# Guidelines for the Responsible Conduct of Research: Ethics and the Publication Process

**Committee on Research Integrity and Publication Practices** 

#### **About this Document**

This guidelines document is an official policy of the American Speech-Language-Hearing Association (ASHA) and was prepared by ASHA's Committee on Research Integrity and Publication Practices. Members of the Committee were David Denton (ASHA), Janis Costello Ingham (University of California, Santa Barbara), Joanne Jessen (ASHA), Kevin Kearns (MGH Institute of Health Professions), Fred Minifie (Professor Emeritus, University of Washington), Sharon Moss (ex officio), Peggy Nelson (University of Minnesota), and Bernard Rousseau (Vanderbilt University). Raymond Kent (University of Wisconsin—Madison) served as monitoring vice president. This policy document was developed by ASHA under an award from the U.S. Department of Health and Human Services' Office of Research Integrity (ORI) - Association of American Medical Colleges (AAMC) Responsible Conduct of Research (RCR) Program for Academic Societies.

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## **Purpose of the Guidelines**

The discipline of communication sciences and disorders (CSD) is committed to advancing knowledge through basic, translational, and applied research regarding (a) normal speech, language, hearing, and swallowing; (b) the nature, prevention, and amelioration of communication and swallowing disorders; and (c) intervention strategies and the effectiveness, efficiency, and outcomes of clinical treatment. The American Speech-Language-Hearing Association (ASHA) believes that advancements in basic knowledge and clinical practice emerge from the diligent application of sound research

methodologies and the peer-reviewed, published dissemination of findings. Throughout its history, ASHA has relied on scientific research and scholarly publication to advance knowledge in critical areas related to the discipline and the professions.

ASHA is mindful of the position taken by the American Association for the Advancement of Science (AAAS) in 1975, noting that "one of the basic responsibilities of scientists is to maintain the quality *and integrity* [italics added] of the work of the scientific community" (AAAS, 1975, p. 8). Federal guidelines define *scientific misconduct* as "fabrication, falsification or plagiarism in proposing, performing, or reviewing research, or in reporting research results [see 9.d below]. Research misconduct does not include honest error or differences of opinion" (Responsibility of PHS Awardee and Applicant Institutions, 2005). Others (Ingham & Moss, 2006) have added the general notion of *questionable research practices* to the discussion. This complements AAAS's more broadly defined *research integrity*: "the fostering of core values and ethical traditions of the scientific disciplines that promote rigorous and responsible research practices" (Iverson, Frankel, & Siang, 2003), hence the term in common use today—*the responsible conduct of research*. This more wide-ranging concept is the topic of these guidelines.

In 1997, the Committee on Research Integrity of the Association of American Medical Colleges (AAMC) declared that it was "worthwhile for scientific and professional societies to develop codes of ethics and research practice" (AAMC, 1997, p. 5). Like other scientific and professional organizations, ASHA is strongly committed to promoting ethical practices in research, in the reporting of research via publications in its scholarly journals, and in the education and training of researchers. The following guidelines provide information about, and encourage adherence to, ethical standards for the responsible conduct and reporting of research in CSD and, in particular, in ASHA's research journals. Researchers, as well as students preparing for research careers in CSD, should familiarize themselves with these guidelines. In addition, research teams should consult their home institutions to determine local requirements for training in responsible conduct of research. These guidelines may also be useful in ethics education activities, especially in academic programs. Such guidelines are essential to protect the integrity of our journals and the science of our discipline.

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# **Ethical Issues for Authors**

The responsible conduct of research—from the earliest stages of a project and onward—has a direct bearing not only on the quality of any resulting article but also on ethical issues that arise during the publication process. These guidelines are intended to help researchers avoid ethical pitfalls through all phases of the research and publication process.

Before beginning a research project, researchers who are planning to submit manuscripts to ASHA journals should consult the ASHA Code of Ethics (ASHA, 2003; www.asha.org/policy), as well as the Web site of the U.S. Department of Health and Human Services Office of Research Integrity (ORI; http://ori.dhhs.gov/publications/) for broad principles and rules that apply to the responsible conduct of research. Before preparing and submitting a manuscript for publication in one of ASHA's journals, researchers should also review the Instructions for Authors in the back pages of each journal issue or online (www.asha.org/about/publications/journal-abstracts/submissions/); the *Publication Manual of the American Psychological Association* (5th ed.; American Psychological Association [APA], 2001; www.apa.org/books/4200060.html), the official style manual generally adhered to by ASHA's journals; and *CSE's White Paper on Promoting Integrity in Scientific Journal Publications* (Scott-Lichter and the Editorial Policy Committee, Council of Science Editors, 2006; www.councilscienceeditors.org/editorial\_policies/white\_paper.cfm).

The following sections highlight topics related to the conduct and publication of research where potential problems of ethical conduct are most likely to arise.

- 1. **Protection of Humans and Animals.** All investigators, domestic and international, who submit manuscripts to ASHA journals, must ensure the protection of humans and animals involved in research.
  - Protecting Human Participants in Research. Investigators have special responsibilities to ensure confidentiality, informed consent, avoidance of coercion, ability to withdraw without penalty, and a risk-benefit analysis.
    - 1. All investigators planning to include humans in experiments should submit research proposals to an independent, objective review panel to ensure that the rights of participants, researchers, and institutions are protected. Approvals for research involving human participants in the United States must be obtained from duly constituted institutional review boards (IRBs) or their equivalents prior to conduct of the research. The basis for considerations regarding human participants can be found in *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (National Commission for the Protection of Human Subjects, 1979; <a href="www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm">www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm</a>). See also *Protection of Human Subjects* (ASHA, 2005 an Issues in Ethics statement from ASHA's Board of Ethics; available from <a href="www.asha.org/policy">www.asha.org/policy</a>).
    - 2. If deception of participants is an integral component in an experiment, it must be handled in compliance with IRB guidelines, which typically require inclusion of debriefing sessions.
    - 3. Research involving protected health information (i.e., individually identifiable health information) obtained from entities covered by the Health Insurance Portability and Accountability Act (HIPAA)

- must comply with HIPAA guidelines (see <a href="www.hhs.gov/ocr/hipaa/">www.hhs.gov/ocr/hipaa/</a> and <a href="www.hhs.gov/ocr/privacysummary.pdf">www.hhs.gov/ocr/privacysummary.pdf</a>).
- 2. **Protecting Animals in Research.** Investigators are responsible for exploring alternative research methodologies prior to making a decision to use animals in research, providing a risk-benefit analysis to ensure that the knowledge gained will justify the use of animals, and treating animals humanely.
  - In the United States, approval for research involving animals must be obtained from a duly constituted institutional animal care and use committee (IACUC) or its equivalent prior to conduct of the research. Such research must be performed in accordance with the *Public Health Service Policy on Humane Care and Use of Laboratory Animals* (U.S. Department of Health and Human Services, 2002; <a href="http://grants.nih.gov/grants/olaw/references/PHSPolicyLabAnimals.pdf">http://grants.nih.gov/grants/olaw/references/PHSPolicyLabAnimals.pdf</a>), the National Research Council's (1996) *Guide for the Care and Use of Laboratory Animals* (<a href="http://www.nap.edu/readingroom/books/labrats/">http://www.nap.edu/readingroom/books/labrats/</a>), and the Animal Welfare Act (<a href="http://history.nih.gov/laws/pdf/AWA.pdf">http://history.nih.gov/laws/pdf/AWA.pdf</a>).
  - 2. Authors should consult with the National Institutes of Health (NIH) Office of Animal Care and Use for links and information regarding responsible conduct of research involving animals (<a href="http://grants.nih.gov/grants/olaw/references/phspol.htm">http://grants.nih.gov/grants/olaw/references/phspol.htm</a>, <a href="http://oacu.od.nih.gov/regs/index.htm">http://oacu.od.nih.gov/regs/index.htm</a>, and <a href="http://oacu.od.nih.gov/awic/legislat/awa.htm">www.nal.usda.gov/awic/legislat/awa.htm</a>).
- 3. **Compliance.** ASHA's Publications Board requires that compliance with IRB/IACUC requirements be confirmed in the cover letter when a manuscript is submitted for publication in an ASHA journal. Such compliance should also be mentioned in the methods section of the manuscript. Investigators from outside the United States must provide assurance that their experiments were performed in accordance with procedures that adhered to the humane use of humans and animals in research.
- 2. **Authorship.** Early in the planning of a research project, roles of coinvestigators should be specified and agreed to, including identification of the person who will serve as the project leader, or principal investigator (PI).
  - 1. All and only those who have contributed substantially to the research should be named as authors. Substantial contributions include having major roles in some or all of the following: conceptualization and design of the study, preparation and execution of the plan for data collection, analysis and interpretation of the data, and formulation of the written manuscript. ASHA scholarly publication policies do not permit "honorary/gift" or "ghost" authorships. (Honorary authorships occur when the name of someone who is not fundamentally involved in the research, such as a department head or sponsor of the research, is included among the listed authors. Ghost authorships occur when the persons who write the

- manuscript are not those who conducted the research, such as when a research group hires professional writers to prepare grants or manuscripts.) Persons who were helpful during the research process but who do not qualify as authors may be recognized in the acknowledgments section of an article.
- 2. From the beginning of the research project, ultimate accountability for the contents of the published report should be designated to one author (typically the PI), shared equally among all authors, or divided among individual authors, each of whom will be accountable for specific aspects of the research (e.g., selection and conduct of statistical analyses, brain imaging techniques, or genetic assays.).
- 3. Preferably in advance of preparation of the manuscript, the team of investigators should agree upon the order in which authors' names will be listed in a published article.
- 4. In advance of presentation at scientific or professional meetings, the list of presenters and the content of prepublication reports should be agreed on by the research team. This should be the case, as well, if some of the authors propose to publish a subset of the data for a different purpose or based on a different analysis.
- 5. A cover letter written by the corresponding author to the journal's editor is required when a manuscript is submitted to an ASHA journal. The letter must indicate that each author is a contributing author and that each (a) has read the submitted version of the manuscript, (b) accepts responsibility for its content (or for the content in the particular author's realm of responsibility), and (c) agrees to the order of authorship. Individuals' original signatures (or fax copy) on the Copyright Transfer Agreement form serve to certify their authorship.
- 6. Additional guidance regarding qualifications for authorship can be found in the policies of the International Council of Medical Journal Editors (<a href="www.icmje.org/">www.icmje.org/</a>) and in the *Publication Manual of the American Psychological Association* (<a href="mailto:APA">APA</a>, 2001; <a href="www.apa.org/books/4200060.html">www.apa.org/books/4200060.html</a>).
- 3. **Conflicts of Interest.** Conflicts of interest have the potential to influence the ultimate integrity of the research product and the reputation of the researchers involved, as well as to influence readers' perceptions. Authors must disclose any conflicts of interest that could have, or could be viewed as having, the potential to bias the conduct or results of the research. The resulting disclosure statement published with the research ensures that readers can evaluate the research in light of the authors' potential or real conflicts.
  - 1. Conflicts of interest may occur:
    - 1. When any member of the research team has personal, financial, or other external incentives that might be perceived as potentially biasing the outcome of the experiment;
    - 2. When the interests of the funding source for an experiment (e.g., a drug company for a test of a drug's effectiveness, a manufacturer for a report on the reliability of a new instrument, or a publishing

- company for the evaluation of a new diagnostic test) could potentially influence the conduct, analysis, or reporting of a study's findings;
- 3. When a support agency or sponsor requires the right to approve publication of research findings. Researchers should be aware that such contractual agreements can inhibit the publication of important findings, such as those that do not support the product/process/treatment of the funder (e.g., foundations, government agencies, and corporate sponsors).
- 2. Authors should bear in mind the following points regarding disclosure of potential conflicts of interest:
  - 1. Potential conflicts of interest must be disclosed to the editor in the cover letter and to readers in a footnote or disclosure statement contained in the manuscript.
  - 2. Failure to disclose relevant conflicts of interest may constitute scientific misconduct.
  - 3. When authors are uncertain about what might be considered a conflict of interest, they should err on the side of full disclosure.
- 4. **Aspirational Responsibilities of Investigators.** The scientific enterprise upon which our discipline and professions depend requires that investigators maintain an open, unbiased, nondiscriminatory atmosphere. The responsible conduct of research calls upon PIs to display leadership qualities that inspire and maintain an ethical approach to research. Examples include the following:
  - 1. Setting and maintaining a tone of respect among the research team members for the experiment, the data, the participants, and the procedures;
  - 2. Inhibiting the expression of overt expectations or application of subtle pressures in regard to the study's ultimate findings;
  - 3. Using appropriate mentoring practices with junior team members, thereby avoiding the misuse of power that could introduce bias, influence authorship, or inhibit the contributions of any team members.
- 5. **Data Management.** Prior to data collection, the following topics should be included in discussions among coinvestigators to ensure that paper and electronic data are private, secure, accurately recorded, and trustworthy:
  - 1. Experimental protocols;
  - 2. Methods of recording and coding data that maintain the confidentiality of participants' identity;
  - 3. Methods for securing data, including secure electronic access and storage;
  - 4. Format of laboratory notebooks;
  - 5. Methods for copying, backing up, and cross-checking data;
  - 6. Methods for recording data so that the research record can be readily understood.
- 6. **Data Retention.** Investigators must retain data for a reasonable period of time after the completion of their published project. Data retention is important because it facilitates replication studies, and it allows verification, reanalyses, and meta-analyses.

- ASHA journals will not consider for publication research for which the original data are not available. Availability must be verified in the authors' cover letter.
- 2. NIH recommends a period of 3 years for data retention (U.S. Department of Health and Human Services, 1999; see <a href="http://grants2.nih.gov/grants/policy/a110/a110implications.htm">http://grants2.nih.gov/grants/policy/a110/a110implications.htm</a>).
- 7. **Data Ownership.** Data ownership regulations vary according to the intellectual property rules of various institutions or sponsoring agencies. In most cases the data belong to the institution and not to individual investigators. The institution may allow copies of data to move with the PI if that person changes institutions.
- 8. **Duplicate Publication.** When submitting a manuscript, an author must reveal within the cover letter any previous publication, in whole or in substantial part, of the manuscript or of the data reported in the manuscript. This includes publication not only in other journals, but also on individual and institutional Web sites, in the mass media, and in translation. Decisions on what constitutes prior publication and might prevent acceptance in an ASHA journal will be determined by current Publications Board policies.
- 9. **Manuscript Preparation.** Well-designed and carefully conducted research by those educated in research methods serves, in itself, as a platform for the responsible conduct of research. The published report of such research should be accurate, complete, and clear. The following sections are among those typically included in most empirical research articles appearing in ASHA journals. Ethical issues associated with the preparation of the manuscript are included in each of these sections (see also the fifth edition of the *Publication Manual of the American Psychological Association*; APA, 2001):
  - 1. **Title and Abstract.** The title and structured abstract should be truthfully descriptive and not mislead the reader regarding the topic or the findings.
  - 2. **Review of the Literature.** Investigators must be familiar with the previously published literature that has a direct bearing on their project. Authors have a responsibility to ensure that their review reflects fully and accurately the current state of the science through critique of relevant, particularly peer-reviewed, literature.
    - 1. The literature review should be critical and accurate, and should provide a clear statement of the research question.
    - 2. The literature review should provide proper attribution for previously published words, ideas, processes, or results of others to avoid *plagiarism*. "Plagiarism occurs when someone falsely represents another person's ideas as his own through irresponsible citation, attribution, or paraphrasing. Plagiarism embodies a failure to give credit where credit is due" (Resnik, 2001, p. 62). Additional information on plagiarism can be found at the ORI's Web site (http://ori.dhhs.gov/policies/plagiarism.shtml) and in the American Psychological Association's (2003) Ethical Priniciples of Psychologists and Code of Conduct (www.apa.org/ethics/code2002.html#8\_11).

- 3. The review must also avoid *self-plagiarism*—the reuse of one's own previously published words or data without acknowledgment, attribution, or copyright permission.
- 4. The literature review should be balanced and include, where possible, references to research studies that support and do not support the hypothesis under study. Deliberate omission or inaccurate reporting of credible and relevant lines of research may constitute unethical conduct.
- 3. **Selection of Methodologies.** Investigators who publish in ASHA journals have an obligation to show that the research design used in their study is appropriate to the research question being addressed. Additionally, investigators have an ethical responsibility to do the following:
  - 1. Select equipment, tests, and materials that are reliable and valid, and that are appropriate for the ages, genders, education levels, cultures, languages, and disabilities of the participants selected for the study.
  - 2. Determine the reliability and validity of any nonstandardized tools used for data collection.
  - 3. Use research designs, statistical procedures, and other relevant analyses in an appropriate and ethical manner, having a clear rationale for each.
  - 4. Select and report characteristics of participants appropriately. Typically, authors describe how many participants were enrolled, attrition rates, and explanations for attrition. This information is necessary to assure readers that the remaining sample is appropriately representative of the target population and not an artifact of the research design.
  - 5. Note whether participants in the current study participated in other similar studies recently, if such participation might reasonably be expected to influence the measures obtained in the current study.
  - 6. Provide sufficient detail about the methodology so other investigators can replicate the work.
- 4. **Report of Results.** Researchers have an obligation to provide an honest description and analysis of their findings, and to refrain from willful deception. When authors have engaged in *scientific misconduct*, evidence is typically found in the results section of a manuscript. As Resnik (2001, p. 54) defined it, "Misrepresentation occurs when scientists do not truthfully or objectively report data or results." The two most obvious types of misconduct are *fabrication* and *falsification*. "Fabrication occurs when scientists make up data; falsification occurs when scientists alter data or results" (Resnik, 2001, p. 54). Common variations follow:
  - 1. "Trimming occurs when scientists fail to report results that do not support their hypotheses. (Outlier data, if legitimately removed, should first be displayed, and the rationale for their removal explained in the manuscript.) Fudging occurs when scientists attempt to make results appear to be better than they are. Cooking

- the data occurs when scientists design tests or experiments in order to obtain results they already have good reasons to suspect will be positive, or when they avoid conducting tests that are likely to yield negative results" (Resnik, 2001, p. 54).
- 2. *Shopping* for a statistical analysis that best supports the investigator's hypothesis is also inappropriate (American Statistical Association, 1999).
- 3. Slicing and dicing occurs when scientists divide a single coherent study into smaller pieces to be reported and published in separate articles (i.e., "salami science"). This can obscure major trends obtained in the study. In such cases, ASHA encourages a single report of the complete study.
- 5. **Discussion.** Authors have an obligation to provide a critical analysis (positive and negative) of the results.
  - The discussion section of a paper should clearly be related to the research question and to results reported in previously published research studies. Conclusions should be drawn directly and fairly from the results. Limitations of the method should be discussed and reasonable explanations provided for unusual, atypical, or discrepant results. Authors are cautioned that if the discussion relies on falsified, fabricated, or plagiarized data, claims made in the discussion might also constitute misconduct.
  - 2. Investigators have additional responsibility to discuss whether selection of participants posed a threat to the internal validity of the experiment. Similarly, investigators are responsible for assuring the readership that no interaction of participant selection and treatment posed a threat to the external validity of the experiment. If threats to either the internal or external validity of the experiment appear to be related to processes used in participant selection, it is the responsibility of the authors to discuss those threats and to suggest ways that such problems could be circumvented in future studies.
  - 3. Also included in this section should be a discussion of how any potential bias by the experimenter(s) or human observers was accounted for or controlled.
- 10. **Copyright Issues.** Copyright issues are described in the ASHA journals' Instructions for Authors (<a href="www.asha.org/about/publications/journal-abstracts/submissions/">www.asha.org/about/publications/journal-abstracts/submissions/</a>). Information about copyright principles can be found at the U.S. Copyright Office Web site (<a href="www.copyright.gov">www.copyright.gov</a>).
  - 1. If copyrighted material is used in an article, it is the responsibility of the authors submitting the manuscript to obtain permission to reproduce that material. Authors must furnish a copy of the permission granted to reproduce or adapt the copyrighted material or a notice that such permission is pending. No article can be published without the necessary permission on file with ASHA.

- 2. Authors also must follow copyright guidelines in regard to their own work by contacting the publisher for permission to use/reproduce any part of their own previously published work. (See the discussion of self-plagiarism above [9.b].)
- 11. **Report of Error.** If, after publication, an author discovers an error in the article, it is the author's responsibility to notify the journal's editor. The journal will publish (in print and online versions) an erratum when an honest error has been found (by an author or reader). As stated above, honest error is not an example of scientific misconduct.

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# **Ethical Issues for Editors, Associate Editors, and Reviewers**

Editors, associate editors, and reviewers receive guidance regarding ASHA's Publications Program, including ethical guidance, from a variety of sources. These include the following:

- Editor's Handbook online (<a href="www.asha.org/about/publications/journal-abstracts/editors/">www.asha.org/about/publications/journal-abstracts/editors/</a>), which details the policies and procedures that direct ASHA's peer-review process
- Instructions for Authors online (<u>www.asha.org/about/publications/journal-abstracts/submissions/</u>)
- Information for Reviewers online (<u>www.asha.org/about/publications/journal-abstracts/submissions/reviewer\_info.htm</u>)
- Publication Manual of the American Psychological Association (www.apa.org/books/4200060.html).

Editors of ASHA journals must be members of ASHA, nominated by their peers, selected by the Publications Board, and approved by the Board of Directors. They are thus responsible for upholding both the ASHA Code of Ethics and the principles delineated in this document. For the 3 years of their term, editors are the gatekeepers for their particular journal (or their journal section). They are responsible for ensuring the quality and integrity of the content of the journals. In this role, they set the tone for establishing the highest standards of ethical conduct during the manuscript review and publication process.

Associate editors are selected to manage the peer review of manuscripts within their particular areas of expertise. They are nominated by the editors, approved by the Publications Board, and ratified by ASHA's Board of Directors. Associate editors are another layer in the gatekeeper function that is inherent to the peer-review process. They are expected to adhere to the research- and publications-related tenets of the ASHA Code

of Ethics and to the principles inherent in the responsible conduct of research set forth in these guidelines.

Reviewers for ASHA's journals are selected for their relevant expertise. General qualifications include special expertise or advanced knowledge of the subject matter, a strong publication history, an aptitude for critical thinking, an ability to communicate clearly, a penchant for thoroughness and fairness, and a willingness to provide reviews in a timely manner. It is assumed that associate editors will invite as reviewers for a particular manuscript persons who have topic-relevant expertise. Associate editors are encouraged to invite persons who are likely to be representative of a range of theoretical and/or methodological viewpoints.

These important members of the editorial review team supporting ASHA's Publications Program (editors, associate editors, and reviewers) must give special attention to the following issues in their efforts to accomplish a fair and principled review of manuscripts submitted for publication.

- 1. **Confidentiality.** The review process is intended to be highly confidential, objective, and thorough.
  - 1. Editors, associate editors, and reviewers should not reveal to any person outside of ASHA's Publications Program information regarding the names of authors, the content of a manuscript, associate editors' and reviewers' recommendations, or the final decision regarding publication of a manuscript. This restriction applies to professional colleagues, students, and staff. Sharing a submitted manuscript with students for the purpose of helping them learn to critique research and write reviews is inappropriate, even if all author-identifying information has been removed. Editors, associate editors, and reviewers should not allow submitted manuscripts to be used as vehicles for "practice" reviews by students.
  - 2. When communicating among themselves, editors, associate editors, reviewers, and others involved in the review process should use manuscript numbers rather than authors' names to attempt to ensure privacy in regard to author identification. Additionally, all communications should be conducted in a respectful, professional manner.
  - 3. Information gained via the review process must not subsequently be used by editors, associate editors, or reviewers to produce a competitive advantage in future publications or grant applications.
  - 4. Information contained in manuscripts is confidential until accepted for publication.
- 2. **Conflicts of Interest.** Editors, associate editors, and reviewers should attempt to recognize and avoid all real or potential conflicts of interest and the appearance of impropriety.
  - 1. Editors, associate editors, and reviewers should recuse themselves from handling the peer review of any manuscript for which they have a conflict of interest or might be perceived as having a conflict of interest. This

- includes manuscripts from colleagues at their home institutions, close collaborators, recent mentors, and current and recent students.
- 2. Editors, associate editors, and reviewers should avoid processing manuscripts in which they have a financial interest that could potentially influence their recommendations.
- 3. Editors, associate editors, and reviewers should avoid processing manuscripts if they have had a previous connection to the research, such as having advised the authors or having read a draft of the manuscript.
- 4. If editors, associate editors, or reviewers have a strong theoretical or personal bias in regard to a manuscript's topic or author(s) that they perceive, upon honest reflection, could interfere with their objective evaluation of the manuscript, they should withdraw from the editorial review process.
- 5. Even if prospective reviewers feel confident that the existence of one or more of these potential conflicts of interest would not intrude upon their objectivity, they should protect the credibility of the review process by avoiding even the appearance of a conflict of interest and decline to review the manuscript.
- 6. If editors, associate editors, or reviewers are aware of previous work that is directly germane to the work being reported, they may recommend that the author consider inclusion of such material in the manuscript. However, editors, associate editors, and reviewers should not take advantage of their positions in a self-serving fashion. In regard to their own publications, editors, associate editors, and reviewers may suggest to an author that citation of their own work might be appropriate in the author's manuscript, but insisting on or coercing the inclusion of such citations is inappropriate.
- 3. **Self-Disqualification.** Reviewers who recognize that they are not qualified to review a particular manuscript due to lack of familiarity with the relevant research in the area, the methodology, or the statistical procedures should refrain from accepting the invitation to review or should provide a review that specifies the areas in which they claim expertise.
- 4. **Reviewer Objectivity and Accountability.** Regardless of whether a review is signed or anonymous, reviewers are accountable for their reviews and should be objective in their comments.
- 5. **Respect for Intellectual Property.** Throughout the editorial review of manuscripts submitted for publication in ASHA's journals, care is taken to ensure respect for intellectual property:
  - 1. If the review process reveals the possibility of plagiarism, inappropriate use of materials protected by copyright, or other abridgment of intellectual property (including trademark and patent), these matters will be brought to the attention of the authors and, in appropriate cases, to the attention of ASHA's Publications Board and Board of Ethics. (See Sections 8 and 9 below.)
  - 2. Included under the rubric of plagiarism is the theft of the intellectual property of others. The <u>U.S. Department of Health and Human Services</u> <u>ORI (2006)</u> states that "the theft or misappropriation of intellectual

property includes the unauthorized use of ideas or unique methods obtained by a privileged communication, such as a manuscript review." (See <a href="http://ori.dhhs.gov/policies/plagiarism.shtml">http://ori.dhhs.gov/policies/plagiarism.shtml</a> for further information regarding ORI policy.)

#### 6. Publication Decisions

- 1. The editor makes the final decision regarding the disposition of manuscripts after weighing comments from the reviewers and giving special attention to the recommendation of the associate editor (see below). Ultimately, the outcome of the review process should not be based on a tally of positive and negative comments from reviewers and an associate editor, but rather on the editor's informed, objective appraisal of the likelihood that the manuscript will contribute reliable and valid new information to the discipline. The new information must also merit archival inclusion in one of ASHA's journals.
- 2. To arrive at a fair recommendation, the associate editor's recommendations to the editor should be informed by comments provided by reviewers, which are integrated with the associate editor's own consideration of all aspects of the manuscript.
  - 1. The associate editor should support his or her recommendations to the editor by providing comments to be conveyed to authors regarding specific strengths and weaknesses of the manuscript, including suggestions for improvement of the manuscript or for the authors' future research endeavors.
  - 2. The associate editor should monitor the quality and tone of the reviews prepared by the reviewers. Where language is inflammatory, the associate editor should return the review with a request for a more civil commentary. Under no circumstances should the associate editor—or editor—alter a reviewer's words without the reviewer's permission.
  - 3. In his or her recommendation to the editor, the associate editor should give less weight to a review that is weak or faulty in logic and uninformative in detail.
  - 4. If the quality or the content of the reviews obtained is inadequate to fully inform a publication recommendation, the associate editor may seek additional reviews.
- 7. **Journal Autonomy.** Editors, associate editors, and reviewers, in concert with the Publications Board, should protect the independence of the journals' content from potential external influences from within ASHA or from individuals or agencies external to ASHA.
- 8. **Identification of Misconduct.** Although editors, associate editors, and reviewers are not obligated to search for possibilities of scientific misconduct in manuscripts under review, it is their duty, during their review of a manuscript, to be mindful of any signs suggesting the possibility of a breach of ethical research practices. Editors must also take seriously allegations of misconduct identified by associate editors or reviewers. Below are examples of some occurrences that could alert editors, associate editors, and reviewers to the possibility of misconduct.

- 1. Reviewers familiar with the relevant literature may recognize plagiarism when it occurs as the "theft or misappropriation of intellectual property [or] the substantial unattributed textual copying of another's work" (U.S. Department of Health and Human Services ORI, 1995; <a href="http://ori.hhs.gov/documents/rio\_handbook.pdf">http://ori.hhs.gov/documents/rio\_handbook.pdf</a>).
- 2. Reviewers may suspect fabrication or falsification of data if they note, for example, anomalies in figures or graphs, differences between findings reported in the text and in figures/tables, or findings that defy logic (i.e., are "too good to be true") but support the author's hypotheses.
- 3. Reviewers may notice the occurrence of duplicate publication if they recognize findings that have been published elsewhere by the author(s).
- 4. Reviewers may occasionally query whether each author listed actually had a substantive role in the research.
- 5. REMINDER: Federal regulations specify that, ultimately, for a finding of research misconduct to be made, "(a) there must be a significant departure from accepted practices of the relevant research community; and (b) the misconduct [must] be committed intentionally, knowingly, or recklessly; and (c) the allegation [must] be proved by a preponderance of the evidence" (Responsibility of PHS Awardee and Applicant Institutions, 2005, § 93.104). Honest error does not constitute scientific misconduct, but it is incumbent upon reviewers to identify and report errors (to the editor), as well as suspected scientific misconduct.
- 9. **Reporting Misconduct.** The duty to report scientific misconduct occurring anywhere in the publication process, including during the conduct of the research, applies to every member of the scientific community. This includes, but is not limited to, authors and coauthors, student research assistants, reviewers, associate editors and editors, and journal readers.
  - Allegations of misconduct must be supported by evidence. Capricious or vindictive allegations are in themselves misconduct and should not be entertained.
  - 2. Persons making allegations should be aware that ASHA does not assume liability for legal or other expenses of any parties involved. Potential complainants may wish to look into whether whistleblower protections would be afforded them by their own institutions or under federal or state law.
  - 3. Allegations of misconduct during the publication process shall be reported to the Publications Board for further evaluation, and when appropriate, to the author's home institution for further investigation in compliance with the institution's procedures. In the case of an ASHA member, the allegation shall also be reported to the Board of Ethics.
- 10. **Adjudication.** This document explicates guidelines, rather than regulations, for an ethical publication process; therefore, detailed procedures for adjudication of allegations are not specifically delineated herein.

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