are reviewed by peers before being accepted or rejected by a journal, and (c) articles are archival (i.e., retrievable for future reference).

1.01 Empirical Studies
Empirical studies are reports of original research. These include secondary analyses that test hypotheses by presenting novel analyses of data not considered or addressed in previous reports. They typically consist of distinct sections that reflect the stages in the research process and that appear in the following sequence:
- introduction: development of the problem under investigation, including its historical antecedents, and statement of the purpose of the investigation;
- method: description of the procedures used to conduct the investigation;
- results: report of the findings and analyses; and
- discussion: summary, interpretation, and implications of the results.

1.02 Literature Reviews
Literature reviews, including research syntheses and meta-analyses, are critical evaluations of material that has already been published. In meta-analyses, authors use quantitative procedures to statistically combine the results of studies. By organizing, integrating, and evaluating previously published material, authors of literature reviews consider the progress of research toward clarifying a problem. In a sense, literature reviews are tutorials, in that authors:
- define and clarify the problem;
- summarize previous investigations to inform the reader of the state of research;
- identify relations, contradictions, gaps, and inconsistencies in the literature; and
- suggest the next step or steps in solving the problem.

The components of literature reviews can be arranged in various ways (e.g., by grouping research based on similarity in the concepts or theories of interest, methodological similarities among the studies reviewed, or the historical development of the field).

1.03 Theoretical Articles
In theoretical articles, authors draw on existing research literature to advance theory. Literature reviews and theoretical articles are often similar in structure, but theoretical articles present empirical information only when it advances a theoretical issue. Authors of theoretical articles trace the development of theory to expand and refine theoretical constructs or present a new theory or analyze existing theory, pointing out flaws or demonstrating the advantage of one theory over another. In this type of article, authors customarily examine a theory's internal consistency and external validity. The sections of a theoretical article, like those of a literature review, can vary in order of their content.

1.04 Methodological Articles
Methodological articles present new methodological approaches, modifications of existing methods, or discussions of quantitative and data analytic approaches to the community of researchers. These articles focus on methodological or data analytic approaches and introduce empirical data only as illustrations of the approach. Methodological articles are presented at a level that makes them accessible to the well-read researcher and provide sufficient detail for researchers to assess the applicability of the methodology to their research problem. Further, the article allows the reader to compare the proposed methods with those in current use and to implement the proposed methods. In methodological articles, highly technical materials (e.g., derivations, proofs, details of simulations) should be presented in appendices or as supplemental materials to improve the overall readability of the article.

1.05 Case Studies
Case studies are reports of case materials obtained while working with an individual, a group, a community, or an organization. Case studies illustrate a problem; indicate a means for solving a problem; and/or shed light on needed research, clinical applications, or theoretical matters. In writing case studies, authors carefully consider the balance between providing important illustrative material and using confidential case material responsibly. (See section 1.11 for a discussion on confidentiality.)

1.06 Other Types of Articles
Other, less frequently published types of articles include brief reports, comments and replies on previously published articles, book reviews, obituaries, letters to the editor, and monographs. Consult with the editor of the journal to which you are considering submitting the manuscript for specific information regarding these kinds of articles.

Ethical and Legal Standards in Publishing
Much of the Publication Manual addresses scientific writing style. Style involves no inherent right or wrong. It is merely a conventional way of presenting information that is designed to ease communication. Different scholarly disciplines have different publication styles.

In contrast, basic ethical and legal principles underlie all scholarly research and writing. These long-standing principles are designed to achieve three goals:
- to ensure the accuracy of scientific knowledge,
- to protect the rights and welfare of research participants, and
- to protect intellectual property rights.

Writers in the social and behavioral sciences work to uphold these goals and follow the principles that have been established by their professional associations. The following guidance is drawn from the "Ethical Principles of Psychologists and Code of Conduct" (hereinafter referred to as the APA Ethics Code; APA, 2002; see also http://www.apa.org/ethics), which contains standards that address the reporting and publishing of scientific data. Note that the APA Ethics Code is not a static document—it may be revised and updated over time. Updates appear on the website as they become available.
Ensuring the Accuracy of Scientific Knowledge

1.07 Ethical Reporting of Research Results

The essence of the scientific method involves observations that can be repeated and verified by others. Thus, psychologists do not fabricate or falsify data (APA Ethics Code Standard 8.10a, Reporting Research Results). Modifying results, including visual images (for more discussion on visual images, see Chapter 5, section 5.29), to support a hypothesis or omitting troublesome observations from reports to present a more convincing story is also prohibited (APA Ethics Code Standard 5.01a, Avoidance of False or Deceptive Statements).

Careful preparation of manuscripts for publication is essential, but errors can still occur. Authors are responsible for making such errors public if the errors are discovered after publication. First, inform the editor and the publisher so that a correction notice can be published. The goal of such a notice is to correct the knowledge base so that the error is brought to the attention of future users of the information. Each correction notice is appended to the original article in an online database so that it will be retrieved whenever the original article is retrieved (for more details on correction notices, see section 8.06; APA Ethics Code Standard 8.10b, Reporting Research Results).

1.08 Data Retention and Sharing

Researchers must make their data available to the editor at any time during the review and publication process if questions arise with respect to the accuracy of the report. Refusal to do so can lead to rejection of the submitted manuscript without further consideration. In a similar vein, once an article is published, researchers must make their data available to permit other qualified professionals to confirm the analyses and results (APA Ethics Code Standard 8.14a, Sharing Research Data for Verification). Authors are expected to retain raw data for a minimum of five years after publication of the research. Other information related to the research (e.g., instructions, treatment manuals, software, details of procedures, code for mathematical models reported in journal articles) should be kept for the same period; such information is necessary if others are to attempt replication and should be provided to qualified researchers on request (APA Ethics Code Standard 6.01, Documentation of Professional and Scientific Work and Maintenance of Records).

APA encourages the open sharing of data among qualified investigators. Authors are expected to comply promptly in a spirit of cooperation with requests for data sharing from other researchers. Before sharing data, delete any personally identifiable information or code that would make it possible to reestablish a link to an individual participant’s identity. In addition to protecting the confidentiality of research participants, special proprietary or other concerns of the investigator or sponsor of the research sometimes must be addressed as well. Generally, the costs of complying with the request should be borne by the requester.

To avoid misunderstanding, it is important for the researcher requesting data and the researcher providing data to come to a written agreement about the conditions under which the data are to be shared. Such an agreement must specify the limits on how the shared data may be used (e.g., for verification of already published results, for inclusion in meta-analytic studies, for secondary analysis). The written agreement should also include a formal statement about limits on the distribution of the shared data (e.g., it may be used only by the person requesting the data, it may be used by the person requesting the data and individuals the requestor directly supervises, or there are no limits on the further distribution of the data). Furthermore, the agreement should specify limits on the dissemination (conference presentations, internal reports, journal articles, book chapters, etc.) of the results of analyses performed on the data and authorship expectations. Data-sharing arrangements must be entered into with proper consideration of copyright restrictions, consent provided by subjects, requirements of funding agencies, and rules promulgated by the employer of the holder of the data (APA Ethics Code Standard 8.14b, Sharing Research Data for Verification).

1.09 Duplicate and Piecemeal Publication of Data

The scientific literature is our institutional memory. Thus, reports in the literature must accurately reflect the independence of separate research efforts. Both duplicate and piecemeal publication of data constitute threats to these goals. Duplicate publication is the publication of the same data or ideas in two separate sources. Piecemeal publication is the unnecessary splitting of the findings from one research effort into multiple articles.

Duplicate publication. Misrepresentation of data as original when they have been published previously is specifically prohibited by APA Ethics Code Standard 8.15, Duplicate Publication of Data. Duplicate publication distorts the knowledge base by making it appear that there is more information available than really exists. It also wastes scarce resources (journal pages and the time and efforts of editors and reviewers). The prohibition against duplicate publication is especially critical for the cumulative knowledge of the field. Duplicate publication can give the erroneous impression that findings are more replicable than is the case or that particular conclusions are more strongly supported than is warranted by the cumulative evidence. Duplicate publication can also lead to copyright violations; authors cannot assign the copyright for the same material to more than one publisher.

Previously published research. Authors must not submit to an APA journal a manuscript describing work that has been published previously in whole or in substantial part elsewhere, whether in English or in another language. More important, authors should not submit manuscripts that have been published elsewhere in substantially similar form or with substantially similar content. Authors in doubt about what constitutes prior publication should consult with the editor of the journal in question.

This policy regarding duplicate publication does not necessarily exclude from consideration manuscripts previously published in abstracted form (e.g., in the proceedings of an annual meeting) or in a periodical with limited circulation or availability (e.g., in a report by a university department, by a government agency, or in a U.S. dissertation). This policy does exclude from consideration the same or overlapping material that has appeared in a publication that has been offered for public sale, such as conference proceedings or a book chapter; such a publication does not meet the criterion of “limited circulation.” Publication of a brief report in an APA journal is with the understanding that an extended report will not be published elsewhere because APA brief reports include sufficient descriptions of methodology to allow for replication; the brief report is the archival record for the work. Similarly, the restraints against
duplicate publication do not preclude subsequent reanalysis of published data in light of new theories or methodologies, if the reanalysis is clearly labeled as such and provides new insights into the phenomena being studied.

**Acknowledging and citing previous work.** Authors sometimes want to publish what is essentially the same material in more than one venue to reach different audiences. However, such duplicate publication can rarely be justified, given the ready accessibility of computerized retrieval systems for published works. If it is deemed scientifically necessary to re-present previously published material—for instance, in reports of new analyses or to frame new research that follows up on previous work from the authors' laboratory—the following conditions must be met:

1. The amount of duplicated material must be small relative to the total length of the text.
2. The text must clearly acknowledge in the author note and other relevant sections of the article (i.e., Method and/or Result sections) that the information was reported previously, and the citation to the previous work must be given.
3. Any republished tables and figures must be clearly marked as reprinted or adapted, and the original source must be provided both in the text and in a footnote to the table or figure.
4. The original publication venue must be clearly and accurately cited in the reference list (see also the discussion on self-plagiarism in section 1.10).

When the original publication has multiple authors and the authorship is not identical on both publications, it is important that all authors receive agreed-upon credit (e.g., in an author note) for their contributions in the later publication.

**Piecemeal publication.** Authors are obligated to present work parsimoniously and as completely as possible within the space constraints of journal publications. Data that can be meaningfully combined within a single publication should be presented together to enhance effective communication. Piecemeal, or fragmented, publication of research findings can be misleading if multiple reports appear to represent independent instances of data collection or analyses; distortion of the scientific literature, especially in reviews or meta-analyses, may result. Piecemeal publication of several reports of the results from a single study is therefore undesirable unless there is a clear benefit to scientific communication. It may be quite difficult to determine whether such a benefit exists when multiple dependent variables that were observed in the same sample and at the same time are reported in separate manuscripts. Authors who wish to divide the report of a study into more than one article should inform the editor and provide such information as the editor requests. Whether the publication of two or more reports based on the same or on closely related research constitutes fragmented publication is a matter of editorial judgment.

**Reanalysis of published data.** There may be times, especially in instances of large-scale, longitudinal, or multidisciplinary projects, when it is both necessary and appropriate to publish multiple reports. Multidisciplinary projects often address diverse topics, and publishing in a single journal may be inappropriate. Repeated publication from a longitudinal study is often appropriate because the data at different ages make unique scientific contributions. Further, useful knowledge should be made available to others as soon as possible, which is precluded if publication is withheld until all the studies are completed.

As multiple reports from large-scale or longitudinal studies are created, authors are obligated to cite prior reports on the project to help the reader understand the work accurately. For example, in the early years of a longitudinal study, one might cite all previous publications from it. For a well-known or long-term longitudinal study, one might cite the original publication, a more recent summary, and earlier articles that focused on the same or related scientific questions addressed in the current report. Often it is not necessary to repeat the description of the design and methods of a longitudinal or large-scale project in its entirety. Authors may refer the reader to an earlier publication for this detailed information. It is important, however, to provide sufficient information so that the reader can evaluate the current report. It is also important to make clear the degree of sample overlap in multiple reports from large projects. Again, authors should inform and consult with the editor prior to the submission of a manuscript of this type.

**Alerting the editor.** Whether the publication of two or more reports based on the same or closely related research constitutes duplicate publication is a matter of editorial judgment, as is the determination of whether the manuscript meets other publication criteria. Any prior publication should be noted (see previous section on acknowledging and citing previous work) and referenced in the manuscript, and authors must inform the journal editor of the existence of any similar manuscripts that have already been published or accepted for publication or that may be submitted for concurrent consideration to the same journal or elsewhere. The editor can then make an informed judgment as to whether the submitted manuscript includes sufficient new information to warrant consideration. If, during the review or production process, a manuscript is discovered to be in violation of duplicate publication policies and authors have failed to inform the editor of the possible violation, then the manuscript can be rejected without further consideration. If such a violation is discovered after publication, an APA journal, appropriate action such as retraction by the publisher or notice of duplicate publication will be taken.

Journal articles sometimes are revised for publication as book chapters. Authors have a responsibility to reveal to the reader that portions of the new work were previously published and to cite and reference the source. If copyright is owned by a publisher or by another person, authors must acknowledge copyright and obtain permission to adapt or reproduce.

### 1.10 Plagiarism and Self-Plagiarism

**Plagiarism.** Researchers do not claim the words and ideas of another as their own; they give credit where credit is due (APA Ethics Code Standard 8.11, Plagiarism). Quotation marks should be used to indicate the exact words of another. Each time you paraphrase another author (i.e., summarize a passage or rearrange the order of a sentence and change some of the words), you need to credit the source in the text. The following paragraph is an example of how one might appropriately paraphrase some of the foregoing material in this section.

As stated in the sixth edition of the *Publication Manual of the American Psychological Association* (APA, 2010), the ethical principles of scientific publication are designed to ensure the integrity of scientific knowledge and to protect the intellectual property rights of others. As the *Publication Manual* explains,
The key element of this principle is that authors do not present the work of another as if it were their own work. This can extend to ideas as well as written words. If authors model a study after one done by someone else, the originating author should be given credit. If the rationale for a study was suggested in the Discussion section of someone else’s article, that person should be given credit. Given the free exchange of ideas, which is very important to the health of intellectual discourse, authors may not know where an idea for a study originated. If authors do know, however, they should acknowledge the source; this includes personal communications. (For additional information on quotations and paraphrasing, see sections 6.03–6.08; for instructions on referencing publications and personal communications, see sections 6.11–6.20.)

Self-plagiarism. Just as researchers do not present the work of others as their own (plagiarism), they do not present their own previously published work as new scholarship (self-plagiarism). There are, however, limited circumstances (e.g., describing the details of an instrument or an analytic approach) under which authors may wish to duplicate without attribution (citation) their previously used words, feeling that extensive self-referencing is undesirable or awkward. When the duplicated words are limited in scope, this approach is permissible. When duplication of one’s own words is more extensive, citation of the duplicated words should be the norm. What constitutes the maximum acceptable length of duplicated material is difficult to define but must conform to legal notions of fair use. The general view is that the core of the new document must constitute an original contribution to knowledge, and only the amount of previously published material necessary to understand that contribution should be included, primarily in the discussion of theory and methodology. When feasible, all of the author’s own words that are cited should be located in a single paragraph or a few paragraphs, with a citation at the end of each. Opening such paragraphs with a phrase like “as I have previously discussed” will also alert readers to the status of the upcoming material.

11.1 Rights and Confidentiality of Research Participants

Certification of standards. Standards 8.01–8.09 of the APA Ethics Code specify the principles psychologists are to follow in conducting research with humans and animals. Authors, regardless of field, are required to certify that they have followed these standards as a precondition of publishing their articles in APA journals (see http://www.apa.org/journals; see also Figure 8.2, pp. 233–234). Authors are also encouraged to include such certifications in the description of participants in the text of the manuscript. Failure to follow these standards can be grounds for rejecting a manuscript for publication or for retraction of a published article.

Protecting confidentiality. When researchers use case studies to describe their research, they are prohibited from disclosing “confidential, personally identifiable information concerning their patients, individual or organizational clients, students, research par-

1.12 Conflict of Interest

In all scientific disciplines, professional communications are presumed to be based on objective interpretations of evidence and unbiased interpretation of fact. An author’s economic and commercial interests in products or services used or discussed in a paper may color such objectivity. Although such relations do not necessarily constitute a conflict of interest, the integrity of the field requires disclosure of the possibilities of such potentially distorting influences where they may exist. In general, the safest and most open course of action is to disclose in an author note activities and relationships that if known to others might be viewed as a conflict of interest, even if you do not believe that any conflict or bias exists.

Whether an interest is significant will depend on individual circumstances and cannot be defined by a dollar amount. Holdings in a company through a mutual fund are not ordinarily sufficient to warrant disclosure, whereas salaries, research grants, consulting fees, and personal stock holdings would be. Being the copyright holder of and/or recipient of royalties from a psychological test might be another example. Participation on a board of directors or any other relationship with an entity or person that is in some way part of the paper should also be carefully considered for possible disclosure.

In addition to disclosure of possible sources of positive bias, authors should also carefully consider disclosure when circumstances could suggest bias against a product, service, facility, or person. For example, having a copyright or royalty interest in a competing psychological test or assessment protocol might be seen as a possible source of negative bias against another test instrument.

The previous examples refer to possible conflicts of interest of a researcher in the conduct of the research. It is important to recognize that reviewers of research reports also have potential conflicts of interest. In general, one should not review a manuscript from a colleague or collaborator, a close personal friend, or a recent student. Typically, the action...
editor will not select individuals to be reviewers in which this obvious conflict of interest may exist. However, if this might occur, a potential reviewer should consult with the action editor about whether recusal from the evaluation process would be appropriate.

Reviewers also have an ethical obligation to be open and fair in assessing a manuscript without bias. If for any reason a reviewer may find this difficult, it is appropriate to discuss the potential conflict of interest with the action editor as soon as this situation becomes apparent.

Last, reviewers have an obligation to maintain the confidentiality of a manuscript. This means, in general, that one does not discuss the manuscript with another individual. Moreover, as noted in section 1.14, “editors and reviewers may not use the material from an unpublished manuscript to advance their own or others’ work without the author’s consent.”

Protecting Intellectual Property Rights

1.13 Publication Credit

Authorship is reserved for persons who make a substantial contribution to and who accept responsibility for a published work.

Definition of authorship. Individuals should only take authorship credit for work they have actually performed or to which they have substantially contributed (APA Ethics Code Standard 8.12a, Publication Credit). Authorship encompasses, therefore, not only those who do the actual writing but also those who have made substantial scientific contributions to a study. Substantial professional contributions may include formulating the problem or hypothesis, structuring the experimental design, organizing and conducting the statistical analysis, interpreting the results, or writing a major portion of the paper. Those who contribute are listed in the byline. Lesser contributions, which do not constitute authorship, may be acknowledged in a note (see section 2.03). These contributions may include such supportive functions as designing or building the apparatus, suggesting or advising about the statistical analysis, collecting or entering the data, modifying or structuring a computer program, and recruiting participants or obtaining animals. Conducting routine observations or diagnoses for use in studies does not constitute authorship. Combinations of these (and other) tasks, however, may justify authorship.

Determining authorship. As early as practicable in a research project, the collaborators should decide on which tasks are necessary for the project’s completion, how the work will be divided, which tasks or combination of tasks merit authorship credit, and on what level credit should be given (first author, second author, etc.). Collaborators may need to reassess authorship credit and order if changes in relative contribution are made in the course of the project (and its publication). This is especially true in faculty-student collaborations, when students may need more intensive supervision than originally anticipated, when additional analyses are required beyond the scope of a student’s current level of training (Fisher, 2003), or when the level of the contribution of the student exceeds that originally anticipated.

When a paper is accepted by an editor, each person listed in the byline must verify in writing that he or she agrees to serve as an author and accepts the responsibilities of authorship (see the section on author responsibilities at the beginning of Chapter 8).

Order of authorship. Authors are responsible for determining authorship and for specifying the order in which two or more authors’ names appear in the byline. The general rule is that the name of the principal contributor should appear first, with subsequent names in order of decreasing contribution, but this convention can vary from field to field. If authors played an equal role in the research and publication of their study, they might wish to note this in the author note (see section 2.03 for more information on author notes).

Principal authorship and the order of authorship credit should accurately reflect the relative contributions of persons involved (APA Ethics Code Standard 8.12b, Publication Credit). Relative status (i.e., department chair, junior faculty member, student) should not determine the order of authorship. Because doctoral work is expected to represent an independent and original contribution devised by students, except under rare circumstances, students should be listed as the principal author of any multi-authored papers substantially based on their dissertation (APA Ethics Code Standard 8.12c, Publication Credit). Unusual exceptions to doctoral student first authorship might occur when the doctoral dissertation is published as part of a collection of studies involving other researchers (Fisher, 2003). Whether students merit principal authorship on master’s-level or other predoctoral research will depend on their specific contributions to the research. When master’s-level students make the primary contributions to a study, they should be listed as the first author. When students are just beginning to acquire skills necessary to make a primary scientific contribution, they may conduct master’s theses that involve the opportunity to learn these skills through collaboration on a faculty-originated project. In such cases, authorship should be determined by the relative contributions of student and faculty member to the project (Fisher, 2003).

1.14 Reviewers

Editorial review of a manuscript requires that the editors and reviewers circulate and discuss the manuscript. During the review process, the manuscript is a confidential and privileged document. Editors and reviewers may not, without authors’ explicit permission, quote from a manuscript under review or circulate copies of it for any purpose other than editorial review (APA Ethics Code Standard 8.15, Reviewers; see section 8.01 for a detailed discussion of the peer review process). If reviewers for APA journals wish to consult with a colleague about some aspect of the manuscript, the reviewer must request permission from the editor prior to approaching the colleague. Publishers have different policies on this, and reviewers should consult with the editor about this matter. In addition, editors and reviewers may not use the material from an unpublished manuscript to advance their own or others’ work without the author’s consent.

1.15 Author’s Copyright on an Unpublished Manuscript

Authors are protected by federal statute against unauthorized use of their unpublished manuscripts. Under the Copyright Act of 1976 (title 17 of the United States Code), an unpublished work is copyrighted from the moment it is fixed in tangible form—for example, typed on a page. Copyright protection is “an incident of the process of authorship” (U.S. Copyright Office, 1981, p. 3). Until authors formally transfer copyright (see section 8.05), they own the copyright on an unpublished manuscript, and all
exclusive rights due the copyright owner of a published work are also due authors of an unpublished work. To ensure copyright protection, include the copyright notice on all published works (e.g., Copyright [year] by [name of copyright holder]). The notice need not appear on unpublished works; nonetheless, it is recommended that a copyright notice be included on all works, whether published or not. Registration of copyright provides a public record and is usually a prerequisite for any legal action.

1.16 Planning for Ethical Compliance

Regardless of the type of article involved, attention to ethical concerns begins long before a manuscript is submitted for publication. Authors submitting a manuscript to an APA journal are required to submit a form stating their compliance with ethical standards for publication as well as a form disclosing any conflicts of interest (see Chapter 8, Figures 8.2 and 8.3, pp. 233-235) once a manuscript is accepted. We encourage authors to consult these forms before beginning their research project and at regular intervals throughout the entire research process. Whether or not the work will be submitted to an APA journal, issues related to institutional approval, informed consent, deception in research, and participant protections should be carefully considered while the research is in the planning stages and may be the basis of questions for editors or reviewers (see Chapter 8). In particular, we urge researchers to review the following checklist.

**Ethical Compliance Checklist**

- Have you obtained permission for use of unpublished instruments, procedures, or data that other researchers might consider theirs (proprietary)?
- Have you properly cited other published work presented in portions of your manuscript?
- Are you prepared to answer questions about institutional review of your study or studies?
- Are you prepared to answer editorial questions about the informed consent and debriefing procedures you used?
- If your study involved animal subjects, are you prepared to answer editorial questions about humane care and use of animals in research?
- Have all authors reviewed the manuscript and agreed on responsibility for its content?
- Have you adequately protected the confidentiality of research participants, clients—patients, organizations, third parties, or others who were the source of information presented in this manuscript?
- Have all authors agreed to the order of authorship?
- Have you obtained permission for use of any copyrighted material you have included?

Manuscript Structure and Content

In this chapter, we describe the structure of the manuscript, with a focus on function and format. For each manuscript element, we detail current expectations for the content. In each section, the following kinds of information are included:

- a definition or description of the manuscript part
- specific guidelines on content to be included, and
- guidelines on how the part should appear in text.

In this edition of the Publication Manual, we present updated journal article reporting standards, and these are also discussed in this chapter. These reporting standards relate to material recommended to appear in the abstract, the introduction of the research problem, the method section, the results, and the discussion of the results. Also presented are three specific modules relating to studies with manipulated conditions or interventions. The chapter ends with sample papers that illustrate the function and format of the sections described.

Journal Article Reporting Standards

Reporting standards provide a degree of comprehensiveness in the information that is routinely included in reports of empirical investigations. The motivation for the development of reporting standards has come from within the disciplines of the behavioral, social, educational, and medical sciences. Uniform reporting standards make it easier to generalize across fields, to more fully understand the implications of individual studies, and to allow techniques of meta-analysis to proceed more efficiently. Also, decision makers in policy and practice have emphasized the importance of understanding how research was conducted and what was found. A set of comprehensive reporting standards facilitates this understanding.

1Note that guidelines for the formatting and preparation of the complete manuscript can be found in section R.03.