright holder. Usually publishers will require that you produce the written permission prior to publication.

**Citing one’s own data.** Some may be surprised to learn that it is possible to plagiarize yourself. Even though one holds the copyright and truly “owns” the information, if one copies phrases, sentences, paragraphs, tables, figures, or photographs from one’s own previous paper without attribution (e.g., a citation from the previous paper), this is considered to be unethical. It is required that one give credit for where information has been previously published, partially because often times the publisher holds the copyright for a particular paper. It is not acceptable to republish the same information unless permission is obtained from the original copyright holder and the republication is clearly identified in the second publication location. It also is considered unethical to portray information as original by not citing one’s previous work.

**Publishing data in duplicate venues.** Interestingly, it is permissible and ethical to publish multiple papers from a single study or data set under certain situations. In fact, it might even be the sign of a particularly important and significant data set when multiple research questions can be published as separate papers. I would suggest that the key aspect of appropriately publishing multiple papers from a single data set is that each paper must address a unique research question or topic. As long as the data are examined in a unique way to answer a different question, then separate papers are certainly permitted. Regular readers of the *International Journal of Aquatic Research and Education* may recognize a series of papers that represents an example of multiple papers addressing unique research questions from the same data set (Avramidis, Butterfly, Llewellyn, 2007, 2009a, 2009b, 2009c, 2009d).

**Previously-presented data.** In most cases, it also is permissible to publish a paper using data from a study that has been previously presented, either as an oral presentation or in the form of a poster. Even if the presentation has had an abstract published, in most cases one is certainly allowed to publish a full text manuscript developed from the presentation. As a related issue, it is typically not permitted for one to represent the same information, ideas, or data as an oral and/or poster presentation at two separate conferences, at least without acknowledging that the presentation has been previously presented elsewhere. The general rule appears to be that one may present data once and then publish that data addressing each single, unique research question once.
Disclosure of Interest

Another publishing-related ethical issue is **disclosure of interest**. This issue, related to the appearance or actual presence of bias, can take several forms. For example, when researchers conduct research using funding from a company, foundation, or agency, it is important to disclose this information. Failure of authors to acknowledge their outside interests may constitute a conflict of interest that could indicate a possible lack of objectivity by the researcher. Certainly, if an author was allowed to serve as a reviewer on her own paper, that would constitute a clear conflict of interest.

Readers may be interested to know that in order to avoid even the appearance of a conflict of interest, the review process used by Manuscript Central prevents an author from being able to participate in the review her own paper since this would be highly inappropriate. Interestingly, the same mechanism applies to me as the Editor and to members of the Editorial Board. If we submit any manuscript, even this editorial, then Manuscript Central prevents us from gaining any administrative access to our paper. I have set up a procedure by which a separate member of the Editorial Board will serve as “associate editor” for any research or educational manuscript that I may submit so that we avoid any conflict of interest.

In this current issue, I am disclosing a potential conflict of interest I personally have with the two scientific reviews/advisories being published in this issue. I am a member of the aquatic subcouncil of the American Red Cross’ Advisory Council for First Aid, Aquatics, Safety, and Prevention. In fact, I am the lead author of the second scientific review and advisory on the minimum age for swimming lessons. Relative to publishing these reviews and advisories, we have followed exactly the same procedure that we use with all agency position statements, reviews, or advisories. These are published verbatim as submitted by the non-profit agency or organization since they have already undergone extensive peer review during their development process. I remind readers that any non-profit agency is welcome to submit scientific reviews or position statements for publication in *International Journal of Aquatic Research and Education*. Please contact me directly if you have an aquatic-related scientific review or position statement that you are interested in publishing.

I believe that it is critical in our scientific endeavors, especially in dissemination and publishing of peer reviewed, scholarly work, to fully understand and abide by the very best ethical practices. This particularly includes understanding and appreciating intellectual property rights, copyright, plagiarism, and conflict of interest issues. I encourage current and prospective authors to continue to raise questions about what is appropriate and representative of the very best of which we are capable.

**References**


Steve Langendorfer, Editor

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