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of the American Psychological Association

THE OFFICIAL GUIDE TO APA STYLE

LIST OF TABLES AND FIGURES

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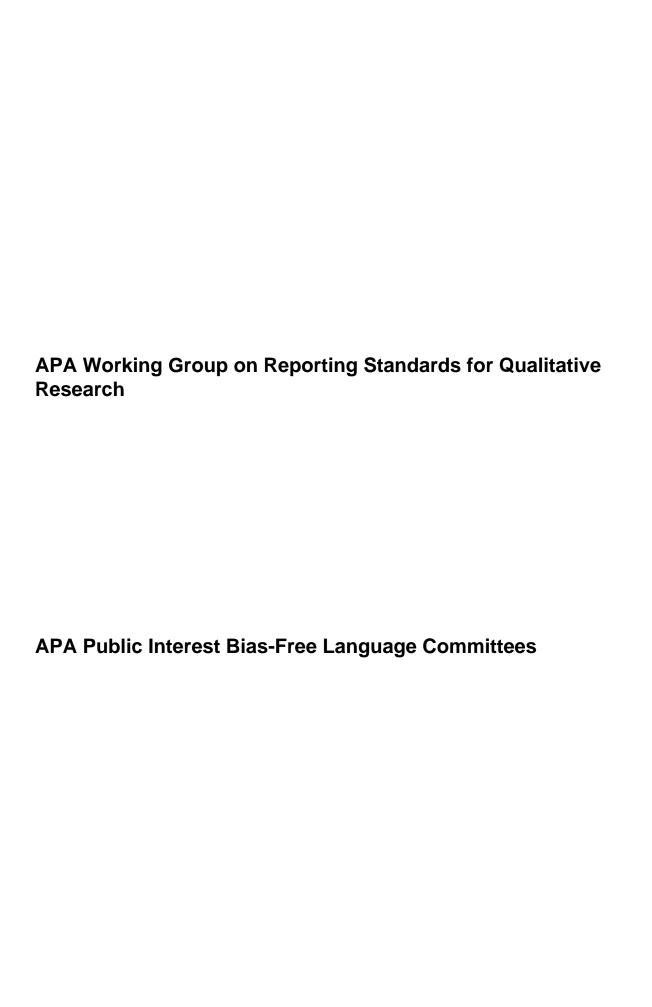
EDITORIAL STAFF AND CONTRIBUTORS

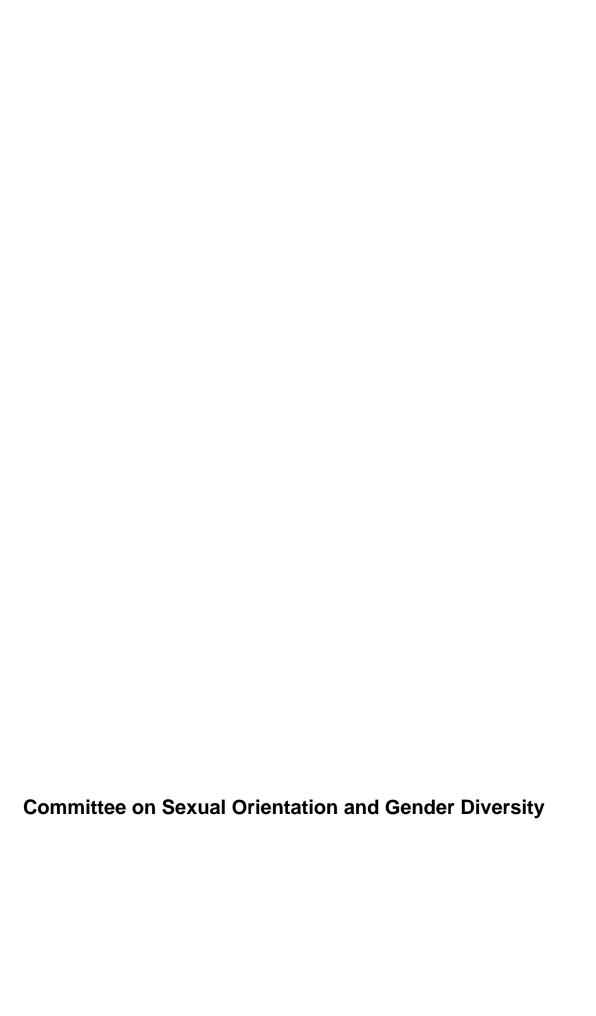
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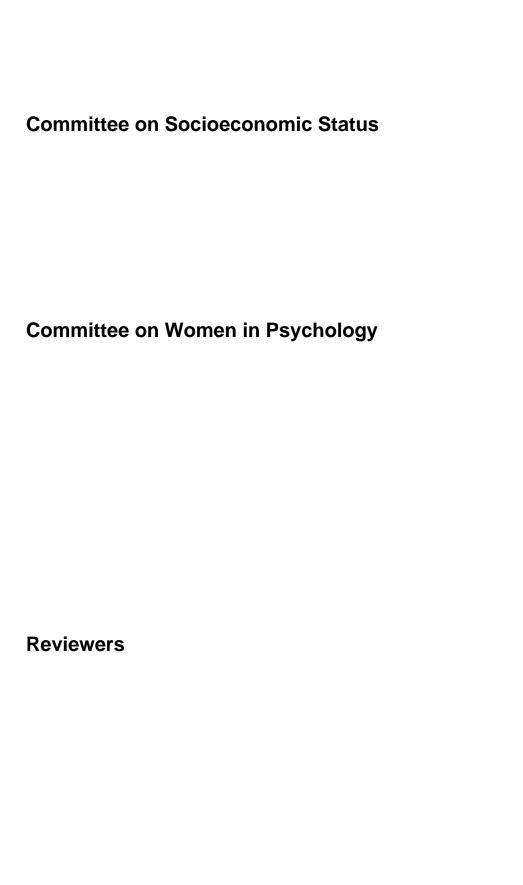
APA Style Team

Publication Manual Revision Task Force

APA Publications and Communications Board Task Force on Journal Article Reporting Standards







ACKNOWLEDGMENTS

The precursor to the Publication Manual of the American Psychological Association was published in 1929 as a seven-page article in Psychological Bulletin describing a "standard of procedure, to which exceptions would doubtless be necessary, but to which reference might be made in cases of doubt" (Bentley et al., 1929, p. 57). Since then, the scope and length of the Publication Manual have grown in response to the needs of researchers, students, and educators across the social and behavioral sciences, health care, natural sciences, humanities, and more; however, the spirit of the original authors' intentions remains.

To address changes in scholarly writing and publishing since the release of the sixth edition, we consulted many professional groups and experts (each recognized individually in the Editorial Staff and Contributors list). We thank members of the Publication Manual Revision Task Force for their vision for the manual and for ensuring that our guidance reflects current best practices. We also thank the APA Working Group on Quantitative Research Reporting Standards for updating the original journal article reporting standards (JARS) for quantitative research and the APA Working Group on Reporting Standards for Qualitative Research for their groundbreaking work in establishing the first set of qualitative and mixed methods JARS in APA Style. We are indebted to members of the APA Public Interest Directorate committees and other advocacy groups who revised the bias-free language guidelines on age, disability, race and ethnicity, sexual orientation and gender diversity, and socioeconomic status. We are also grateful to the reviewers who provided valuable perspectives while representing psychology, nursing, education, business, social work, ethics, and writing instruction.

The important work of the Publication Manual Revision Task Force, JARS working groups, APA bias-free language committees, and other experts builds on efforts from previous groups. Thus, we also acknowledge the significant contributions of prior task forces, working groups, and APA staff members who revised previous editions of the Publication Manual.

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Last, we thank our many users who contributed their feedback via emails, surveys, interviews, focus groups, and social media. Your insights into what worked for you and what more you needed from APA Style have been invaluable in revising and creating content for this edition of the manual.

INTRODUCTION

Excellence in writing is critical for success in many academic and professional pursuits. APA Style is a set of guidelines for clear and precise scholarly communication that helps authors, both new and experienced, achieve excellence in writing. It is used by millions of people around the world in psychology and also in fields ranging from nursing to social work, communications to education, business to engineering, and other disciplines for the preparation of manuscripts for publication as well as for writing student papers, dissertations, and theses. The Publication Manual of the American Psychological Association is the authoritative resource for APA Style, and we are proud to deliver its seventh edition.

Why Use APA Style?

APA Style provides a foundation for effective scholarly communication because it helps authors present their ideas in a clear, concise, and organized manner. Uniformity and consistency enable readers to (a) focus on the ideas being presented rather than formatting and (b) scan works quickly for key points, findings, and sources. Style guidelines encourage authors to fully disclose essential information and allow readers to dispense with minor distractions, such as inconsistencies or omissions in punctuation, capitalization, reference citations, and presentation of statistics.

When style works best, ideas flow logically, sources are credited appropriately, and papers are organized predictably and consistently. People are described using language that affirms their worth and dignity. Authors plan for ethical compliance and report critical details of their research protocol to allow readers to evaluate findings and other researchers to potentially replicate the studies. Tables and figures present data in an engaging, consistent manner.

Whether you use APA Style for a single class or throughout your career, we encourage you to recognize the benefits of a conscientious approach to writing. Although the guidelines span many areas and take time and practice to learn, we hope that they provide a balance of directiveness and flexibility and will eventually become second nature.

APA Style for Students

The Publication Manual has long been an authoritative source for scholarly writing, and this edition provides more targeted guidance and support for students. All students, no matter what career they pursue, can benefit from mastering scholarly writing as a way to develop their critical thinking skills and hone the precision and clarity of their communication.

Most guidelines in the Publication Manual can be applied to both student papers and professional manuscripts. The manual also has elements specifically designed for students, including a student title page; guidance on citing classroom or intranet sources; and descriptions of common types of student papers such as annotated bibliographies, response papers, and dissertations and theses. Journal article reporting standards (JARS) are intended primarily for authors seeking publication but may be helpful for students completing advanced research projects.

Utility and Accessibility

We have created the seventh edition of the Publication Manual with the practical needs of users in mind. Within chapters, content is organized using numbered sections to help users quickly locate answers to their questions. This ease of navigability and depth of content mean that the manual can be used as both a reference work and a textbook on scholarly writing.

This edition promotes accessibility for everyone, including users with disabilities. In consultation with accessibility experts, we ensured that the guidelines support users who read and write works in APA Style through a variety of modalities, including screen readers and other assistive technologies. For example, we present a streamlined format for in-text citations intended to reduce the burden of both writing and reading them. We provide guidance on how to use adequate contrast in figures to meet Web Content Accessibility Guidelines (Web Accessibility Initiative, 2018). We also support the use of a variety of fonts and default settings in common word-processing programs, meaning that users need to make fewer adjustments to their systems to be ready to write in APA Style. Above all, our aim is to support the many ways in which people communicate. We encourage authors to be conscientious and respectful toward both the people about whom they are writing and the readers who will benefit from their work.

What's New in the Seventh Edition?

Brief descriptions of new and updated content are provided next on a chapter-by-chapter basis. For a more comprehensive overview of content changes, see the APA Style website (https://apastyle.apa.org).

Chapter 1: Scholarly Writing and Publishing Principles

Chapter 1 addresses types of papers and ethical compliance.

- New guidance addresses quantitative, qualitative, and mixed methods articles as well as student papers, dissertations, and theses.
- Information on planning for and ensuring ethical compliance reflects best practices.
- Guidance on data sharing, including in qualitative research, reflects open practice standards.

Chapter 2: Paper Elements and Format

Chapter 2 is designed to help novice users of APA Style select, format, and organize paper elements.

- The title page is updated for professionals, and a new student title page is provided.
- For all papers, the byline and affiliation format on the title page aligns with publishing standards.
- The author note includes more information, such as ORCID iDs, disclosure of conflicts of interest or lack thereof, and study registration information.
- The running head format has been simplified for professional authors and is not required for students.
- Font specifications are more flexible to address the need for accessibility.
- An updated heading format for Levels 3, 4, and 5 improves readability and assists authors who use the heading-styles feature of their word-

processing program.

• Two new sample papers are provided: a professional paper and a student paper, with labels to show how specific elements appear when implemented.

Chapter 3: Journal Article Reporting Standards

Chapter 3 orients users to journal article reporting standards (JARS) and includes tables outlining standards for reporting quantitative, qualitative, and mixed methods research.

- JARS for quantitative research has been significantly expanded and updated (see Appelbaum et al., 2018; Cooper, 2018).
- The updated JARS now cover qualitative and mixed methods research (see Levitt, 2019; Levitt et al., 2018).

Chapter 4: Writing Style and Grammar

Chapter 4 provides guidance on writing style and grammar.

- The singular "they" is endorsed, consistent with inclusive usage.
- More detailed guidance helps writers avoid anthropomorphism.

Chapter 5: Bias-Free Language Guidelines

Chapter 5 presents bias-free language guidelines to encourage authors to write about people with inclusivity and respect.

- Existing guidance on age, disability, gender, racial and ethnic identity, and sexual orientation has been updated to reflect best practices.
- New guidance is provided on participation in research, socioeconomic status, and intersectionality.

Chapter 6: Mechanics of Style

Chapter 6 covers the mechanics of style, including punctuation, capitalization, abbreviations, numbers, and statistics in text.

- Updated guidance answers a common question: Use one space after a period at the end of a sentence, unless an instructor or publisher requests otherwise.
- Formatting of linguistic examples has changed; quotation marks are now used around examples, rather than italics, to promote accessibility.
- Expanded guidance is provided on the capitalization of proper nouns, job titles, diseases and disorders, and more.
- Guidelines for the presentation of abbreviations address common questions, such as how to include a citation with an abbreviation.
- Guidelines for the presentation of numbers have been updated to be consistent throughout a work (e.g., there is no longer an exception for presenting numbers in an abstract).
- New guidance is given on how to write gene and protein names.
- Updated guidelines allow greater flexibility for lettered, numbered, and bulleted lists.

Chapter 7: Tables and Figures

Chapter 7 presents guidance on creating tables and figures.

- More than 40 new sample tables and figures are presented, in dedicated sections, covering a variety of research types and topics.
- The presentation of tables and figures in text is more flexible (either after the reference list on separate pages or embedded in the text).
- Formatting of tables and figures is parallel, including consistent styles for numbers, titles, and notes.
- The accessible use of color in figures is addressed.

Chapter 8: Works Credited in the Text

Chapter 8 addresses appropriate levels of citation as well as plagiarism, self-plagiarism, and other unethical writing practices.

• In-text citations have been simplified; all in-text citations for works with three or more authors are shortened to the name of the first author plus "et

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more.

• Social media, webpages, and websites are addressed in new categories. For consistency and ease of formatting, blogs and other online platforms that publish articles are part of the periodicals category.

Chapter 11: Legal References

Chapter 11 presents expanded and updated legal reference examples.

- Guidelines from The Bluebook: A Uniform System of Citation continue to be the foundation for APA Style legal references, with some modifications.
- New, relevant legal reference examples are provided (e.g., the Every Student Succeeds Act).

Chapter 12: Publication Process

Chapter 12 provides guidance on the publication process.

- New content helps early career researchers adapt a dissertation or thesis into a journal article or articles, select a journal for publication, avoid predatory or deceptive publishers, and navigate journal submission.
- Improved guidance on the journal publication process reflects current processes and policies authors need to be aware of when preparing a manuscript for submission.
- New guidance addresses how authors can share and promote their work following publication.

APA Style Online

The APA Style website (https://apastyle.apa.org) is the premier and authoritative online destination for APA Style. In addition to numerous free resources and instructional aids, it contains supplemental content that is referred to throughout the manual, including additional reference examples, sample papers, and guidance on using color effectively and accessibly in figures.

The JARS website (https://apastyle.apa.org/jars) contains the full repository of information about journal article reporting standards for a wide range of research designs; it is freely available to complement the orienting information in Chapter 3.

The APA Style blog (https://apastyle.apa.org/blog) and related social media accounts will continue to answer questions about and share insights into APA Style with the publication of the seventh edition, providing authoritative content from members of the APA Style team.

Academic Writer (https://digitallearning.apa.org/academic-writer) is APA's cloud-based tool for teaching and learning effective writing. Developed by the creators of APA Style, this product helps both student and professional authors compose research papers and master the application of seventh-edition APA Style.

Notes to Users

The Publication Manual refers to numerous products and services that are not affiliated with the American Psychological Association but that our readers may encounter or use during the process of research, writing, and publication. The trademarks referenced in the Publication Manual are the property of their respective owners. The inclusion of non-APA products is for reference only and should not be construed as an endorsement of or affiliation between APA and the owners of these products and their respective brands.

Finally, some eagle-eyed users have asked why every aspect of APA Style is not applied throughout this manual. The manual is a published work, whereas the guidelines for APA Style are meant to be applied to manuscripts being submitted for publication or to student papers. Considerations for published works such as this book (e.g., typesetting, line spacing, length, fonts, use of color, margins) differ from those of draft manuscripts or student papers and thus necessitate deviations from APA Style formatting. Also, in this manual—in which we are writing about writing—it is often necessary to distinguish between explanatory text and examples through the use of font, color, and other design elements. Wherever possible, however, we have endeavored to demonstrate APA Style while writing about it and to present the information in a way that is accessible for our many users around the world.

SCHOLARLY WRITING AND PUBLISHING PRINCIPLES

Research is complete only when scholars share their results or findings with the scientific community. Although researchers may post articles on scholarly collaboration sites or preprint servers or share them informally by email or in person, the most widely accepted medium for formal scholarly communication continues to be the published article in a peer-reviewed, scientific journal. Scientific journals contain our primary research literature and thus serve as repositories of the accumulated knowledge of a field.

Students are also important members of the scholarly community. Although most student work is not formally published, by writing papers students engage in critical thinking, thoughtful self-reflection, and scientific inquiry and thereby prepare to make unique contributions to the repository of knowledge. Therefore, student writing deserves the same level of care and attention to detail as that given to professional writing.

In this chapter, we provide important principles that professional and student authors should consider before writing their paper or, in many cases, before embarking on a research study. We begin with overviews of the different types of articles and papers professional and student authors write. This is followed by a discussion of ethical, legal, and professional standards

in publishing that all authors of scholarly work, regardless of the type of paper they are writing or their level of experience, must be mindful of and abide by. For example, research conducted with human participants or nonhuman animal subjects must be approved by an institutional review board (IRB), institutional animal care and use committee (IACUC), or another ethical committee. Similarly, an author writing about human participants must protect their confidentiality while following best practices for data sharing. Moreover, any written work, from a course paper to a published manuscript, should represent an original contribution and include appropriate citations to the work of others. Thus, scholarly writing and publishing, in all forms, are inherently embedded in and guided by an ethical context.

Types of Articles and Papers

Many types of articles are published in scientific journals, including quantitative, qualitative, and mixed methods empirical articles and replications. These journal articles report primary, or original, research—that is, research that has not been previously formally published. Theoretical articles and methodological articles do not present research but describe advancements in theories or methods. Journal articles that review or synthesize findings from primary research include literature reviews and qualitative meta-analyses. By understanding quantitative and characteristics of different types of articles and the types of information they most efficiently convey, you will be able to select an article type that fits your research and to follow the appropriate journal article reporting standards (discussed in Chapter 3). Students may write the same kinds of articles that are published in journals, as well as student papers (including course assignments, dissertations, and theses) not intended for publication in a journal (see Section 1.10). Sample papers are included at the end of Chapter 2 and on the APA Style website (https://apastyle.apa.org).

1.1 Quantitative Articles

In quantitative articles, authors report original, empirical, quantitative research. Quantitative research refers to a set of approaches commonly used in the behavioral and social sciences and related fields in which the observed outcomes are numerically represented. The results of these studies are typically analyzed using methods (statistics, data analyses, and modeling techniques) that rely on the numerical properties of the measurement system. Quantitative research studies use a variety of experimental designs and a range of analytic techniques. Some quantitative articles present novel hypotheses and data analyses not considered or addressed in previous reports of related data. Within the article, authors should describe elements of their study in the first person (see Section 4.16). Researchers who used a quantitative approach should follow the quantitative journal article reporting standards to report their findings (see Sections 3.5–3.12).

Quantitative articles typically include distinct sections that reflect the stages of the research process and appear in the following sequence:

- a statement of the purpose of the investigation, a review of the background literature, and an explicit statement of the hypotheses being explored (see Section 3.4)
- a full description of each step of the investigation, including details about the materials used and the procedures followed (which should be sufficient to enable replication), a full statement of the research design, statements on the protection of human participants or nonhuman animal subjects and informed consent, and a description (in words and/or a figure) of the flow of participants through the study (see Section 3.6)
- data analysis and a report of the findings (see Section 3.7)
- a summary of the study, including any interpretation, limitations, and implications of the results (see Section 3.8)

Authors of quantitative articles often report the findings of several conceptually linked studies in one manuscript. These authors should make the rationale, logic, order, and method of each study clear to readers. Headings should be used to label each study—for instance, "Experiment 1," "Experiment 2," and so forth. This format organizes the sections and makes them easier to discuss in the manuscript or in later research articles. Method and Results subsections can appear under each study heading. If appropriate, the authors can include a short subsection titled "Discussion" in which they explore the implications of the results of each study, or they can combine the discussion with the description of results under a heading such as "Results and Discussion." Authors should always include a comprehensive general discussion of all the studies at the end of the article, which often has the heading "General Discussion."

1.2 Qualitative Articles

In qualitative articles, authors report original, empirical, qualitative research. Qualitative research refers to scientific practices that are used to generate knowledge about human experience and/or action, including social processes. Qualitative approaches tend to share four sets of characteristics:

- Researchers analyze data consisting of natural language (i.e., words), researcher observations (e.g., social interactions), and/or participants' expressions (e.g., artistic presentations) rather than collecting numerical data and conducting mathematical analyses. Reports tend to show the development of qualitative findings using natural language (although numbers may be used adjunctively in describing or exploring these findings).
- Researchers often use an iterative process of analysis in which they reexamine developing findings in light of continued data analysis and refine the initial findings. In this way, the process of analysis is self-correcting and can produce original knowledge.
- Researchers recursively combine inquiry with methods that require researchers' reflexivity about how their own perspectives might support or impair the research process and thus how their methods should best be enacted.
- Researchers tend to study experiences and actions whose meaning may shift and evolve; therefore, they tend to view their findings as being situated within place and time rather than seeking to develop laws that are expected to remain stable regardless of context.

Researchers who used a qualitative approach should follow the qualitative journal article reporting standards to report their findings (see Sections 3.13–3.17).

A variety of

methods are reported in qualitative articles, and the structure of qualitative articles varies depending on the nature of the study. For example, in case studies researchers report analyses or observations obtained while working closely with an individual, group, community, or organization. Case studies illustrate a problem in depth; indicate a means for solving a problem; and/or shed light on needed research, clinical applications, or theoretical matters. Qualitative articles also describe studies with multiple participants, groups, communities, or organizations that identify commonalities and/or differences across these entities. Such research can have a systemic focus, examining the ways in which social processes, actions, or discourses are structured.

Regardless of the qualitative research approaches they use, when writing ngp A m

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1.4 Replication Articles

In replication articles, authors report the results of work intended to verify or reproduce findings from previous investigations. The aim of a replication study is to examine whether the conclusions from an earlier study remain the same or similar over variations in the conduct of the original study. There are internal and external forms of replication; only external replications are addressed in APA journal article reporting standards (see Section 3.10). An external replication occurs when researchers obtain a new sample and duplicate, insofar as is possible or desirable, the features of the original study being replicated. New design, measures, and/or data-analysis methods can also be used to test whether a finding has generality beyond the particular situation studied in the original work, but any such variations must be clearly specified in the report.

Researchers conducting an external replication should report sufficient information to allow readers to determine whether the study was a direct (exact, literal) replication, approximate replication, or conceptual (construct) replication. In a direct replication, researchers repeat a study collecting data from a new sample in a way that duplicates as far as possible the conditions of the earlier study. A direct replication is called an exact replication or a literal replication when researchers use procedures that are identical to the original experiment or duplicated as closely as possible (e.g., with variations only in the location of the study and the investigators conducting the study). These forms of replication are useful for establishing that the findings of the original study are reliable. In an approximate replication (or a modified replication), researchers incorporate alternative procedures and additional conditions into the features of the original study; such replications usually contain the original study design along with some additional study features. The purpose of an approximate or modified replication may be not only to replicate a study but also to determine whether some factors not included in the original formulation have an influence on the outcome. In a conceptual replication, researchers introduce different techniques and manipulations to gain theoretical information; it is possible that no features of the initial study are retained. Researchers may use other labels for or descriptions of replications (for further exploration of this issue, see National Academies of Sciences, Engineering, and Medicine, 2019); the descriptions provided in this

section were adapted from the APA Dictionary of Psychology (https://dictionary.apa.org).

1.5 Quantitative and Qualitative Meta-Analyses

Meta-analysis refers to a collection of techniques in which researchers use the findings from a group of related studies to draw a general conclusion (synthesis) based on the extant research on a topic. Individual participant or subject data are not used in meta-analyses because the data analyzed are at the study level.

Just as the reporting standards for quantitative and qualitative studies vary by study design, those for meta-analyses vary by the particular questions asked in the study and the approaches used to answer those questions. Because the study is the input unit for a meta-analysis, the studies included are provided in the reference list and marked with an indicator that shows they were part of the meta-analysis. This indicator distinguishes studies included in a meta-analysis from other references. For example, in APA Style articles, references used in a meta-analysis are preceded by an asterisk (see Section 9.52).

Within quantitative approaches, meta-analyses generally stipulate a technique in which effect-size estimates from individual studies are the inputs to the analyses. Meta-analysis is also used to determine factors that may be related to the magnitude of the outcome in quantitative studies—for example, design factors (e.g., randomized vs. nonrandomized), demographic factors (e.g., percentage of the study sample below the poverty line), and so forth. Meta-analytic reports usually follow the same basic structure as quantitative studies (see Section 1.1) and contain an introduction and Method, Results, and Discussion sections. Researchers who use a quantitative meta-analytic approach should follow the reporting standards for quantitative meta-analysis (see Section 3.12).

Within qualitative research, there are a variety of approaches to meta-analysis, including qualitative metasynthesis, metaethnography, metamethod, and critical interpretive synthesis. These approaches often use strategies from primary qualitative analyses to

synthesize findings across studies. Qualitative meta-analyses can be used to highlight methodological trends, identify common findings and gaps, develop new understandings, and propose future directions for an area of research. Qualitative meta-analytic reports have a structure similar to that of qualitative primary reports, with the addition of a description of the perspectives and situatedness of the authors of the primary works included in the analysis. Qualitative meta-analyses do not entail a singular procedure but rather an aggregating function common to meta-analytic approaches. Qualitative meta-analyses are not to be confused with quantitative reviews, in which authors generate a narrative description of a quantitative literature base. We recommend referring to those studies as literature reviews or narrative literature reviews to avoid confusion with qualitative meta-analyses (see Section 1.6). Researchers who used a qualitative meta-analytic approach should follow the reporting standards for qualitative meta-analysis (see Section 3.17).

1.6 Literature Review Articles

Literature review articles (or narrative literature review articles) provide narrative summaries and evaluations of the findings or theories within a literature base. The literature base may include qualitative, quantitative, and/or mixed methods research. Literature reviews capture trends in the literature; they do not engage in a systematic quantitative or qualitative meta-analysis of the findings from the initial studies.

In literature review articles, authors should

- define and clarify the problem;
- summarize previous investigations to inform readers of the state of the research;
- identify relations, contradictions, gaps, and inconsistencies in the literature; and
- suggest next steps in solving the problem.

The components of literature review articles can be arranged in various ways—for example, by grouping research on the basis of similarity in the concepts

or theories of interest, methodological similarities among the studies reviewed, or the historical development of the field.

1.7 Theoretical Articles

Theoretical articles draw from existing research literature to advance theory. Theoretical articles present empirical information only when it advances the theoretical issue being explicated. Authors of theoretical articles trace the development of a theory to expand and refine its constructs, present a new theory, or analyze an existing theory. Typically, they point out flaws or demonstrate the advantage(s) of one theory over another. Authors also may examine a theory's internal consistency and external validity. The order of sections in a theoretical article can vary.

1.8 Methodological Articles

Methodological articles present new approaches to research or practice, modifications of existing methods, or discussions of quantitative and/or qualitative data analysis. These articles use empirical data (quantitative, qualitative, or both) only as a means to illustrate an approach to research. Some use simulated data to demonstrate how methods work under varying conditions (e.g., different sample sizes, number of variables, level of nonnormality, size of coefficients).

Methodological articles provide sufficient detail for researchers to assess the applicability of the methodology and its feasibility for the type of research problem it is designed to study. Further, these articles allow readers to compare proposed methods with those in current use. In methodological articles, highly technical materials (e.g., derivations, proofs, data generation, computer code, extensive details of simulations) should be presented in appendices or as supplemental materials to improve overall article readability. When having detailed information (e.g., parameters used in a simulation) is necessary for readers to understand the major points being made, those details should be presented in the text of the article.

1.9 Other Types of Articles

Additional types of published articles include brief reports, comments on and replies to previously published articles, book reviews, obituaries, and letters to the editor. Authors should consult the editors or author guidelines of individual journals for specific information regarding these kinds of articles.

1.10 Student Papers, Dissertations, and Theses

Although the Publication Manual originated as a guide for authors seeking publication in scholarly journals, it has been widely adopted by academic instructors, departments, and institutions that require students to use APA Style when writing scholarly papers. Students may write the same types of papers that are professionally published (e.g., literature review articles) or assignments that fall outside that scope (e.g., dissertations, theses, essays, response or reaction papers, annotated bibliographies). Likewise, this manual has historically addressed researchers working in the field of psychology; however, students and researchers use APA Style in other fields and disciplines, including social work, nursing, communications, education, and business. Some journals in these fields require APA Style, and others do not. Other field-specific requirements may also apply (e.g., nurses may have to adhere to a nurse's code of ethics rather than a psychologist's code of ethics).

commonly written at the undergraduate level include annotated bibliographies, many types of essays, and response or reaction papers. The descriptions that follow are generally representative of these types of papers; check with your assigning instructor or institution for specific guidelines.

- consist of reference list entries followed by short descriptions of the work called annotations. Instructors generally set most requirements for these papers, but many APA Style guidelines still apply (see Section 9.51).
- report how specific events lead to particular results or advocate for a specific position. A clear and strong thesis provides a solid foundation for this type of essay. The paragraphs are generally structured by describing each cause and its collateral effect, with logical transitions between them.
- compare and contrast two (or more) items with the

goal of linking disparate items under a central thesis. The paper structure can be organized to focus on Topic 1 and then Topic 2, or the topics may be interwoven.

- follow a multiparagraph structure (e.g., five paragraphs) and explain or provide information on a specific topic. The paper structure includes an introduction, body, and a conclusion. Evidence should be provided to reinforce the written claims detailed in the paper.
- convey a story from a clear point of view and include a beginning, middle, and end. Narrative essays should have a clearly defined purpose and focus and include concise, evocative language.
- are intended to convince readers to adopt a certain viewpoint or take a particular action. They present clear arguments, include logical transitions, and have a similar paper structure to the expository essay.
- are concise summaries in students' own words of essential points, statements, or facts from a single work; the length of a précis is typically about a quarter of the length of the original work. The précis structure includes a brief thesis and sections that mirror the sections of the original work, such as Method, Results, and Discussion.
- summarize one or more works and describe students' personal reactions or responses to them, including how the work or works impacted them, are relevant to their life, and so forth. This type of paper is typically short (e.g., three pages or so). The first person is used in describing personal reactions (see Section 4.16).

are typically required of graduate students, but undergraduate students completing advanced research projects may write similar types of papers. Academic institutions or departments have detailed guidelines for how to format and write dissertations and theses, and the requirements and acceptable format vary by discipline. Some dissertations and theses are hundreds of pages long and contain thorough literature reviews and exhaustive reference lists, whereas others follow a multiple-article format consisting of several shorter, related papers that are intended for individual publication. See Section 12.1 for guidance on adapting a dissertation or thesis into a journal article.

As mentioned in the introduction to this manual, most of the guidelines in the Publication Manual can be applied to student papers. However, because the scope of what constitutes a student paper is broad and flexible, and because students submit papers to their academic institutions rather than to an APA journal, we do not designate formal requirements for the nature or contents of an APA Style student paper. Thus, questions about paper length, required sections, and so forth are best answered by the instructor or institution setting the assignment. Students should follow the guidelines and requirements developed by their instructors, departments, and/or academic institutions when writing papers, including dissertations and theses; tl l

Ethical, Legal, and Professional Standards in Publishing

In addition to abiding by standards specific to writing and publishing, authors of scholarly research should also follow ethical standards (e.g., Section 8, Research and Publication, of the APA Ethical Principles of Psychologists and Code of Conduct, hereinafter referred to as the APA Ethics Code; APA, 2017a; see also https://www.apa.org/ethics/code) and broader professional standards when conducting a research study. Moreover, individuals engaged in conducting, analyzing, or reporting any type of research should have acquired the requisite skills and experience to do so competently (e.g., Section 2, Competence, of the APA Ethics Code; see also the Multicultural **Guidelines:** An Ecological Approach Context, Identity, and to Intersectionality; APA, 2017b).

Ethical and legal principles underlie all scholarly research and writing. These long-standing principles are designed to achieve the following goals:

- ensuring the accuracy of scientific findings,
- protecting the rights and welfare of research participants and subjects, and
- protecting intellectual property rights.

Writers in the social and behavioral sciences work to uphold these goals and to follow the principles that have been established by their professional disciplines. The guidance in this section is drawn from the APA Ethics Code (APA, 2017a), which applies to all APA members regardless of where they publish and contains standards that address the reporting and publishing of scientific data. The APA Ethics Code is not a static document—it is revised over time to reflect shifts or changes in the understanding and conception of the principles of beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect by the scientific community relative to advances in science and technology and evolving cultural norms. Revised or new versions of the APA Ethics Code appear on the APA website after adoption by the APA Council of Representatives.

Ensuring the Accuracy of Scientific Findings

1.11 Planning for Ethical Compliance

Regardless of the type of article, attention to ethical concerns should begin long before any manuscript is submitted for publication. Among the issues to carefully consider while research is in the planning stages are those related to institutional approval, informed consent, deception in research, participant protections, and data sharing. Most journals, including APA journals, require authors submitting a manuscript for publication to also submit forms affirming their compliance with ethical standards for research and publication and disclosing their conflicts of interest, if any (see Section 12.13 for more information and a link to the APA ethical compliance form). We encourage all authors, whether or not they will submit their manuscript to an APA journal, to consult these ethics resources before beginning their research project and at regular intervals throughout the research process. To ensure that they meet ethical standards, before starting a research project, authors should contact the appropriate IRB or ethical review group for their institution or country for information on the kinds of research that require ethics approval, procedures for obtaining ethics approval, ethical and research requirements, and so forth. Authors not affiliated with a university, hospital, or other institution with an IRB are still expected to follow ethical standards in conducting their research and should consult an external IRB if necessary. information For IRBs. the APA website more on see (https://on.apa.org/2FuiPJ1).

Authors are encouraged to report in the text of the manuscript the institutional approvals the study received, as described in the APA journal article reporting standards in Chapter 3 (see Sections 3.6 and 3.14 and Tables 3.1–3.3). Authors should also be prepared to answer potential questions related to these issues from editors or reviewers during the review process (see Section 12.13). As a final step prior to manuscript submission, authors should also consult the ethical compliance checklist in Section 1.25.

1.12 Ethical and Accurate Reporting of Research Results

The essence of ethics in all scientific reporting is that authors report the methods and results of their studies fully and accurately. Therefore, the ethical and professional issues discussed in this section apply equally to quantitative, qualitative, and mixed methods research (see Chapter 3 for additional reporting standards).

Authors must not fabricate or falsify data (APA Ethics Code Standard 8.10a, Reporting Research Results). Modifying results, including visual images, to support a theory or hypothesis and omitting troublesome observations from a report to present a more convincing story are also prohibited (APA Ethics Code Standard 5.01b, Avoidance of False or Deceptive Statements). Similarly, representing data-generated hypotheses (post hoc) as if they were preplanned is a violation of basic ethical principles.

The practice of "omitting troublesome observations" includes

- selectively failing to report studies (e.g., in the introduction or Discussion section) that, although methodologically sound and relevant to the hypothesis, theory, or research question at hand, had results that do not support the preferred narrative (i.e., that contrast with results obtained in the current study);
- selectively omitting reports of relevant manipulations, procedures, measures, or findings within a study, for similar reasons; and
- selectively excluding participants or other individual data observations, without a valid methodological reason, in order to achieve desired results.

To clarify expectations for reporting and help safeguard scientific integrity, APA (like other scientific organizations) has issued a series of reporting standards (Appelbaum et al., 2018; Cooper, 2018; Levitt, 2019; Levitt et al., 2018). These standards, which are discussed in Chapter 3, address many aspects of the ethical reporting of experiments. They include expectations for describing all measured variables, for tracking participant flow through a study (with an accompanying prototype figure; see Figure 7.5 in Section 7.36) so that no participant is selectively excluded without mention, and for reporting special classes of studies such as clinical trials.

Reporting standards, like the APA Ethics Code, are not static; changes are continually made to improve how researchers report results. One of the more recent and important changes for quantitative research reporting is that

hypotheses should now be stated in three groupings: preplanned–primary, preplanned–secondary, and exploratory (post hoc). Exploratory hypotheses are allowable, and there should be no pressure to disguise them as if they were preplanned. Similarly, qualitative researchers should transparently describe their expectations at the outset of the research as part of their research reporting.

1.13 Errors, Corrections, and Retractions After Publication

Careful preparation of manuscripts for publication is essential, but errors can still appear in the final published article. When errors are substantive enough to affect readers' understanding of the research or their interpretation of the results, authors are responsible for making such errors public.

When a correction is needed, the first step is to inform the editor and the publisher of the journal so that a formal correction notice (erratum) can be published. The goal of such a notice is to openly and transparently correct the knowledge base for current and future users of the information in the published article. A correction notice is usually appended to the original article's record in research databases so that readers will retrieve it when they access either the article or a database's record for the article; at times, the article itself may also be corrected. See also APA Ethics Code Standard 8.10b, Reporting Research Results, as well as Section 12.22 of this manual for further information on when and how to write a correction notice.

Occasionally, the problems with an article are so great (e.g., plagiarism, fabrication or falsification of data, belatedly discovered calculation or measurement errors that change the interpretation of the findings) that the entire article is retracted by the author or authors, their institution, or the publisher. Whatever the reason for the retraction, the intent is to remove the information from the scientific literature and thus avoid wasting the time and resources of other scientists who might rely on or attempt to replicate the compromised results. The retracted article may still be available in databases; however, a retraction notice will accompany it to notify readers of its status. Authors should avoid citing retracted articles

unless the citation is essential; if authors do cite a retracted article, its reference list entry should reflect that the article has been retracted (see the APA Style website at https://apastyle.apa.org for an example).

1.14 Data Retention and Sharing

Authors are expected to retain the data associated with a published article in accordance with institutional requirements; funder requirements; participant agreements; and, when publishing in an APA journal, the APA Ethics Code (Standard 8.14, Sharing Research Data for Verification). When planning a research study and before beginning data collection, authors are encouraged to consider how the data will be retained (and shared) and to outline clear data-handling procedures in the study protocol submitted to an IRB or other ethics committee. During the informed consent process, authors should describe to study participants the data they intend to collect, save, and/or share with other researchers and obtain their approval. In qualitative studies, data sharing may not be appropriate because of confidentiality, consent, and other limitations (see Section 1.15).

The APA Ethics Code prohibits authors from withholding data from qualified requesters for verification through reanalysis in most circumstances (see Standard 8.14, Sharing Research Data for Verification), as long as the confidentiality of the participants is protected. The APA Ethics Code permits psychologists to require that a requester be responsible for any costs associated with the provision of the data. Increasingly, funders are also requiring that data be shared in an open- or secured-access repository or that a data-management plan otherwise be spelled out. Authors publishing in an APA journal are invited to share their data on APA's portal on the Open Science Framework (https://osf.io/view/apa/).

Notably, incentives are offered to researchers who wish to share their data, such as Open Science Badges offered through the Center for Open Science. Open Science Badges are awarded for the open sharing of materials used by researchers in the process of data collection and analysis (e.g., instructions, stimuli, blank questionnaires, treatment manuals, software, interview protocols, details of procedures, code for mathematical models); source data, meaning the original written, electronic, or audiovisual records of the study

participants' responses (e.g., paper questionnaires, transcripts, output files, observational notes, video recordings); and analysis data, meaning the processed version of the source data used to produce the analyses reported in the paper.

Subject to the conditions and exceptions discussed next, authors are expected to share data, analyses, and/or materials during the review and publication process if questions arise with respect to the accuracy of the report. On request, the authors should share the raw data with the journal's editor and (if approved by the editor) with reviewers to verify the reported analyses and data and to assess their rigor. If questions arise about the integrity or processing of the source data, authors should also share access to them with the editor on request. Costs of sharing data requested during the review process should be borne by the authors. Similarly, students should expect to provide raw data to faculty reviewing their dissertation, thesis, or research project. A journal editor has the right to deny publication if the authors refuse to share requested materials or data during the review process. In the case of student work, refusal to share requested materials or data may result in a failing grade or defense. See Section 1.15 for additional considerations when sharing access to data from qualitative studies.

Authors must make their data available after publication, subject to conditions and exceptions, within the period of retention specified by their institution, journal, funder, or other supporting organization. This permits other competent professionals to confirm the reported analyses using the data on which the authors' conclusions are based or to test alternative analyses that address the article's hypotheses (see APA Ethics Code Standard 8.14a, Sharing Research Data for Verification, and Standard 6.01, Documentation of Professional and Scientific Work and Maintenance of Records). Competent professionals are those who are currently accountable to a research institution or an educational employer and who demonstrate sufficient training and credentials to understand the research study's background, methods, and analyses. The journal editor may be asked to determine who qualifies as a competent professional given the topic of the research. See Section 1.15 for additional considerations when sharing qualitative research data.

Typically, any additional costs of complying with a request for data beyond the general standards of internal data maintenance (e.g., anonymization, transfer of data, translation) should be borne by the requester, and these costs should be assessed at a reasonable local rate for the necessary services and materials. If it emerges that authors are unwilling or unable to share data for verification within the retention period, the journal's current editor may retract the article or issue an Expression of Concern about its findings according to the policy of the publisher.

Data and materials may sometimes be requested after publication for purposes beyond the ones outlined previously. Regardless of why the data and materials are requested, to avoid misunderstanding, it is important that the researcher requesting data and the researcher providing it come to a written agreement about the conditions under which the data are to be shared (see APA Ethics Code Standard 8.14b, Sharing Research Data for Verification). Generally, such an agreement specifies 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), who may have access to the data (e.g., only the requester, the requester and direct supervisees, anyone interested with no limits on further sharing), and how the requester will store and dispose of the data. Furthermore, the agreement should specify any limits on the dissemination of the results of analyses performed on the data (e.g., whether they can be published in conference presentations, internal reports, journal articles, or book chapters) and any expectations for authorship of publications based on shared data. Datasharing arrangements must be entered into with proper consideration of the rights of the copyright owner (see Section 12.20), participants' consent, requirements of funding agencies, requirements of IRBs and other ethics committees that provided permission to conduct the study, and rules promulgated by the employer of the holder of the data.

Authors may choose or be required to share data and/or materials openly by posting them online. Journal editors may set a policy to encourage open sharing, to require it, and/or to require authors to give a reason why data and materials cannot be shared (e.g., risk to participant privacy). A permanent link to any data or materials to be shared openly should be included in the article, such as in an Open Practices section in the author note (see Section 2.7); the reference for the data set should also be included in the reference list

of the article (see Section 10.9 for how to cite). Federally funded or grant-funded research is often subject to requirements for data sharing; see, for example, the data-sharing policies of the National Institutes of Health (n.d.).

Before sharing or posting data and materials for any purpose, researchers must remove any personally identifiable information or code that would make it possible to reestablish a link to an individual participant's identity. Sometimes, a unique combination of demographic or other public information can be used to establish a participant's identity, and this possibility must be kept in mind and avoided as well. Researchers should consult the relevant policies of their institution or country (e.g., the European Union General Data Protection Regulation [GDPR], the Health Insurance Portability and Accountability Act [HIPAA]) for regulations and guidance on conditions for sharing data and deidentifying protected health information.

In addition to protecting the confidentiality of research participants, some proprietary arrangements may prohibit the sharing of data and materials (e.g., data provided in confidence by a business entity, a coding scheme developed commercially by the authors). Editors are responsible for setting policy for their journal about the acceptability for publication of research resting on proprietary arrangements, given that its accuracy and veracity cannot be checked in the usual way. This policy may depend on the availability of alternative ways to satisfy concerns about scientific integrity. For example, research using a proprietary personality scale may be acceptable if enough qualified researchers subscribe to it that someone can be found to help with independent verification.

1.15 Additional Data-Sharing Considerations for Qualitative Research

The sharing of qualitative data with editors, peers, and other researchers has distinct considerations in addition to those described in Section 1.14. The APA Committee on Human Research and numerous qualitative researchers have expressed concerns about sharing qualitative research data (Data Sharing Working Group, 2015; DuBois et al., 2018; Guishard, 2018). Although consensus on how to navigate this issue has not yet been

established, this section highlights several points that contraindicate or suggest alternates to data sharing.

Data are typically reproduced in qualitative research reports. Segments of data (e.g., quotations from interviews) are presented to exemplify the process of analysis and to demonstrate the grounding of the findings in the data. Because these raw data are available for examination in the text of the article, they provide a basis by which readers, as well as editors and reviewers during the manuscript review process, can evaluate (and perhaps question) the appropriateness of the conclusions reached.

The obligation to protect participants' confidentiality can present special ethical issues for qualitative data sharing. For instance, raw data from a qualitative study involving multiple detailed stories about participants' lives may contain details that are necessary to make the data meaningful but that can be revealing in compromising ways when triangulated. Qualitative research may also involve intensive case studies of people who were selected because of their unique attributes. Although the researchers may try to mask participants' identities within a manuscript, it may not be possible to retain all that is meaningful to evaluate an analysis and at the same time protect participants' confidentiality if the complete data set is shared. The high burden on the researchers to remove all information that can lead to the identification of a participant is unjustifiable if it produces a set of data that is stripped of meaning. As a result, the researchers may instead need to withhold data to ensure participant confidentiality (see McCurdy & Ross, 2018, on the sometimes prohibitive complications of this process).

There is also the consideration that participants may give consent to participate in a study to a specific group of researchers and may not extend that consent to other researchers. This may be of particular concern with vulnerable populations. For instance, lesbian participants may consent to have their data analyzed by researchers who are in their community and who seek to support their rights, but that consent may not apply to other researchers with different motivations. Likewise, some

researchers spend years developing the trust to collect and analyze data from a community, and community members may not extend that trust to other groups of researchers. Indeed, communities may be owners or co-owners of the data themselves and may refuse to share the data (DuBois et al., 2018; Tuck & Yang, 2014). As a result, the relationship between the researchers and the participants is an important ethical consideration and one that may contraindicate data sharing.

Many qualitative researchers view their own history and epistemological perspectives as legitimate influences on the process of inquiry. Thus, when sharing data from qualitative research, the researchers' perspectives and experiences must be taken into account. Research can be compromised if researchers are unreflective or not purposeful or explicit about this influence. However, when researchers are aware, they can deliberately elaborate on the investigative attitudes (e.g., phenomenological bracketing), personal experiences (e.g., ethnographic study), research teams (e.g., including researchers from the communities under analysis), or analytic lenses (e.g., critical theories) that enrich their research and thereby deepen the acuity they bring to the analytic task (Guishard et al., 2018). These qualitative researchers would not necessarily expect editors or external researchers to interpret their research in the same way when evaluating their analysis because they may not share their perspectives.

In qualitative inquiry, the researchers are the analytic tool, so those who have developed an intimate understanding of a data set or who have developed a perspective to enhance their sensitivity to the data typically are better attuned to nuances, implicit meanings, and systemic connections. This means that an editor or external researcher should not expect replication of the findings and should articulate an appropriate purpose and rationale for review of the shared data prior to the data being shared. Also, the approach to investigation selected may signify epistemological commitments of researchers and their participants, and these values need to be considered and honored in data-sharing efforts. In any case, a review of the data would need to be conducted with a keen awareness of the distinct epistemological positions and analytic processes within qualitative research.

1.16 Duplicate and Piecemeal Publication of Data

Reports in the literature must accurately reflect the independence of separate research efforts. Both duplicate and piecemeal publication of data misrepresent the amount of original research in the repository of scientific knowledge. Duplicate publication is the publication of the same data or ideas in two separate works. Piecemeal publication is the unnecessary splitting of the findings from one research effort into multiple works.

Misrepresentation of data as original when they have been published previously is specifically prohibited by the APA Ethics Code (Standard 8.13, Duplicate Publication of Data). Duplicate publication distorts the knowledge base by making it appear that more information is available than actually 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. When submitting a manuscript for publication, authors are obligated to disclose whether they have posted the manuscript online, either in full or in substantial part; some editors may consider such posting to be prior publication.

Examples of and Exceptions to Duplicate Publication. Authors should not submit manuscripts that have been published in whole or in substantial part elsewhere, including manuscripts with substantially similar form or content to their previously published works. This policy also applies to translations; authors are not permitted to publish research in one language and then translate the article into another language and publish it again. Authors in doubt about what constitutes prior publication should consult the editor of the journal to which they are submitting their manuscript.

The policy regarding duplicate publication also means that the same or overlapping material that has appeared in a publication offered for public sale, such as conference proceedings or a book chapter, should not be republished elsewhere because these sources are considered widely available. For example, a brief report is published in an APA journal 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.

The policy regarding duplicate publication has some exclusions. Manuscripts previously published in abstracted form (e.g., in conference proceedings) or in a periodical with limited circulation or availability (e.g., report by a university department or government agency, dissertation) can be published again in a venue of wide circulation (e.g., in a journal). Consult a journal editor to determine whether a study reported in a dissertation or thesis or posted in a preprint repository could benefit from peer review and publication as a journal article.

Similarly, it is not considered duplicate publication to reanalyze already 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. The policy also does not apply to follow-up studies; for example, researchers may first report the initial findings from a clinical trial and subsequently report results of a follow-up assessment 2 years after the trial's completion.

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. Such duplicate publication can rarely be justified, given the ready accessibility of published works online. If authors think it is justified, the article must include a reference to the original report—both to inform editors, reviewers, and readers and to fulfill the authors' obligations to the copyright holder of the previous work.

If it is deemed scientifically necessary to represent previously published material—for instance, to report 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 authors must clearly acknowledge in the author note and in all

relevant sections of the article (e.g., Method, Results) that the information was reported previously, and the previous work must be cited.

- 3. The authors must provide a copyright attribution for any reprinted or adapted tables and figures and may need to secure permission from the copyright holder as well (see Sections 12.14–12.18).
- 4. The original work must be clearly and accurately cited in the reference list (see also the discussion on self-plagiarism in Sections 1.17 and 8.3).

When the original work has multiple authors and the authorship of the new work is not identical, all authors of the original work must provide appropriate copyright permission (see Section 12.20) and receive agreed-upon credit (e.g., in an author note; see Section 2.7) for their contributions in the later publication.

Authors are obligated to present work as parsimoniously and completely as possible within the space constraints of journal articles. Data that can be meaningfully combined within a single article 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 the results from a single study is therefore undesirable unless there is a clear reason for doing so. It may be quite difficult to determine whether a valid reason exists; therefore, authors who submit manuscripts based on studies or data presented in other published or submitted works should inform the journal editor of the source and extent of the overlap, and they should detail how their submission builds on the previous reports. 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.

Multiple Publications From Large-Scale, Longitudinal Projects and Qualitative and Mixed Methods Research. There are times when it is both necessary and appropriate to publish multiple reports. Multidisciplinary projects often address diverse topics and answer different questions; thus, publishing the results in a single article may be inappropriate. Similarly, researchers sometimes design studies with the purpose of addressing distinct theoretical questions using the same instruments; if written as separate research reports, each report should make a unique contribution and not overlap substantially with the others or with previously published material. Researchers should consider at the outset of data collection how the data will be presented (e.g., in one report vs. multiple reports); although new research questions or analyses may arise in the process of analyzing the data, researchers should not fish through the data for the sole purpose of extracting additional studies. Although all reports stem from the same overall project, the introduction, Results, and Discussion sections of each report would be unique, and at least some aspects of the Method section would be unique as well.

Longitudinal or large-scale studies are another instance when multiple publications are often appropriate because the data at different time points make independent scientific contributions. Further, useful knowledge should be made available to others as soon as possible, which is precluded if publication is delayed until all the studies are complete.

Multiple reports may be needed in some qualitative and mixed methods research when qualitative data collection and analysis produce volumes of findings that are not appropriate for publication in a single article—for instance, when investigators conduct interviews to explore questions that have distinct purposes and are meaningful in relation to separate literatures and concerns. With mixed methods studies, authors might publish multiple articles, such as a qualitative study, a quantitative study, and a mixed methods overview study, each focusing on new insights based on findings across the methods.

When authors create multiple reports from studies of this sort, they are obligated to cite prior reports on the project to help readers understand the work accurately. For example, in the early years of a longitudinal study, the authors might cite all previous publications from it. For a well-known or long-term longitudinal study, the authors 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. It is useful to distinguish

between data sets that are complete and data sets that are still in collection. It is not necessary to repeat the description of the design and methods of prior reports in their entirety; authors may refer readers to an earlier publication for this detailed information. It is important, however, to provide sufficient information so that readers can evaluate the current report. It is also important to clarify the degree of sample overlap in multiple reports from large studies. Again, authors should inform and consult with the journal editor before submitting a manuscript of this type.

Whether the publication of two or more reports based on the same or closely related research constitutes piecemeal publication is a matter of editorial judgment, as is the determination of whether the manuscript meets other publication criteria. Authors should note in the manuscript all prior works related to the study by including them in the reference list and citing them in the text (see the previous section on acknowledging and citing previous work). When submitting the manuscript, authors must inform the journal editor in a cover letter of any similar manuscripts that have already been published, accepted for publication, or 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 the authors' identities are masked for review, references to previous work should be concealed as well until after the review process.

If, during the review or production process, a manuscript is discovered to be in violation of duplicate or piecemeal publication policies and the authors failed to inform the editor of the potential for violation, then the manuscript can be rejected without further consideration. If such a violation is discovered after publication in an APA journal, appropriate action, such as retraction by the publisher or notice of duplicate publication, can be taken.

Journal articles sometimes

are revised for publication as book chapters. Authors have a responsibility to reveal to readers 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 obtain permission to reprint or adapt the work and include a copyright attribution in the chapter (see Sections 12.14–12.18).

1.17 Implications of Plagiarism and Self-Plagiarism

Plagiarism is the act of presenting the words, ideas, or images of another as one's own; it denies authors credit where credit is due. Whether deliberate or unintentional, plagiarism violates ethical standards in scholarship (see APA Ethics Code Standard 8.11, Plagiarism) and has profound real-world effects. Authors who try to publish plagiarized work face rejection from publication, as well as possible sanction by professional bodies, censure in their place of employment, and/or exclusion from applying for federal funding. Students who turn in a plagiarized assignment face a failing grade, as well as possible censure from a student or university honor board, suspension, or expulsion. Self-plagiarism is the act of presenting one's own previously published work as original; it misleads readers and falsely inflates the number of publications on a topic. Like plagiarism, self-plagiarism is unethical. To learn more about what constitutes plagiarism and self-plagiarism and how to avoid both, see Sections 8.2 and 8.3.

Protecting the Rights and Welfare of Research Participants and Subjects

1.18 Rights and Welfare of Research Participants and Subjects

The APA Ethics Code (Sections 3 and 8) specifies the standards psychologists are to follow when conducting research with human participants and nonhuman animal subjects. Both humans and nonhuman animals in research studies have the right to ethical and humane treatment. Research with human participants involves additional rights and welfare protections; for example, researchers are required to

- obtain informed consent, assent, or permission, as appropriate, using language that is reasonably understood by research participants;
- avoid or minimize participants' exposure to
 - o physical, emotional, or psychological harm;
 - exploitative relationships;
 - o undue influence based on the researchers' status, power, or authority;
 - excessive or inappropriate inducements to participate; and
 - o unjustified or unduly delayed deception or debriefing procedures; and
- take adequate measures to prevent unauthorized access to or release of participant data to the public or other researchers not specified in the informed consent (e.g., by obtaining prior written agreement for sharing of research data).

Nonhuman animal subjects are to be cared for humanely and provided with healthful conditions during their stay in research facilities. The protocol for research with nonhuman animals must be reviewed by an appropriate animal care committee (e.g., an IACUC) before it is conducted to ensure that the procedures are appropriate and humane (APA, 2012a).

Researchers who are APA members, regardless of field, are required to certify that they have followed ethical standards as a precondition of publishing their articles in most journals, including APA journals (see Section 12.13). We encourage authors to include in the text of their

manuscripts certifications that their research followed ethical and institutional guidelines, as described in the APA journal article reporting standards in Chapter 3. For instance, if research participants consented to having their identifying information disclosed (e.g., their name), the authors should indicate in the Method section of the article that consent was given. Failure to follow these standards can be grounds for rejecting a manuscript for publication or for retracting a published article.

1.19 Protecting Confidentiality

When authors describe their research, they are prohibited from disclosing "confidential, personally identifiable information concerning their clients/patients, students, research participants, organizational clients, or other recipients of their services" (APA Ethics Code Standard 4.07, Use of Confidential Information for Didactic or Other Purposes) unless participants give documented consent to disclose their identities. The exact requirements for documentation vary depending on the nature of the consent obtained and the type of study.

Confidentiality in case studies can, at times, be difficult to achieve. For example, the researcher might obtain written consent from the subject of the report to publish the study. The researcher must be careful not to exploit the subject—for example, when the researcher has supervisory, evaluative, or other authority over them, as in the case of a client, patient, supervisee, employee, or organizational client (see APA Ethics Code Standard 3.08, Exploitative Relationships, and Standard 3.05, Multiple Relationships).

In some types of qualitative research (e.g., participatory action research, autoethnography), the participants may be investigators and authors, meaning they will be personally identifiable. Participant-authors or participant-investigators should retain control over what information about them is presented in the report (see Section 1.15 for more on sharing data from qualitative research).

Researchers can protect confidentiality by disguising some aspects of the data so that neither the subject nor third parties (e.g., family members, employers) are identifiable. Four main strategies are used: (a) altering specific characteristics, (b) limiting

the description of specific characteristics, (c) obfuscating case detail by adding extraneous material, and (d) using composite descriptions. Disguising identifying information must be done carefully because it is essential not to change variables in a way that would lead readers to draw false conclusions (Sweeney et al., 2015). For example, altering a person's gender in a case illustrating a promising therapy for sexual assault trauma might compromise its educative value if the person's gender played a significant role in the treatment. Subject details should be omitted only if they are not essential to the phenomenon being described. Confidentiality, however, should never be sacrificed for clinical or scientific accuracy. Reports that cannot adequately disguise identifiable subject information should not be submitted for publication. For examples of how to incorporate case material (e.g., quotations from research participants) into the text, see Section 8.36.

Extra steps may be needed to protect participants' confidentiality when working with data sets containing multiple forms of data or protected health information. The HIPAA website provides guidance on deidentifying data (see https://www.hhs.gov/hipaa/for-professionals/privacy/special-topics/de-identification/index.html).

Researchers have also developed methods for deidentifying various kinds of data; see, for example, the work of the Data Privacy Lab (https://dataprivacylab.org/projects/index.html).

1.20 Conflict of Interest

In the APA Ethics Code (Standard 3.06, Conflict of Interest), conflict of interest is defined broadly as involving "personal, scientific, professional, legal, financial, or other interests or relationships" that could negatively affect professional conduct or cause harm to persons with whom a professional interacts (see also Sections 2.7 and 12.13). Thus, the main concerns when a conflict of interest arises in publishing are the impairment of objectivity in both performing and evaluating research and the potential for harm to or exploitation of research participants.

In all scientific disciplines, professional communications are presumed to be based on objective and unbiased interpretations of

evidence. Transparency about researchers' positions in relation to their evidence and interpretations is central. For example, authors' economic and commercial interests in products or services used in a study or discussed in a manuscript may color their ability to collect evidence and interpret it with fidelity. Although the presence of such interests does not necessarily constitute an unethical conflict of interest per se, the integrity of the field requires open and honest disclosure of the possibilities of such influences when they may exist. In general, an author's safest and most transparent 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 the author does not believe that any conflict or bias exists.

Whether an interest is significant depends on individual circumstances and cannot be defined by a threshold 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 should be disclosed. Participation on a board of directors or any other relationship with an entity that is in some way part of the research project should also be carefully considered for possible disclosure.

In addition to disclosing possible influences that might lead authors to support certain findings, authors should also consider disclosing when circumstances could influence them 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 (American Educational Research Association et al., 2014).

For editors and reviewers who evaluate a given manuscript for publication, conflicts of interest are defined more broadly than economic interests and are usually dealt with by recusal rather than disclosure. It is the responsibility of editors and reviewers to recognize their conflicts of interest, disclose these conflicts to the person who assigned them the manuscript, and either decline the request or ask the assigning person to make a decision.

For editors and reviewers, conflicts of interest may be economic, as described previously for authors. If the main topic of an article has direct implications for a commercial interest of the editor or reviewer, that

individual should decline the request to review the article. Any other economic conflicts that bear on the review are for the person who assigned the manuscript to decide.

Conflicts of interest for editors and reviewers may also take the form of personal connections. Having a family tie, marital relationship, close friendship, or romantic connection with an author is generally seen as a conflict of interest. Professional relationships also may constitute a conflict of interest if, for example, one of the authors is a coauthor, past or current collaborator, past doctoral student or supervisor, or current colleague of the editor or reviewer. Editors-in-chief should set policy for their journal about whether collaboration-based conflicts extend for a lifetime or elapse after a certain number of years have passed. If an editor or reviewer guesses the identity of an anonymized author, and there is potential for a personal conflict, the editor or reviewer should make the assigning person aware of this.

Although differences of scientific or political opinion may influence evaluation of a manuscript, it is impractical to define any opinion-based agreement or disagreement as constituting a disqualifying conflict of interest. However, if an editor or reviewer finds that their point of view is fundamentally opposed to the rationale or approach of a manuscript, they should let the assigning person know this. For their part, editors should seek opinions from reviewers with a variety of positions when evaluating a manuscript known to be controversial.

Protecting Intellectual Property Rights

1.21 Publication Credit

Authorship is reserved for persons who make a substantial contribution to and who accept responsibility for a published work. Individuals should take authorship credit only for work they have performed or to which they have substantially contributed (APA Ethics Code Standard 8.12a, Publication Credit). Authorship encompasses, therefore, not only persons who do the 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 study design, organizing and conducting the analysis, or interpreting the results and findings. Those who so contribute are listed as authors in the byline. Lesser contributions, which do not constitute authorship, may be acknowledged in the author note (see Section 2.7; see also a taxonomy of authorship in the natural sciences called CRediT at https://casrai.org/credit). Lesser contributions may include such supportive functions as designing or building the study apparatus, suggesting or advising about the analysis, collecting or entering the data, modifying or structuring a computer program, recruiting participants, and 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.

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

When a manuscript is accepted for publication, each person listed in the byline must verify in writing that they (a) agree to serve as an author, (b) approve the order of authorship presented in the byline, and (c) accept the responsibilities of authorship.

1.22 Order of Authors

Authors are responsible for determining authorship and for specifying the order in which two or more authors' names appear in the byline. 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 (e.g., department chair, junior faculty member, student) should not determine the order of authorship. The general rule is that the name of the principal contributor appears first, with subsequent names appearing in order of decreasing contribution. In some cases, another principal contributor appears last. These

master's thesis. In such cases, authorship should be determined by the relative contributions of the student and faculty member to the project (Fisher, 2017).

When students contribute equally to a group project that will be submitted to an instructor (not for publication), students may put their names in any order in the byline (e.g., alphabetical order, reverse alphabetical order).

1.23 Authors' Intellectual Property Rights During Manuscript Review

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 the authors' explicit permission, quote from a manuscript under review or circulate copies of it to others, including graduate or postdoctoral students, for any purpose other than editorial review (APA Ethics Code Standard 8.15, Reviewers; see Section 12.7 for a detailed discussion of the peer review process). If a reviewer wishes 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 how editorial review works, and reviewers should consult the editor for any questions. In addition, editors and reviewers may not use material from an unpublished manuscript to advance their own or others' work without the authors' consent.

1.24 Authors' Copyright on Unpublished Manuscripts

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 "automatically from the moment the original work of authorship is fixed" (U.S. Copyright Office, 2017, p. 1), referring to the moment in which a work exists in any tangible form—for example, typed on a page. Until authors formally transfer copyright (see Section 12.20), they own the copyright on an unpublished manuscript; all exclusive rights due the copyright owner of a published work

are also due the authors of an unpublished work. To ensure copyright protection, publishers 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 authors include a copyright notice on all works, whether published or not. Registration of copyright (e.g., with the U.S. Copyright Office at https://www.copyright.gov/registration/) provides a public record and is usually a prerequisite for any legal action.

1.25 Ethical Compliance Checklist

The following checklist provides general guidance for ensuring compliance with ethics requirements.



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PAPER ELEMENTS AND FORMAT

Consistency in the order, structure, and format of paper elements allows readers to focus on a paper's content rather than its presentation. Following APA Style guidelines to achieve consistency in the presentation of paper elements is essential to crafting an effective scholarly work.

In this chapter, we provide an overview of the elements of a paper, including how to structure, format, and organize them. These guidelines apply broadly to any APA Style paper and may be especially useful to students or researchers who are not familiar with APA Style. For researchers preparing manuscripts for publication, more in-depth guidelines on journal article reporting standards (JARS) for quantitative, qualitative, and mixed methods research are discussed in Chapter 3. Students can find guidance on dissertations and theses in Sections 1.10 and 12.1. Sample APA Style papers are included at the end of this chapter; additional sample papers are available on the APA Style website (https://apastyle.apa.org).

Required Elements

2.1 Professional Paper Required Elements

Paper elements appear in various combinations depending on the nature of the work. Manuscripts submitted for publication (see Sections 1.1–1.9) should always include a title page (see Section 2.3), which contains the paper title (see Section 2.4), author names and affiliations (see Sections 2.5–2.6), and author note (see Section 2.7); page headers with a running head and page numbers (see Sections 2.8 and 2.18); an abstract (see Section 2.9); text (see Section 2.11); and a reference list (see Section 2.12). Papers may also include keywords (see Section 2.10), footnotes (see Section 2.13), tables (see Chapter 7), figures (see Chapter 7), appendices (see Section 2.14), and/or supplemental materials (see Section 2.15). Authors seeking publication should refer to the journal's instructions for authors or manuscript submission guidelines for any requirements that are different from or in addition to those specified by APA Style.

2.2 Student Paper Required Elements

Student papers (e.g., narrative essays, reaction or response papers, literature review papers; see Section 1.10) usually include, at minimum, a title page (see Sections 2.3–2.6), page numbers (see Section 2.18), text (see Section 2.11), and a reference list (see Section 2.12). They may also have tables (see Chapter 7), figures (see Chapter 7), and/or appendices (see Section 2.14). Student papers do not typically include a running head, an author note, or an abstract, unless specifically requested by the instructor or institution. Student papers have a student-specific version of the title page (see Section 2.3).

Paper Elements

2.3 Title Page

A title page is required for all APA Style papers. There are both professional and student versions of the title page.

The professional title page (see Figure 2.1) includes the following elements:

- title of the paper (see Section 2.4),
- name of each author of the paper (the byline; see Section 1.22 for determining the order of authorship and Section 2.5 for formatting the byline),
- affiliation for each author (see Section 2.6),
- author note (see Section 2.7),
- running head (also included on all pages; see Section 2.8), and
- page number (also included on all pages; see Section 2.18).

Figure 2.1 Sample Professional Title Page

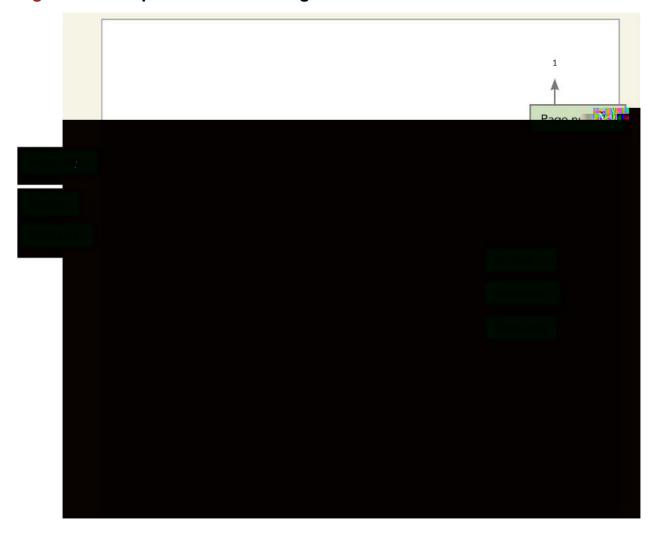
See the section indicated for each element for formatting instructions.

Students should follow the guidelines of their instructor or institution when determining which title page format is most appropriate to

use. If not instructed otherwise, students should include the following elements on the title page (see Figure 2.2):

- title of the paper (see Section 2.4);
- name of each author of the paper (the byline; see Section 1.22 for determining the order of authorship and Section 2.5 for formatting the byline);
- affiliation for each author, typically the university attended (including the name of any department or division; see Section 2.6);
- course number and name for which the paper is being submitted (use the format shown on institutional materials; e.g., PSY204, PSYC 4301, NURS 303);
- instructor name (check with the instructor for the preferred form; e.g., Dr. Hülya F. Akı; Professor Levin; Kwame Osei, PhD; Mariam Sherzai, RN);
- assignment due date, written in the month, date, and year format used in your country (usually November 4, 2020, or 4 November 2020; we recommend spelling out the month, although 2020-11-04 is the format in countries that use the international standard date); and
- page number (also included on all pages; see Section 2.18).

Figure 2.2 Sample Student Title Page



See the sections for the title, byline, affiliation, and page numbers for formatting instructions for these elements. Place the course number and name, instructor name, and assignment due date on separate lines, centered and in that order, below the affiliation (see Section 2.21 for more on line spacing).

2.4 Title

The title should summarize the main idea of the paper simply and, if possible, in a way that is engaging for readers. For research papers, it should be a

concise statement of the main topic of the research and should identify the variables or theoretical issues under investigation and the relationship between them. Although there is no prescribed limit for title length in APA Style, authors are encouraged to keep their titles focused and succinct. Research has shown an association between simple, concise titles and higher numbers of article downloads and citations (Hallock & Dillner, 2016; Jamali & Nikzad, 2011).

Include essential terms in the title to enhance readers' ability to find your work during a search and to aid abstracting and indexing in databases if the work is published. Avoid words that serve no purpose; they increase the title length and can mislead indexers. For example, the words "method" and "results" do not normally appear in a title, nor should such phrases as "a study of" or "an experimental investigation of." Occasionally terms such as "research synthesis," "meta-analysis," or "fMRI study" convey important information for potential readers and are included in the title. Avoid using abbreviations in a title; spelling out all terms helps ensure accurate, complete indexing of the article and allows readers to more readily comprehend its meaning. When an animal name—for example, "Rat"—is in the title, also include the scientific name in italics and parentheses—(Rattus norvegicus). See Table 2.1 for examples of effective versus ineffective paper titles.

Table 2.1 Effective and Ineffective Paper Titles

Ineffective title	Rationale
	Ineffective title

The paper title should be in title case (see Section 6.17), bold, centered, and positioned in the upper half of the title page (e.g., three or four

lines down from the top margin of the page). Move the title up to accommodate a longer author note if necessary. If the title is longer than one line, the main title and the subtitle can be separated on double-spaced lines if desired. Note that the paper title also appears at the top of the first page of text (see Sections 2.11 and 2.28).

2.5 Author Name (Byline)

Every paper includes the name of the author or authors—the byline. The preferred form of an author's name is first name, middle initial(s), and last name; this form reduces the likelihood of mistaken identity (e.g., that authors with the same first and last names are the same person). To assist researchers and librarians, use the same form of your name for publication throughout your career when possible; for example, do not use a middle initial on one paper and omit the initial on a different paper. Determining whether, for example, Marisol G. Rodríguez is the same person as M. G. Rodríguez can be difficult, particularly when citations span years and institutional affiliations change. If you change your name during your career, present your new name in a consistent form as well. Omit all professional titles (e.g., Dr., Professor) and academic degrees or licenses (e.g., PhD, EdD, MD, MA, RN, MSW, LCSW) from the byline.

Write the byline on the title page after the paper title. Include one blank double-spaced line between the paper title and the byline. Follow these guidelines for byline formatting:

- If the paper has one author, write the author name centered and in standard (i.e., nonbold, nonitalic) font.
- If the paper has multiple authors, order the names of the authors according to their contributions. Write all names on the same line (flowing onto additional lines if needed), centered, and in standard font. For two authors, separate the names with the word "and"; for three or more authors, separate the names with commas and include "and" before the final author's name.
- For names with suffixes, separate the suffix from the rest of the name with a space, not a comma (e.g., Roland J. Thorpe Jr.).

See Table 2.2 for examples of how to set up author bylines and affiliations.

Table 2.2 Examples of Author Bylines and Affiliations

Variation	Example

2.6 Author Affiliation

The affiliation identifies where the author(s) worked (or studied, in the case of student authors) when the work was conducted, which is usually a university or other institution. Include a dual affiliation only if two institutions contributed substantial support to the study. Include no more than two affiliations per author. If the affiliation has changed since the work was completed, give the current affiliation in the author note (see Section 2.7). Abide by these guidelines when presenting affiliations:

• Academic affiliations (e.g., universities, teaching hospitals affiliated with a university) should include the name of any department or division and the name of the institution, separated by a comma. It is not necessary to

include the location of the institution unless the location is part of the institution's name.

- Nonacademic institutional affiliations (e.g., hospitals not affiliated with a university, independent laboratories, other organizations) should include the name of any department or division, the name of the institution, and the location of the institution, separated by commas.
- Authors who are in private practice or who have no institutional affiliation should include their location.

authors who have different affiliations, list the affiliation of the first author first, followed by the affiliation of the second author, with each affiliation centered and in standard font on its own line, beginning one line below the byline. Place a superscript numeral 1 after the first author's surname, without a space between the name and the numeral (when a paper has three or more authors and thus commas appear after author names, put the numeral after the surname and before the comma). Then put a corresponding superscript numeral 1 before the corresponding affiliation (with a space between the numeral and the start of the affiliation). Repeat this process for the second author using the numeral 2 (and so on when a paper has more authors).

If some, but not all, authors share an affiliation, list the affiliation once and reuse the superscript numeral in the byline. Identify authors with two affiliations in the byline by separating the appropriate superscript numerals with a superscript comma and space.

If the paper has only one author, or if there are multiple authors but all authors share the same one or two affiliations, then superscript numerals are not used.

Group Authors. For group authors (e.g., task forces, working groups, organizations), superscript numerals are not usually used because the group is essentially its own affiliation.

2.7 Author Note

An author note provides additional information about authors, study registration, data sharing, disclaimers or statements regarding conflicts of interest, and help or funding that supported the research. It also provides a point of contact for interested readers. Student papers do not typically include an author note.

Arrange the author note into separate paragraphs; if a paragraph is not applicable to your manuscript, omit it from the author note. Also, the following requirements apply for manuscripts submitted to APA journals; other publishers may have different requirements (e.g., some journals require authors to provide disclosures and acknowledgments on a separate page at the end of the manuscript rather than in the author note).

Authors may include their ORCID

identification number (iD), if they have one (see the ORCID website at https://orcid.org/ for more information). ORCID iDs help authors who have changed names or who share the same name ensure publications are correctly attributed to them. Provide the author's name, the ORCID iD symbol, and the full URL for the ORCID iD, listing each author on a separate, indented line. The iD symbol should be included in the link, per ORCID's recommendation.

⊙

Include only the names of authors who have ORCID iDs. If no authors have ORCID iDs, omit this paragraph.

Identify any changes in author affiliation subsequent to the time of the study. Use the following wording: "[Author's name] is now at [affiliation]." This paragraph may also be used to acknowledge the death of an author.

If the disclosures

and acknowledgments are short, combine them into one paragraph; if they are long, separate them into multiple paragraphs.

Study Registration. If the study was registered, provide the registry name and document entry number in the author note. Clinical trials and meta-analyses are often registered. For example, write "This study was registered with ClinicalTrials.gov (Identifier NCT998877)." For more information on study registration information as it pertains to JARS, see Section 3.9.

Open Practices and Data Sharing. If the study data and/or materials are to be shared openly as part of the publication of the article (see also Section 1.14), acknowledge this in the author note. Cite the data set in the author note, and include the reference for the data set in the reference list (see Section 10.9).

Disclosure of Related Reports and Conflicts of Interest. If the article is based on data used in a previously published report (e.g., a longitudinal study), doctoral dissertation, or conference presentation, disclose this information, and include an in-text citation. For example, write "This article is based on data published in Pulaski (2017)" or "This article is based on the dissertation completed by Graham (2018)" and include an entry for Pulaski (2017) or Graham (2018) in the reference list. Also acknowledge the publication of related reports (e.g., reports on the same data). In addition, indicate in this paragraph whether any author has a possible or perceived conflict of interest (e.g., ownership of stock in a company that manufactures a drug used in the study); if not, state that no conflict of interest exists. If your employer or granting organization requires a disclaimer stating, for example, that the research reported does not reflect the views of that organization, include such a statement in this paragraph and follow the format or wording prescribed by that organization.

Acknowledgments of Financial Support and Other Assistance. Complete and accurate funding information for your article should be included in the author note. Report the names of all funding organizations; all grant, fellowship, or award numbers and/or names; the names of the funding recipients; and the names of principal investigators (if any) for the funded research. Do not precede grant numbers by "No." or "#" (e.g., write "We received funding from Grant A-123 from the National Science Foundation" or "National Science Foundation Grant A-123 funded this work," not "Grant No. A-123" or "Grant #A-123"). Next, acknowledge colleagues who assisted in conducting the study or critiquing the manuscript but who are not authors of the work. Study participants may be acknowledged for exceptional contributions if desired. Then provide any thanks for personal assistance, such as in manuscript preparation or copyediting. End this paragraph by explaining any special agreements concerning authorship, such as if authors contributed equally to the study. Do not acknowledge the people routinely involved in the review and acceptance of manuscripts in this paragraph, such as peer reviewers, editors, associate editors, and consulting editors of the journal to which you are submitting the manuscript. If you would like to acknowledge a specific idea raised by a reviewer or journal editor, do so in a footnote in the text where the idea is discussed.

The corresponding author answers queries regarding the work after it is published and ensures that any data are retained for the appropriate amount of time. Any author can serve as

the corresponding author. Provide the full name and complete mailing address for the corresponding author, with the name and address separated by a comma and a period after the address. Then provide the corresponding author's email address, with no period after it. Use the following format:

Place the author note in the bottom half of the title page, below the title, byline, and affiliation. Leave at least one blank line between the affiliation and the author note label. Center the label "Author Note" (in bold). Indent each paragraph of the author note and align paragraphs to the left. Although the paragraphs of the author note are labeled in this section to help explain them, do not label the paragraphs of the author note in your paper. See Figure 2.3 for a sample author note.

Author Note ..loriah S. Cerhero Mattyr://arcirl_resol 🐉 1825-0097 CREIDIO Sofia Maria Hernandez Garcia Dhttps://orcid.org/0000-0001-5727-2427 Change of Sofia Maria Hernandez Garcia is now at the Department of Information Systems, affiliation University of Pittsburgh. This study was registered with ClinicalTrials.gov (Identifier NCT998877). We have no Disclosures and acknowledgments conflicts of interest to disclose. Our work was funded by Grant A-123 from the Society for Imaginary Persons. We thank Lois Overstreet for her insightful comments and exceptional patience during the data-gathering process. Contact Correspondence concerning this article should be addressed to Josiah S. Carberry, information Department of Psychoceramics, Brown University, Providence, RI 02912, United States. Email: jscarberry@institution.edu

Figure 2.3 Sample Author Note

2.8 Running Head

The running head is an abbreviated version of the paper title that appears at the top of every page to identify it for readers, especially readers of a print copy of the published article. Running heads are required only for manuscripts being submitted for publication. Running heads are not required for student papers unless the instructor or institution requests them; thus, the header for a student paper includes only the page number.

Authors should supply the running head rather than leave this task to the publisher because authors are best able to select the most important words for an abbreviated title. The running head does not have to consist of the same words in the same order as the title; rather, the idea of the title should be conveyed in a shortened form. For example, an article titled "Restless Nights: Sleep Latency Increases and Sleep Quality Decreases With Caffeine Intake" can have a running head of "CAFFEINE-INDUCED REDUCTIONS IN SLEEP EFFICIENCY."

The running head should contain a maximum of 50 characters, counting letters, punctuation, and spaces between words as characters. If the title is already 50 characters or fewer, the full title can be used as the running head. Avoid using abbreviations in the running head; however, the ampersand symbol (&) may be used rather than "and" if desired.

Write the running head in the page header, flush left, in all-capital letters, across from the right-aligned page number. Use the same running head on every page, including the title page; do not include the label "Running head" to identify the running head on any page (see the sample papers at the end of this chapter).

2.9 Abstract

An abstract is a brief, comprehensive summary of the contents of the paper. Authors writing for publication should follow the reporting standards for abstracts presented in Section 3.3. Most scholarly journals require an abstract. For any journal-specific instructions, consult the instructions for authors or the webpage of the journal to which you plan to submit your article. For example, some journals publish a public significance statement, which summarizes the significance of the study for a general audience, along with

the abstract. An abstract is not usually required for student papers unless requested by the instructor or institution.

Abstracts typically are limited to no more than 250 words. If you are submitting a work for publication, check the journal's instructions for authors

The text, or body of the paper, contains the authors' main contribution to the literature. Both professional and student authors should follow the content and formatting guidelines described in this chapter and the citation principles described in Chapters 8 and 9; researchers preparing manuscripts for publication should also review the reporting standards for quantitative, qualitative, or mixed methods research, as appropriate, described in Chapter 3. For guidance on the contents of various types of papers, see Sections 1.1 to 1.10.

The text can be organized in many ways, and the organization generally depends on the paper type (see also Sections 1.1–1.10). Most papers include an introduction that addresses the importance of the work, contextualizes the work within the existing literature, and states the aims of the work. Beyond the introduction, the paper should include paragraphs or sections explaining the main premises of the paper. There are many possible formats for the rest of the text; for example, a quantitative research paper typically includes sections called "Method," "Results," and "Discussion," whereas a qualitative research paper may include a section called "Findings" instead of "Results," or it may have different section headings altogether, depending on the nature of the inquiry. A brief student paper (e.g., a response paper) may not have section headings or may have sections with headings different from those described in this manual. See Section 2.26 for more on organization.

The text should start on a new page after the title page and abstract (if the paper includes an abstract). On the first line of the first page of the text, write the title of the paper in title case, bold, and centered. The text should be left-aligned, double-spaced paragraphs, with the first line of each paragraph indented by one tab key (0.5 in.; see Sections 2.23–2.24). Use headings as needed and appropriate within the text to separate sections and to reflect the organizational structure of the content (see Sections 2.26–2.27). Do not start a new page or add extra line breaks when a new heading occurs; each section of the text should follow the next without a break.

2.12 Reference List

The reference list provides a reliable way for readers to locate the works authors cite to acknowledge previous scholarship. References are used to

document and substantiate statements made about the literature, just as data in the paper are used to support interpretations and conclusions. The references cited in the paper do not need to be exhaustive but should be sufficient to support the need for your research and to enable readers to place it in the context of previous research and theorizing. For detailed guidance on citing sources in the text and preparing the reference list, consult Chapters 8 and 9, respectively.

Start the reference list on a new page after the text and before any tables, figures, and/or appendices. Label the reference list "References," capitalized, in bold, and centered. Double-space all reference list entries (including between and within references). Use a hanging indent for all references, meaning that the first line of each reference is flush left and subsequent lines are indented by 0.5 in. Use the paragraph-formatting function of your word-processing program to automatically apply the hanging indent. For the order of works in the reference list, see Sections 9.44 to 9.49.

2.13 Footnotes

A footnote is a brief note that provides additional content or copyright attribution. Any type of paper may include footnotes.

Content footnotes supplement or enhance substantive information in the text; they should not include complicated, irrelevant, or nonessential information. Because they can be distracting to readers, content footnotes should be included only if they strengthen the discussion. A content footnote should convey just one idea; if you find yourself creating paragraphs or displaying equations as you are writing a footnote, then the main text or an appendix would likely be a more suitable place to present the information. Another alternative is to indicate in a short footnote that supplemental material is available online (see Section 2.15). In most cases, authors integrate an idea into an article best by presenting important information in the text, not in a footnote.

When authors reproduce lengthy quotations and/or test or scale items in the text, a copyright attribution is usually required and

should be presented in a footnote. A reproduced table or figure also requires a copyright attribution, but this attribution appears in the table or figure note. Further directions on seeking permission to reproduce material and appropriate wording for the copyright attribution appear in Sections 12.14 to 12.18.

Number all footnotes consecutively in the order in which their callouts appear in the text with superscript Arabic numerals. Footnote callouts should be superscripted, like this, following any punctuation mark except a dash. A footnote callout that appears with a dash—like this mark except a dash. (The callout falls inside a closing parenthesis if it applies only to matter within the parentheses, like this. Do not put a space before the footnote callout in text. Do not place footnote callouts in headings. To refer to a footnote again after it has been called out, identify it in the text by the footnote number (e.g., write "see Footnote 3"); do not repeat the footnote callout or the whole footnote.

Place each footnote at the bottom of the page on which it is discussed using the footnote function of your word-processing program (see the sample professional paper at the end of this chapter for examples). Footnotes may alternatively be placed in consecutive order on a separate page after the references; in this case, put the section label "Footnotes" in bold, centered at the top of the page; then write the footnotes themselves as double-spaced indented paragraphs that begin with a superscript footnote number, and put a space between the footnote number and the text that follows. Be sure that the number of the footnote callout corresponds with the number that appears with the footnoted text.

2.14 Appendices

Sometimes authors wish to include material that supplements the paper's content but that would be distracting or inappropriate in the text of the paper. Such material can often be included in an appendix, which is included in the print and electronic versions of the article, or in supplemental materials (see Section 2.15), which are available in an online-only supplemental archive that the publisher maintains.

Include an appendix only if it helps readers understand, evaluate, or replicate the study or theoretical argument being made. Be sure that all relevant ethical standards have been followed for materials placed in the appendices, including copyright attribution, accurate representation of data, and protection of human participants (e.g., as the standards apply to images or videos of identifiable people; see Sections 1.18 and 12.17).

In general, an appendix is appropriate for materials that are relatively brief and easily presented in print format. Some examples of material suitable for an appendix are (a) lists of stimulus materials (e.g., those used in psycholinguistic research); (b) instructions to participants; (c) tests, scales, or inventories developed for the study being reported; (d) detailed descriptions of complex equipment; (e) detailed demographic descriptions of subpopulations in the study; and (f) other detailed or complex reporting items described in Chapter 3. Student papers may include appendices.

Begin each appendix on a separate page after any references, footnotes, tables, and figures. Give each appendix a label and a title. If a paper has one appendix, label it "Appendix"; if a paper has more than one appendix, label each appendix with a capital letter (e.g., "Appendix A," "Appendix B") in the order in which it is mentioned in the text. Each appendix should be mentioned (called out) at least once in the text by its label (e.g., "see Appendix A"). The appendix title should describe its contents. Place the appendix label and title in bold and centered on separate lines at the separate lines at the appendix regins.

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and figures within a text appendix must be mentioned in the appendix and numbered in order of mention. The tables and figures within a text appendix should be embedded within the text, as described in Section 7.6.

If an appendix consists of a table only or a figure only, then the appendix label takes the place of the table or figure number, and the appendix title takes the place of the table or figure title. Thus, if Appendix B is a table-only appendix, the table is referred to as Appendix B rather than as Table B1. Likewise, if Appendix C is a figure-only appendix, the figure is referred to as Appendix C rather than as Figure C1. If multiple tables and/or figures (but no text) are combined into one appendix, label and title the appendix and also number and title the tables and/or figures within the appendix (e.g., Tables D1 and D2 are two tables in Appendix D).

2.15 Supplemental Materials

Supplemental materials to a journal article are published online only. These materials enrich readers' experience and understanding of the content of the article. Online-only publication tends to be appropriate for materials that are more useful when available as downloadable files and for materials that are not easily presented in print. Student papers do not typically include supplemental materials.

Some examples of content provided as supplemental materials are

- video clips, audio clips, or animations
- lengthy computer code
- details of mathematical or computational models
- oversized tables
- detailed intervention protocols
- expanded methodology descriptions
- color figures or other images (see Section 7.26)
- printable templates and worksheets
- data files (e.g., generated using SPSS or other software)

Supplemental materials should include enough information to make their content interpretable when accompanied by the published text. Also keep in mind accessibility guidelines as they pertain to online or interactive materials to ensure that your files are not only openable but also accessible to all

readers.¹ Complete data sets should be made available, as appropriate, in online repositories or archives (see Section 10.9 for the reference format) or in supplemental materials. See Sections 1.14 and 1.15 for more on data retention and sharing.

Because this content may be useful to the field, APA and many other publishers make it possible to provide supplemental materials to a wide audience by posting them online and placing a link with the published article. These files (like appendices) then become part of the primary journal record and cannot be augmented, altered, or deleted. As such, materials for inclusion in supplemental materials should be submitted in formats that are widely accessible. We recommend checking with the journal publisher for preferred file types and any limitations.

Less widely used file formats, including TeX, LaTeX, any client- or server-side scripting (e.g., Java, CGI), executable files, and software applications, might be acceptable but of less use to readers who do not have access to specialized programs. Because of the risk of downloading embedded viruses or malware, many uncommon file types or executable files may be blocked by firewalls and antivirus protection programs, system administrators, or users. Therefore, we do not recommend using such file types unless they are critical to understanding or using your material (e.g., syntax from a methodological paper such as an SPSS macro might be saved with an SPS extension so that it can be used directly by other researchers). Briefly describe any supplemental materials in the text or a footnote to the text as appropriate (see Section 2.13).

Most journals make supplemental materials subject to peer review and require that they be submitted with the initial manuscript. Once accepted, the supplemental materials are typically posted with no editing, formatting, or typesetting. For APA journals, a link to the supplemental materials appears in the published article and leads readers to a landing page that includes a bibliographic citation, a link to the published article, and a context statement and link for each supplemental file (see an example of a landing page at https://on.apa.org/2CmDGd6). Other journals may include links in the article that directly open the supplemental files. See Chapter 3 for more details on the role of supplemental materials in JARS. See the APA website

(https://on.apa.org/2Qo7OhX) materials.	for additional	information	about su	pplemental

Format

2.16 Importance of Format

Use the guidelines in this section to format all APA Style papers. The physical appearance of a paper can enhance or detract from it. A well-prepared paper encourages editors and reviewers, as well as instructors in the case of student work, to view authors' work as professional. In contrast, mechanical flaws can lead reviewers or instructors to misinterpret content or question the authors' expertise or attention to detail, and students may receive a lower grade because of formatting errors. For manuscripts being submitted for publication, publishers will use your word-processing file to produce the typeset version of your article, so it is important that you properly format your article.

2.17 Order of Pages

Arrange the pages of the paper in the following order:

- title page (page 1)
- abstract (start on a new page after the title page)
- text (start on a new page after the abstract, or after the title page if the paper does not have an abstract)
- references (start on a new page after the end of the text)
- footnotes (start on a new page after the references)
- tables (start each on a new page after the footnotes)
- figures (start each on a new page after the tables)
- appendices (start each on a new page after the tables and/or figures)

APA Style provides options for the display of footnotes, tables, and figures. Footnotes may appear either in the footer of the page where they are first mentioned (see Section 2.13) or on a separate page after the references. Tables and figures may be embedded within the text after they have been mentioned, or each table and figure can be displayed on a separate page after the footnotes (or after the references if there is no footnotes page; see Section 7.6).

2.18 Page Header

All papers should contain the page number, flush right, in the header of every page. Use the automatic page-numbering function of your word-processing pro-gram to insert page numbers in the top right corner; do not type page numbers manually. The title page is page number 1.

Manuscripts being submitted for publication should contain the running head (see Section 2.8) in the page header in addition to the page number. When both elements appear, the running head should be flush left and the page number should be flush right. Student papers need only the page number in the page header, unless the instructor or institution also requires a running head.

2.19 Font

APA Style papers should be written in a font that is accessible to all users. Historically, sans serif fonts have been preferred for online works and serif fonts for print works; however, modern screen resolutions can typically accommodate either type of font, and people who use assistive technologies can adjust font settings to their preferences. Thus, a variety of font choices are permitted in APA Style; also check with your publisher, instructor, or institution for any requirements regarding font.

Use the same font throughout the text of the paper. Options include

- a sans serif font such as 11-point Calibri, 11-point Arial, or 10-point Lucida Sans Unicode or
- a serif font such as 12-point Times New Roman, 11-point Georgia, or normal (10-point) Computer Modern (the latter is the default font for LaTeX).

We recommend these fonts because they are legible and widely available and because they include special characters such as math symbols and Greek letters.

An APA Style paper may contain other fonts or font sizes under the following circumstances:

• Within figure images, use a sans serif font with a type size between 8 and 14 points.

- When presenting computer code, use a monospace font, such as 10-point Lucida Console or 10-point Courier New.
- When presenting a footnote in a page footer, the default footnote settings of your word-processing program are acceptable (e.g., 10-point font with single line spacing).

Because different fonts take up different amounts of space on the page, we recommend using word count rather than page count to gauge paper length (see Section 2.25). See the APA Style website (https://apastyle.apa.org) for further discussion of font and accessible typography.

2.20 Special Characters

Special characters are accented letters and other diacritical marks, Greek letters, math signs, and symbols. Type special characters using the special character functions of your word-processing program or a plug-in such as MathType. Characters that are not available should be presented as images. For more information on Greek letters and mathematical symbols, see Sections 6.44 and 6.45.

2.21 Line Spacing

Double-space the entire paper, including the title page, abstract, text, headings, block quotations, reference list, table and figure notes, and appendices, with the following exceptions:

- Elements of the title page are double-spaced, and an additional double-spaced blank line appears between the title and byline. At least one double-spaced blank line also appears between the final affiliation and any author note (see Figure 2.1).
- The table body (cells) and words within the image part of a figure may be single-spaced, one-and-a-half-spaced, or double-spaced, depending on what format creates the most effective presentation of the data. If text appears on the same page as a table or figure, insert a double-spaced blank line between the text and the table or figure (for more information on placement of tables and figures, see Section 7.6).

- Footnotes that appear at the bottom of the page on which they are called out should be single-spaced and formatted with the default settings of your word-processing program. Footnotes that appear on their own page after the references should be formatted like regular paragraphs of text—that is, indented and double-spaced.
- It is permissible to apply triple- or quadruplespacing in special circumstances, such as before and after a displayed equation.

It is not necessary to add blank lines before or after headings, even if a heading falls at the end of a page. Do not add extra spacing between paragraphs.

2.22 Margins

Use 1-in. (2.54-cm) margins on all sides (top, bottom, left, and right) of the page. This is the default page margin in most word-processing programs. Dissertations and theses may have different requirements if they are to be bound (e.g., 1.5-in. left margins).

2.23 Paragraph Alignment

Align the text to the left and leave the right margin uneven ("ragged"). Do not use full justification, which adjusts the spacing between words to make all lines the same length (flush with the margins). Do not manually divide words at the end of a line, and do not use the hyphenation function to break words at the ends of lines. Do not manually insert line breaks into long DOIs or URLs; however, breaks in DOIs or URLs applied automatically by a word-processing program are permissible.

2.24 Paragraph Indentation

Indent the first line of every paragraph 0.5 in. For consistency, use the tab key or the automatic paragraph-formatting function of your word-processing program. The default settings in most word-processing programs are acceptable. The remaining lines of the paragraph should be left-aligned.

Exceptions to these paragraph indentation requirements are as follows:

- For professional papers, the title (in bold), byline, and affiliations on the title page should be centered (see Figure 2.1).
- For student papers, the title (in bold), byline, affiliations, course number and name, instructor, and assignment date should be centered (see Figure 2.2).
- Section labels should be centered (and bold; see Section 2.28).
- The first line of the abstract should be flush left (not indented; see Section 2.9).
- The entirety of a block quotation should be indented from the left margin 0.5 in. If the block quotation spans more than one paragraph, the first line of the second and any subsequent paragraphs of the block quotation should be indented another 0.5 in., such that those first lines are indented a total of 1 in. (see Section 8.27).
- Level 1 headings should be centered (and in bold), and Level 2 and 3 headings should be left-aligned (and in bold or bold italic, respectively; see Section 2.27).
- Table and figure numbers (Sections 7.10 and 7.24, respectively), titles (Sections 7.11 and 7.25), and notes (Sections 7.14 and 7.28) should be flush left.
- Reference list entries should have a hanging indent of 0.5 in. (see Section 2.12).
- Appendix labels and titles should be centered (and bold; see Section 2.14).

2.25 Paper Length

Journals differ in the average length of articles they publish; consult the journal's instructions for authors to determine the appropriate length for the type of article you are submitting. The length for student papers is determined by the assignment guidelines.

If a paper exceeds the target length, shorten it by stating points clearly and directly, confining discussion to the specific problem under investigation, deleting or combining data displays, eliminating repetition across sections, and writing in the active voice. For guidance on improving sentence and paragraph length, see Section 4.6. A professional paper that is still too long

may need to be divided into two or more papers, each with a more specific focus (however, see Section 1.16 on piecemeal publication).

Paper length targets may be specified by either page count or word count; we recommend word count because different fonts are slightly different sizes and may produce variations in the number of pages. In general, to determine the page count, count every page, including the title page and reference list. Likewise, to determine word count, count every word from beginning to end, including all in-text citations, reference entries, tables, figures (other than words in a figure image, which may not be captured by word count), and appendices. The default settings of the word-count function of your word-processing program are acceptable for determining the word count. Do not count text in the page header (i.e., running head and/or page numbers) or manually add any words within figure images to the word count (these words are generally not included in the automatic word count in programs such as Microsoft Word, Academic Writer, or Google Docs). If the journal to which you are submitting has different specifications for determining the page count or word count, follow the instructions of the journal.

Organization

2.26 Principles of Organization

In scholarly writing, sound organizational structure is the key to clear, precise, and logical communication. Before beginning to write, consider the best paper length and structure for your findings. Ordering your thoughts logically at both sentence and paragraph levels will also strengthen the impact of your writing.

Headings in a document identify the topic or purpose of the content within each section. Headings help readers become familiar with how a paper's content is organized, allowing them to easily find the information they seek. Headings should be succinct yet long enough to describe the content; see the sample papers at the end of this chapter for examples of effective headings. Concise headings help readers anticipate key points and track the development of your argument. Headings that are well formatted and clearly worded aid both visual and nonvisual readers of all abilities. Headings must be clearly distinguishable from the text. For a deeper discussion of how to effectively create and use headings (and related text) for all users (including those using assistive technologies), visit the APA Style website (https://apastyle.apa.org).

There are five possible levels of heading in APA Style (see Section 2.27), and all topics of equal importance should have the same level of heading. For example, in a multiexperiment paper, the headings for the Method and Results sections for Experiment 1 should be the same level as the headings for the Method and Results sections for Experiment 2, with parallel wording. In a single-experiment paper, the Method, Results, and Discussion sections should all have the same heading level. Avoid having only one subsection heading within a section, just like in an outline; use at least two subsection headings within a section, or use none (e.g., in an outline, a section numbered with a Roman numeral would be divided into either a minimum of A and B subsections or no subsections; an A subsection could not stand alone).

2.27 Heading Levels

APA Style headings have five possible levels: Level 1 headings are used for top-level or main sections, Level 2 Level

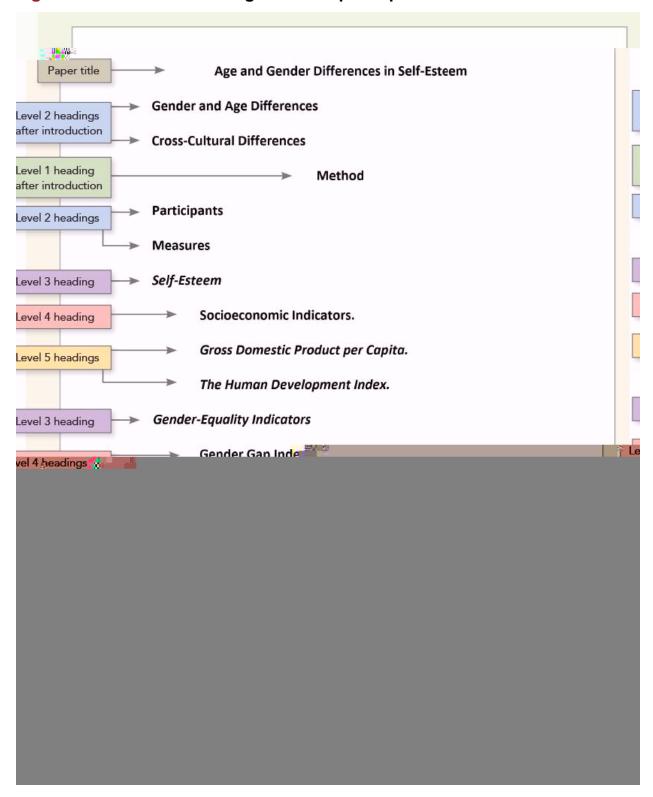
The number of levels of heading needed for a paper depends on its length and complexity; three is average. If only one level of heading is needed, use Level 1; if two levels are needed, use Levels 1 and 2; if three levels are needed, use Levels 1, 2, and 3; and so forth. Use only the number of headings necessary to differentiate distinct sections in your paper; short student papers may not require any headings. Do not label headings with numbers or letters.²

Table 2.3 shows how to format each level of heading, Figure 2.4 demonstrates the use of headings in the introduction, and Figure 2.5 lists all the headings used in a sample paper in correct format. The sample papers at the end of this chapter also show the use of headings in context.

Table 2.3 Format for the Five Levels of Heading in APA Style

Level	Format
	Centered, Bold, Title Case Heading
	Flush Left, Bold, Title Case Heading
	Flush Left, Bold Italic, Title Case Heading
	Indented, Bold, Title Case Heading, Ending With a Period.
	Indented, Bold Italic, Title Case Heading, Ending With a Period.

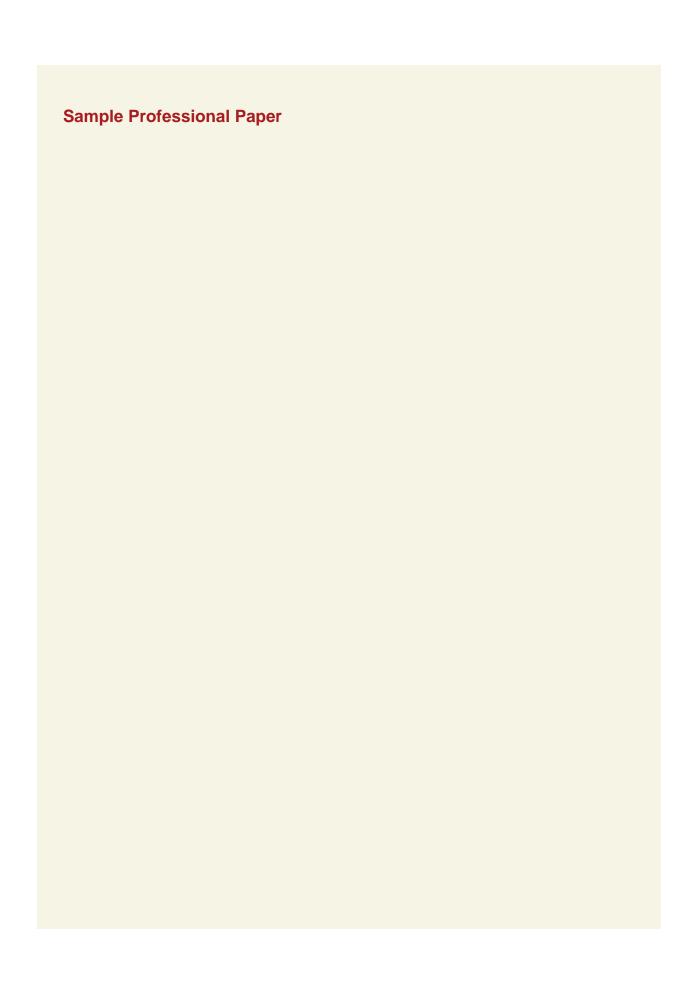
Figure 2.5 Format of Headings in a Sample Paper



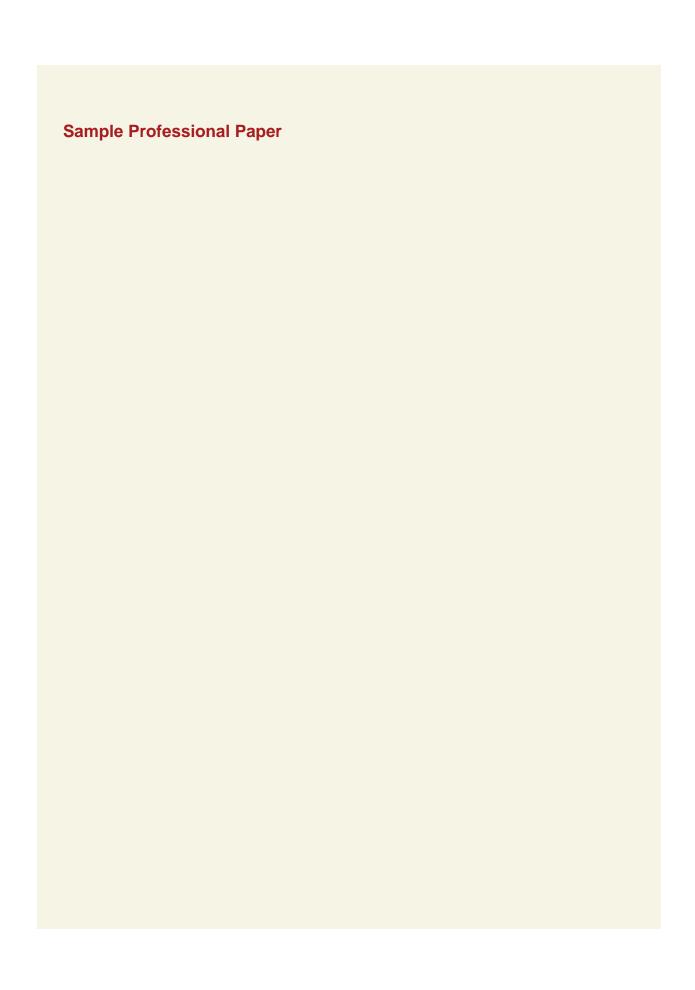
2.28 Section Labels

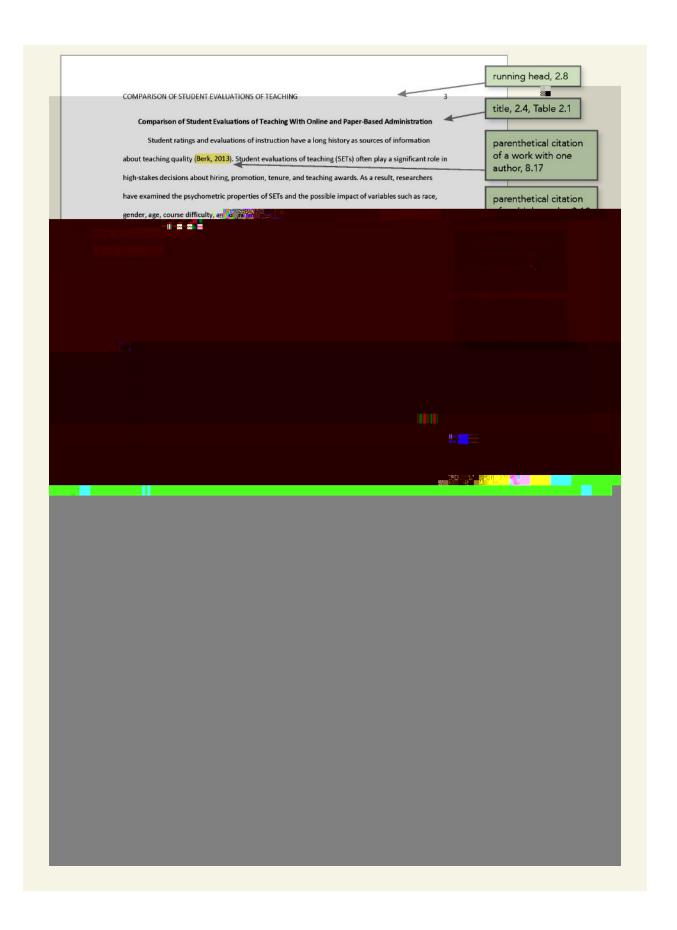
Section labels include "Author Note," "Abstract," the paper title at the top of the first page of text, "References," "Footnotes," and "Appendix A" (and other appendix labels). Place section labels on a separate line at the top of the page on which the section begins, in bold and centered.

Sample Papers

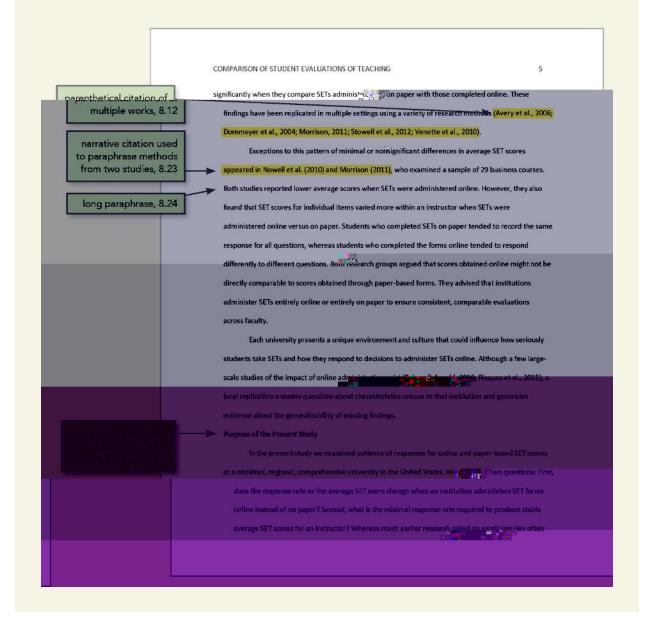




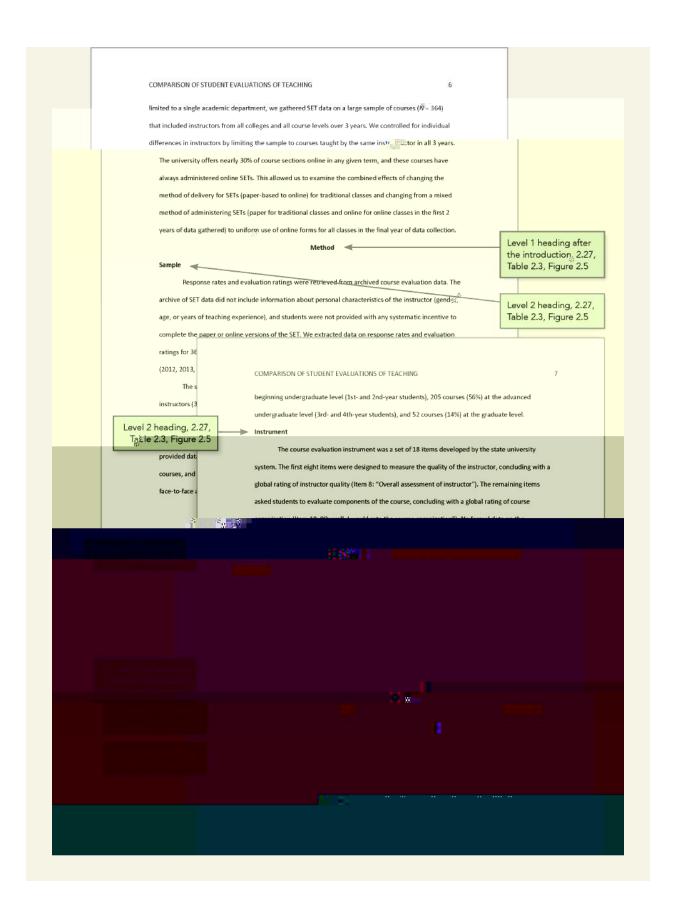




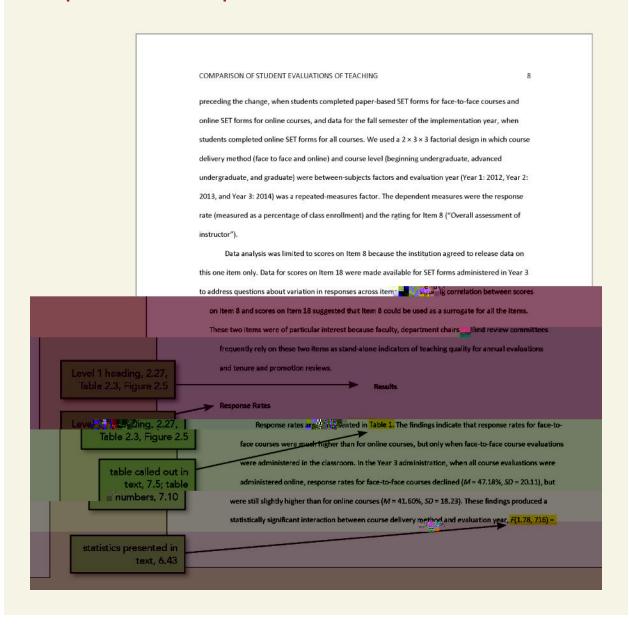
Sample Professional Paper

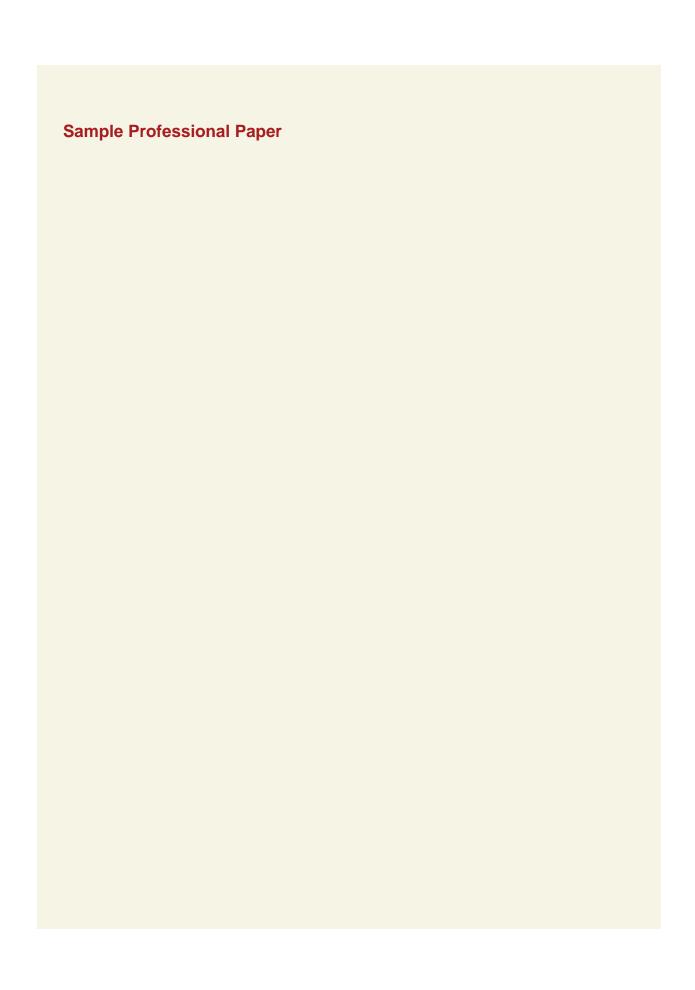


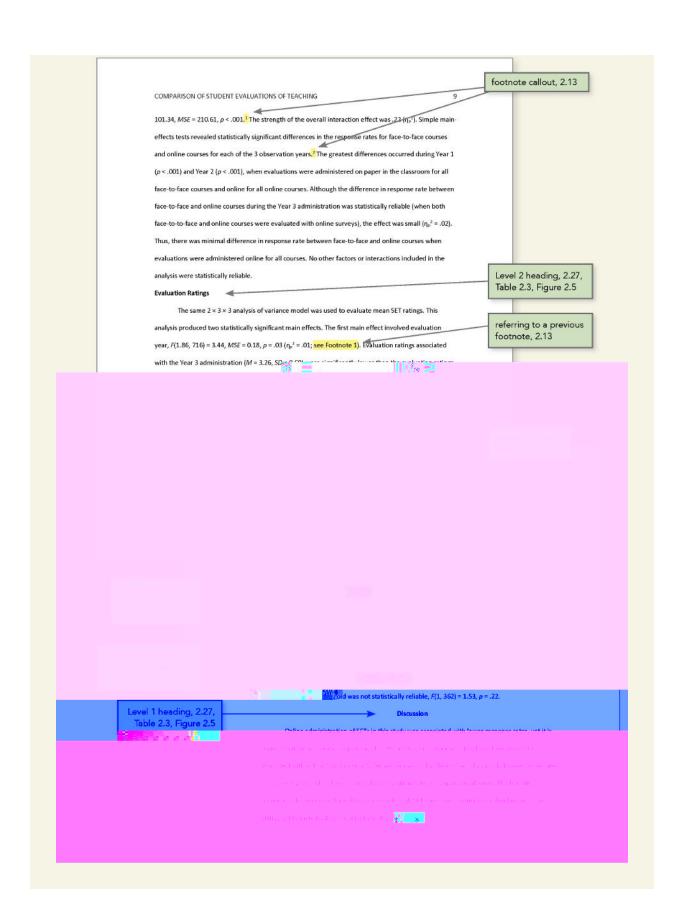
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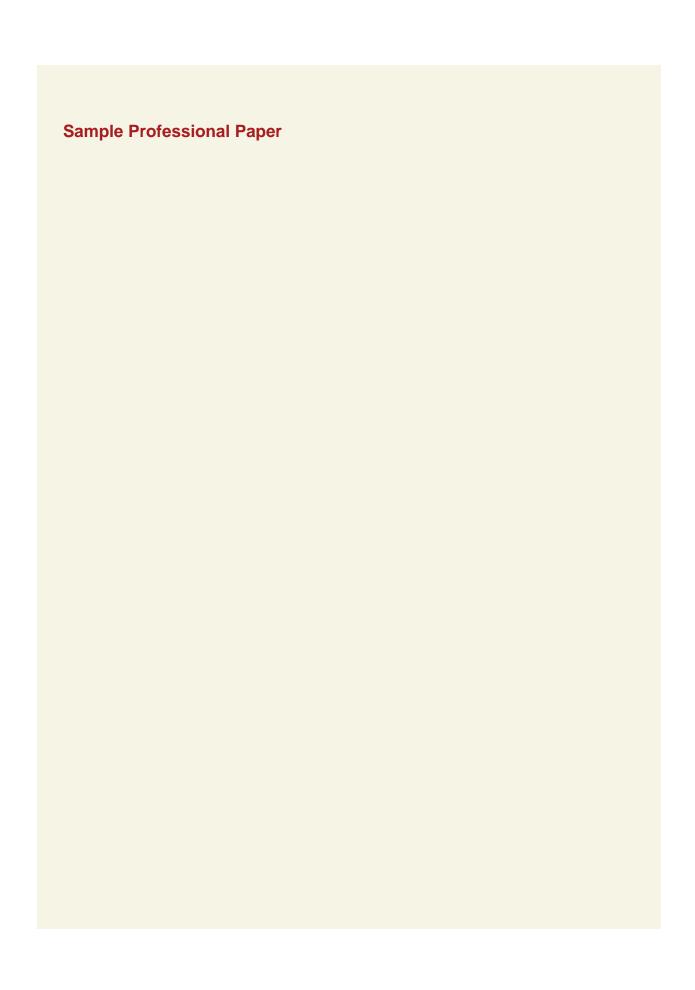
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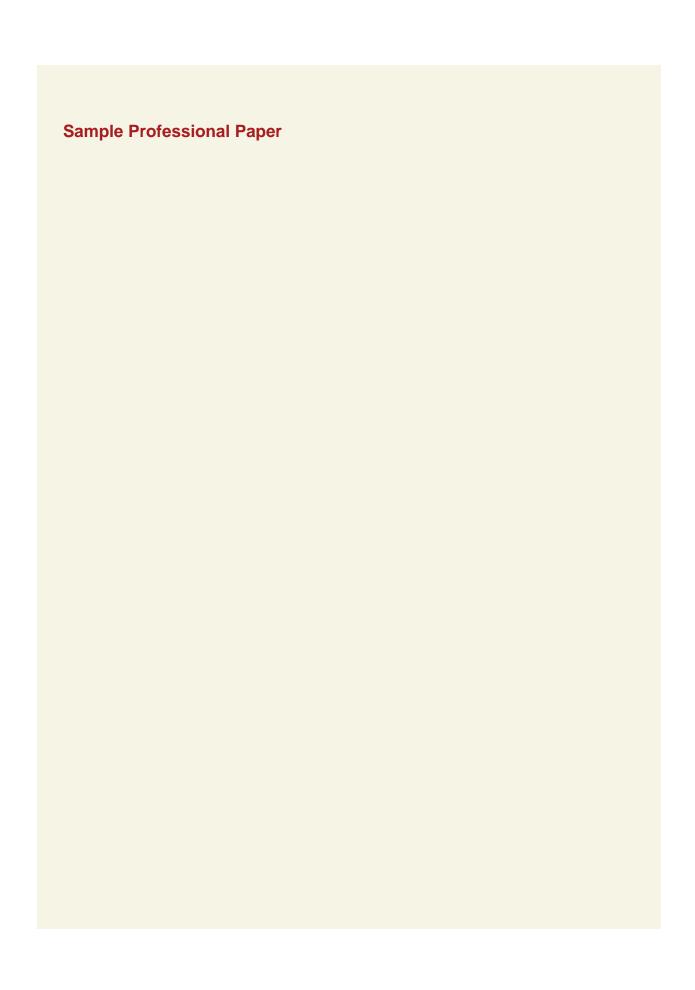


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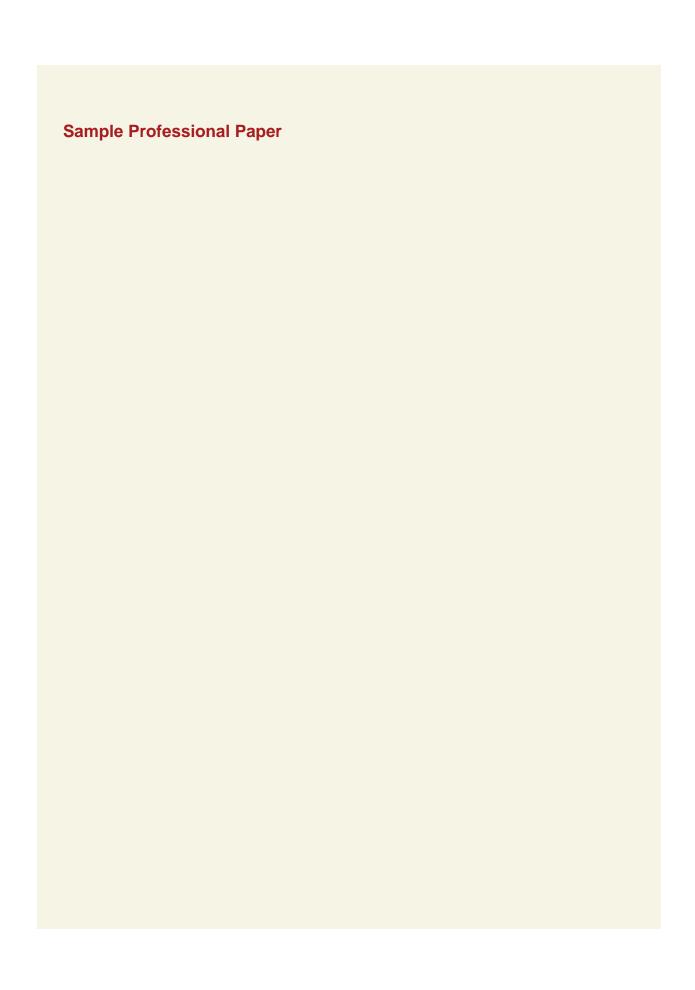


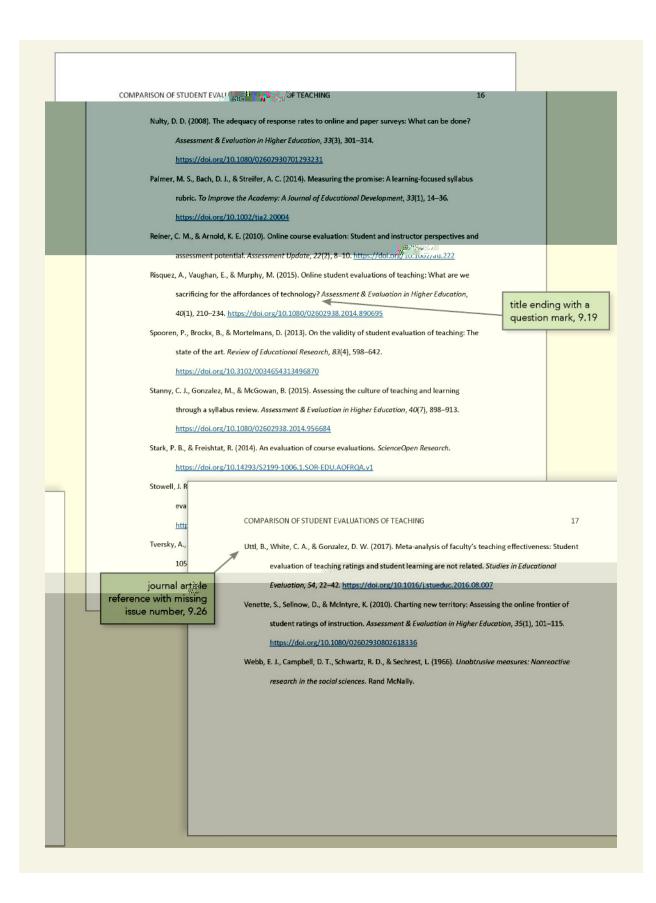


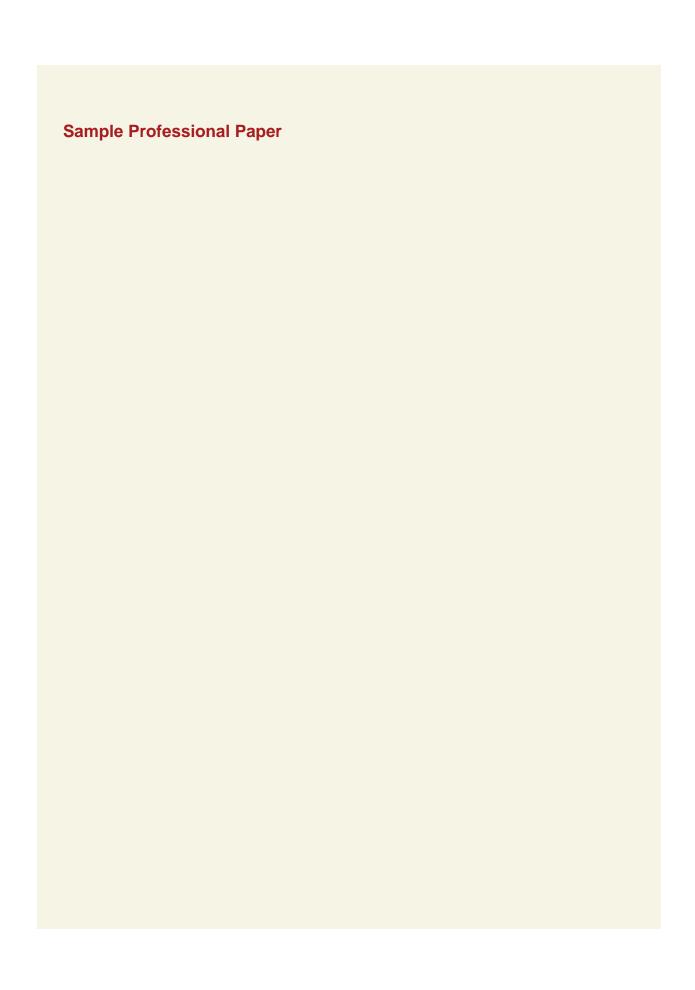
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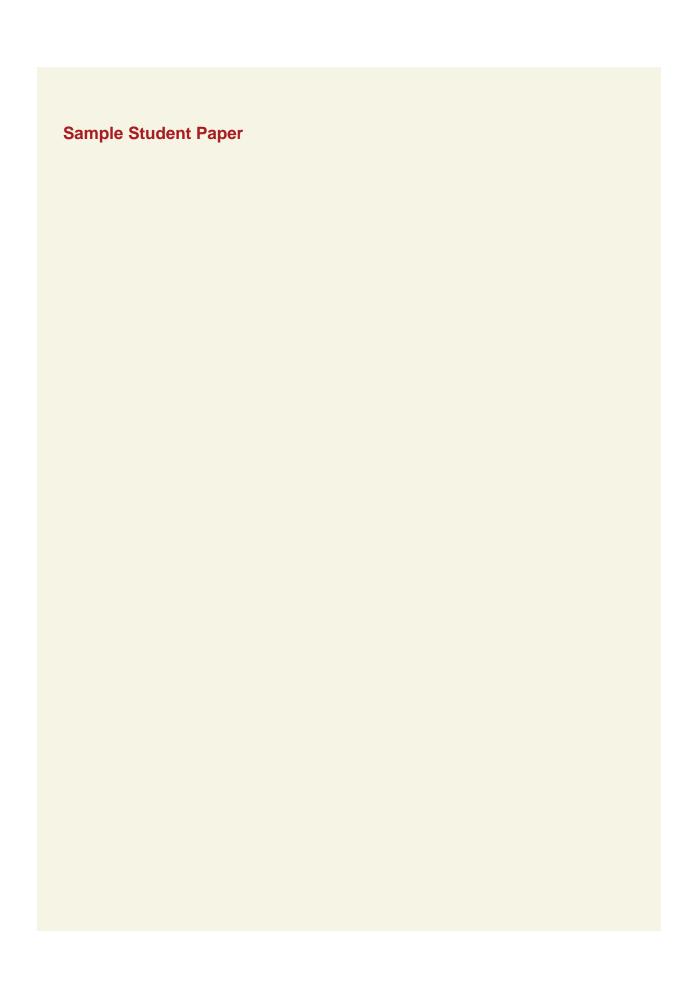


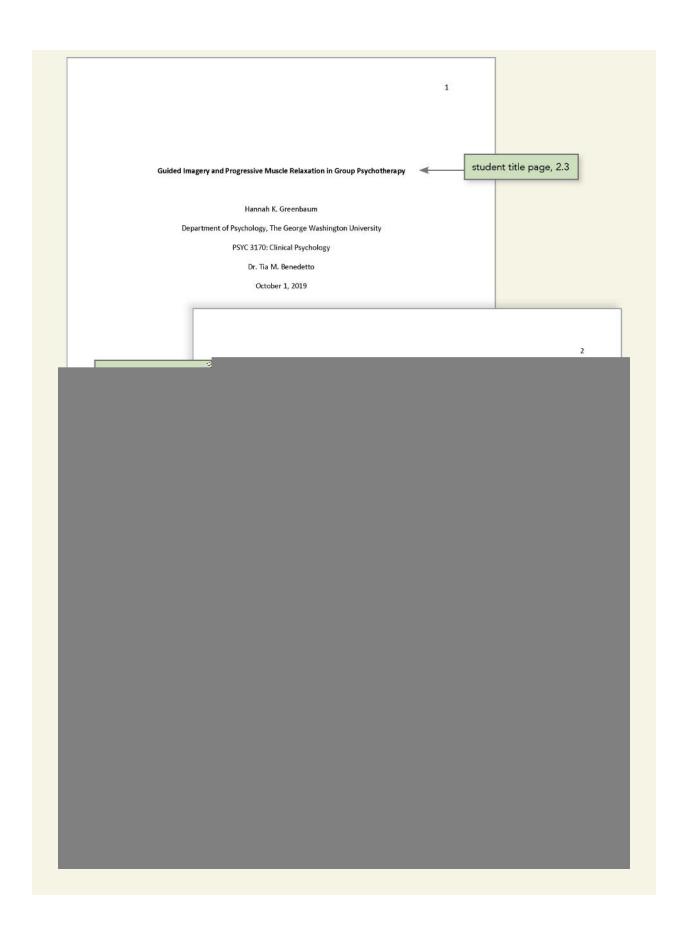


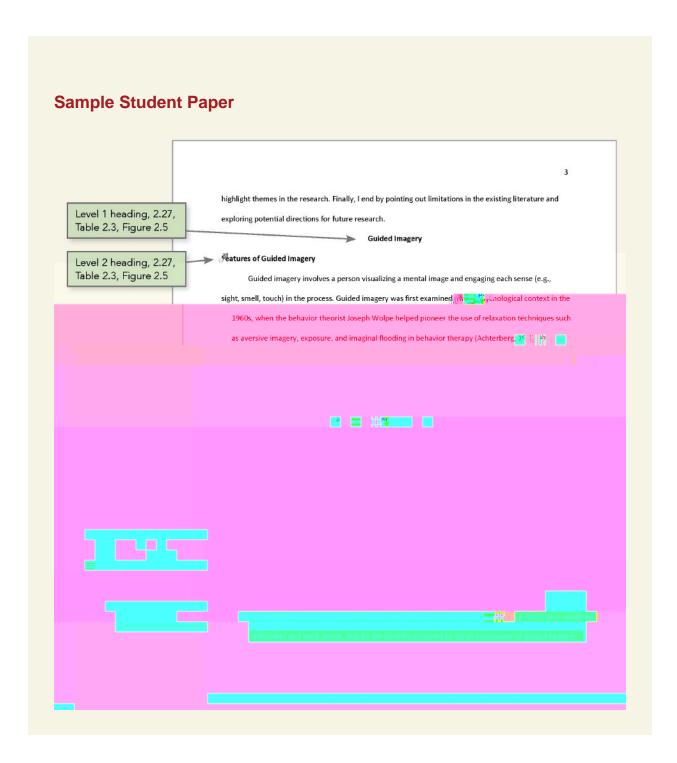


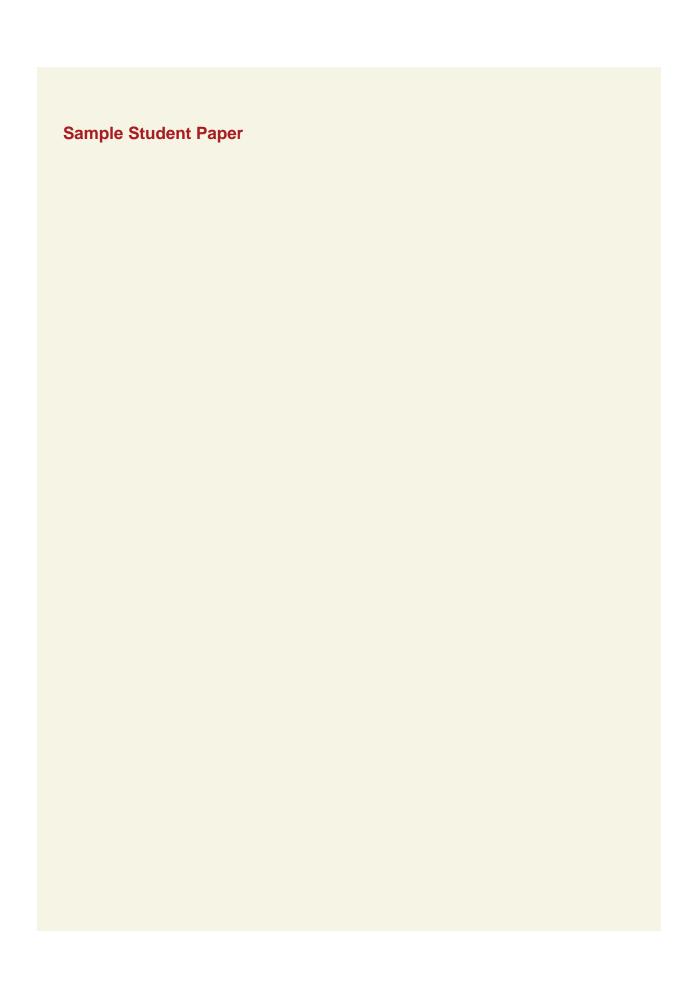


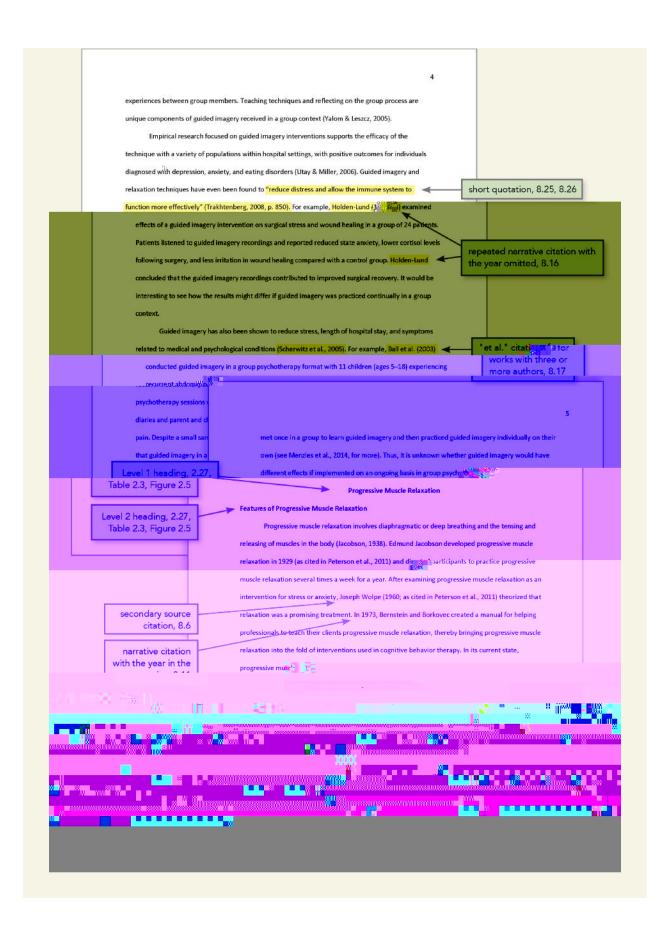


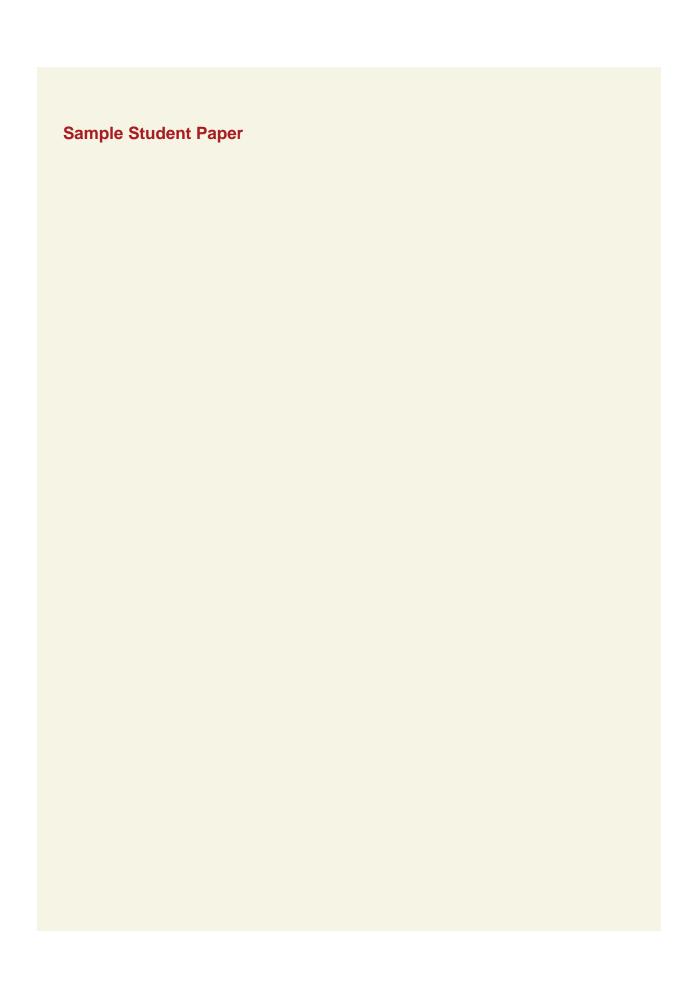


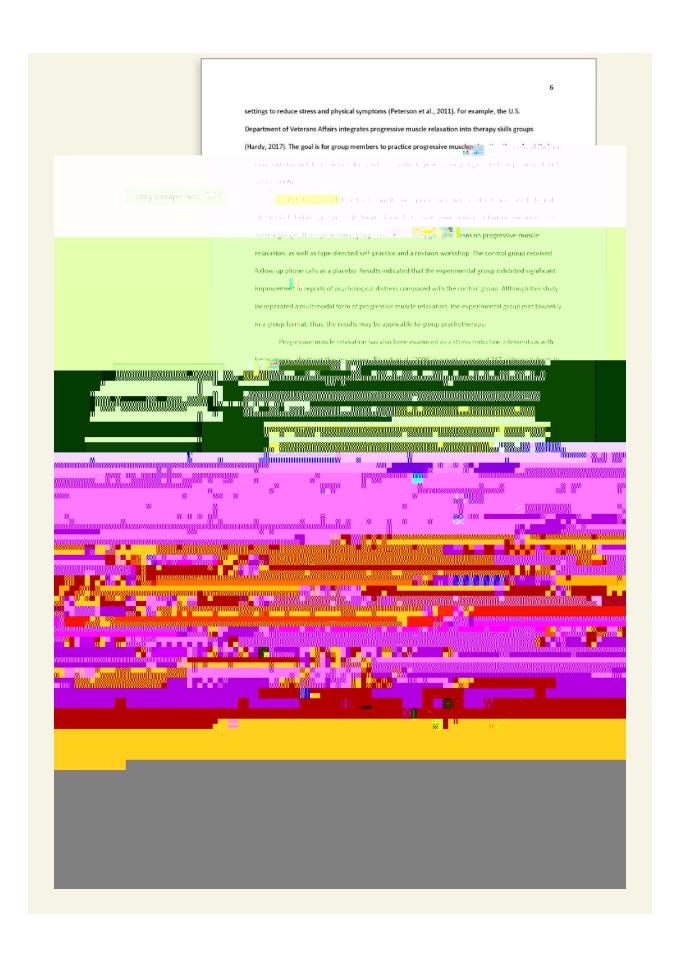


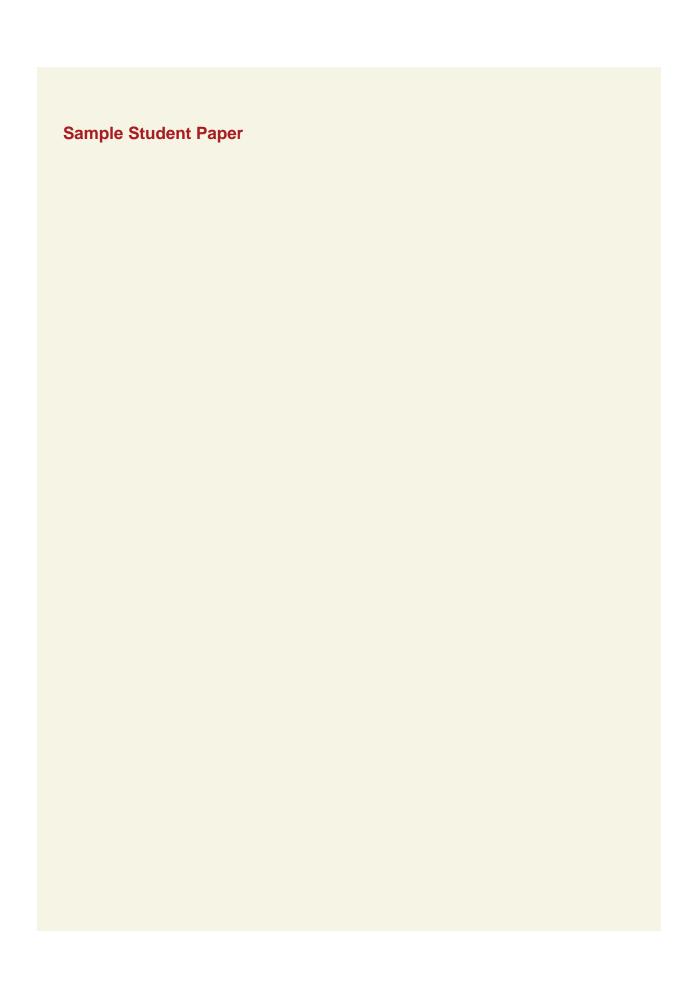


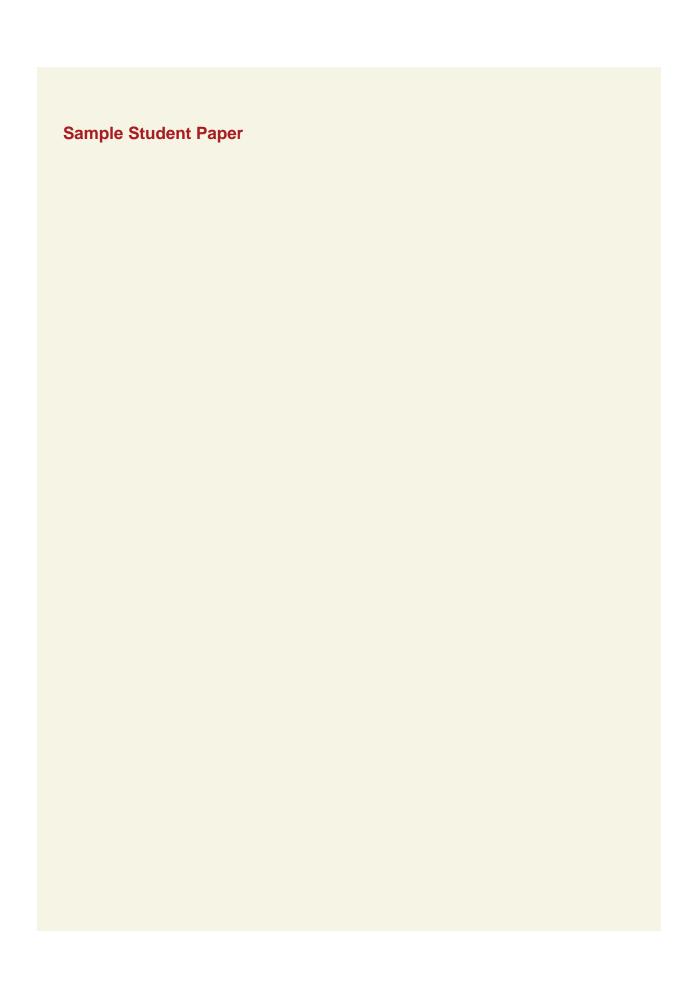














JOURNAL ARTICLE REPORTING STANDARDS

This chapter orients readers to a specialized set of guidelines developed by APA referred to as journal article reporting standards, or JARS. These standards provide guidelines for authors on what information should be included, at minimum, in journal articles. By using JARS, authors can make their research clearer, more accurate, and more transparent for readers. Writing clearly and reporting research in a way that is easier to comprehend helps ensure scientific rigor and methodological integrity and improves the quality of published research. Reporting standards are closely related to the way studies are designed and conducted, but they do not prescribe how to design or execute studies, and they are not dependent on the topic of the study or the particular journal in which the study might be published. Comprehensive, uniform reporting standards make it easier to compare research, to understand the implications of individual studies, and to allow techniques of meta-analysis to proceed more efficiently. Decision makers in policy and practice have also emphasized the importance of understanding how research was conducted and what was found.

This chapter contains practical guidance for authors who will use JARS when reporting their research—primarily, authors seeking professional

publication as well as undergraduate or graduate students conducting advanced research projects. Undergraduate students who are writing less complicated research papers may also find the standards on the abstract and introduction helpful (see Sections 3.3–3.4). Note that the information available regarding JARS is substantial and detailed; this chapter is only an introduction. The APA Style JARS website (https://apastyle.apa.org/jars) contains a wealth of resources (links to many appear throughout this chapter). JARS may also be revised and expanded in the future as new standards are developed; any such changes will be reflected on the website. The sections that follow discuss the application of the principles of JARS, including why the standards exist and how they have evolved; terminology used to discuss JARS, with a link to a glossary on the JARS website; reporting standards for abstracts and introductions that pertain to all types of research articles; and specific standards for quantitative, qualitative, and mixed methods research.

Overview of Reporting Standards

3.1 Application of the Principles of JARS

By adopting and following JARS in their articles, researchers

- help readers fully understand the research being reported and draw valid conclusions from the work,
- allow reviewers and editors to properly evaluate manuscripts submitted for publication for their scientific value,
- enable future researchers to replicate the research reported,
- foster transparency (for more on the ethic of transparency in JARS, see the JARS website at https://apastyle.apa.org/jars/transparency), and
- improve the quality of published research.

Within these guidelines for reporting standards, however, is flexibility in how the standards are applied across different types of research studies. Guidelines on where to include information recommended in JARS within an article are flexible in most cases (exceptions are information that must appear 1 M Mi

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JARS, published in 2018 (see Appelbaum et al., 2018; Levitt et al., 2018), expands on the types of quantitative research (JARS–Quant) addressed and now includes standards for reporting qualitative (JARS–Qual) and mixed methods (JARS–Mixed) research. As research approaches continue to evolve, authors should use these standards to support the publication of research; they should not allow these standards to restrict the development of new methods.

3.2 Terminology Used in JARS

Researchers use many methods and strategies to meet their research goals, and the guidelines in JARS were developed to facilitate the reporting of research across a range of research traditions (Appelbaum et al., 2018; Levitt et al., 2018). These methods fall into either quantitative (Sections 1.1 and 3.5–3.8), qualitative (Sections 1.2 and 3.13–3.16), or mixed methods (Sections 1.3 and 3.18) traditions; separate reporting standards exist for each tradition. There are also specialized standards for particular quantitative (see Sections 3.9–3.12) and qualitative methodologies (see Section 3.17), such as meta-analysis.

Given this diversity, the terms used in this chapter may be unfamiliar to some readers. See the JARS website (https://apastyle.apa.org/jars/glossary) for a glossary of related terms, including "approaches to inquiry," "data-analytic strategies," "data-collection strategies," "methodological integrity," "research design," and "trustworthiness." Because researchers do not always agree on terminology, we encourage authors to translate these terms to reflect their own preferred approaches, taking care to define terms for readers. We recognize that our language inevitably carries philosophical implications (e.g., do researchers "discover," "understand," or "co-construct" findings?). We also encourage reviewers and editors to view our terms as placeholders that may be usefully varied by authors to reflect the values of their research traditions.

Common Reporting Standards Across Research Designs

Many aspects of the scientific process are common across quantitative, qualitative, and mixed methods approaches. This section reviews reporting standards that have considerable overlap for the two initial elements of journal articles—the abstract and the introduction. We present the common reporting standards for the abstract and introduction as well as some distinctive features for each approach. For descriptions of and formatting guidelines for the title, byline and institutional affiliation, author note, running head, abstract, keywords, text (the body of a paper), reference list, footnotes, appendices, and supplemental materials, see Chapter 2 (Sections 2.4–2.15).

3.3 Abstract Standards

An abstract is a brief, comprehensive summary of the contents of the paper. A well-prepared abstract can be the most important paragraph in an article. Many people have their first contact with an article by reading the title and abstract, usually in comparison with several others, as they conduct a literature search. Readers frequently decide on the basis of the abstract whether to read the entire article. The abstract needs to be dense with information. By embedding essential terms in your abstract, you enhance readers' ability to find the article. This section addresses the qualities of a good abstract and standards for what to include in abstracts for different paper types (see Sections 1.1–1.10). Requirements for abstract length and instructions on formatting the abstract are presented in Section 2.9.

A good abstract is

• Ensure that the abstract correctly reflects the purpose and content of the paper. Do not include information that does not appear in the paper body. If the study extends or replicates previous research, cite the relevant work with an author—date citation.

- Report rather than evaluate; do not add to or comment on what is in the body of the paper.
- Write in clear and deliberate language. Use verbs rather than their noun equivalents and the active rather than the passive voice (e.g., "investigated" instead of "an investigation of"; "we present results" instead of "results are presented"; see Section 4.13). Use the present tense to describe conclusions drawn or results with continuing applicability; use the past tense to describe specific variables manipulated or outcomes measured. If presenting statistical or mathematical information, see Sections 6.40 to 6.48 for the appropriate formats.
- Be brief, and make each sentence maximally informative, especially the lead sentence. Begin the abstract with the most important points. Do not waste space by repeating the title. Include only the four or five most important concepts, findings, or implications. Use the specific words in your abstract that you think your audience will use in their searches.

The abstract for an empirical article (quantitative, qualitative, or mixed methods; see Sections 1.1–1.3) should describe the following:

- the problem under investigation, in one sentence, if possible; when presenting quantitative analyses, include the main hypotheses, questions, or theories under investigation
- participants or data sources, specifying pertinent characteristics (e.g., for nonhuman animal research, include the genus and species); participants will be described in greater detail in the body of the paper
- essential features of the study method, including
 - research design (e.g., experimental, observational, qualitative, mixed methods)
 - analytic strategy (e.g., ethnography, factor analysis)
 - data-gathering procedures
 - sample size (typically for quantitative analyses) or description of the volume of observations or number of participants (typically for qualitative analyses)

- materials or central measures used
- o a statement about whether the study is a secondary data analysis
- basic findings, including
 - o for quantitative analyses, effect sizes and confidence intervals in addition to statistical significance levels when possible
 - for qualitative methods, main findings in relation to central contextual features
- conclusions and implications or applications of the research findings

The abstract for a replication article (see Section 1.4) should describe the following:

- type of replication being reported (e.g., direct [exact, literal], approximate, conceptual [construct])
- scope of the replication in detail
- original study or studies that are being replicated
- general conclusions reached in the replication

The abstract for a quantitative or qualitative meta-analysis (see Section 1.5) should describe the following:

- research problems, questions, or hypotheses under investigation
- characteristics for the inclusion of studies, including
 - o for quantitative meta-analyses, independent variables, dependent variables, and eligible study designs
 - for qualitative meta-analyses, criteria for eligibility in terms of study topic and research design
- methods of synthesis, including statistical or qualitative metamethods used to summarize or compare studies and specific methods used to integrate studies
- main results, including
 - o for all studies, the number of studies; the number of participants, observations, or data sources; and their important characteristics
 - o for quantitative analyses, the most important effect sizes and any

important moderators of these effect sizes

- o for qualitative analyses, the most important findings in their context
- conclusions (including limitations)
- implications for theory, policy, and/or practice

The abstract for a literature review article (also called a narrative literature review article; see Section 1.6) should describe the substantive content being reviewed, including the following:

- scope of the literature examined in the review (e.g., journals, books, unpublished abstracts) and the number of items included in the review
- period of time covered in the review (e.g., range of years)
- general conclusions reached in the review

The abstract for a theoretical article (see Section 1.7) should describe the following:

- how the theory or model works and/or the principles on which it is based
- what phenomena the theory or model accounts for and linkages to empirical results

The abstract for a methodological article (see Section 1.8) should describe the following:

- general class, essential features, and range of applications of the methods, methodologies, or epistemological beliefs being discussed
- essential features of the approaches being reported, such as robustness or power efficiency in the case of statistical procedures or methodological integrity and trustworthiness in the case of qualitative methods

3.4 Introduction Standards

The body of a paper always opens with an introduction. The introduction contains a succinct description of the issues being reported, their historical antecedents, and the study objectives.

The introduction of an article frames the issues being studied. Consider the various concerns on which your issue touches and its effects on other outcomes (e.g., the effects of shared storybook reading on word learning in children). This framing may be in terms of fundamental psychological theory, potential application including therapeutic uses, input for public policy, and so forth. Proper framing helps set readers' expectations for what the report will and will not include.

Review the literature succinctly to convey to readers the scope of the problem, its context, and its theoretical or practical implications. Clarify which elements of your paper have been subject to prior investigation and how your work differs from earlier reports. In this process, describe any key issues, debates, and theoretical frameworks and clarify barriers, knowledge gaps, or practical needs. Including these descriptions will show how your work builds usefully on what has already been accomplished in the field.

Clearly state and delimit the aims, objectives, and/or goals of your study. Make explicit the rationale for the fit of your design in relation to your aims and goals. Describe the goals in a way that clarifies the appropriateness of the methods you used.

Quantitative Goals. In a quantitative article, the introduction should identify the primary and secondary hypotheses as well as any exploratory hypotheses, specifying how the hypotheses derive from ideas discussed in previous research and whether exploratory hypotheses were derived as a result of planned or unplanned analyses.

Qualitative Goals. In a qualitative article, the introduction may contain case examples, personal narratives, vignettes, or other illustrative materials. It should describe your research goal(s) and approach to inquiry. Examples of qualitative research goals include developing theory, hypotheses, and deep understandings (e.g., Hill, 2012; Stiles, 1993); examining the development of a social construct (e.g., Neimeyer et al., 2008); addressing societal injustices (e.g., Fine, 2013); and illuminating social discursive practices—that is, the way interpersonal and public communications are enacted (e.g., Parker, 2015). The term approaches to inquiry refers to the philosophical

assumptions that underlie research traditions or strategies—for example, the researchers' epistemological beliefs, worldview, paradigm, strategies, or research traditions (Creswell & Poth, 2018; Morrow, 2005; Ponterotto, 2005). For instance, you might indicate that your approach or approaches to inquiry are constructivist, critical, descriptive, feminist, interpretive, postmodern, postpositivist, pragmatic, or psychoanalytic. Note that researchers may define these philosophies differently, and some qualitative research is more question driven and pragmatic than theoretical. You might also address your approach to inquiry in the Method section (see Section 3.14).

Mixed Methods Goals. In a mixed methods or multimethod article, the introduction should describe the objectives for all study components presented, the rationale for their being presented in one study, and the rationale for the order in which they are presented within the paper (see Section 3.18). In all cases, clarify how the questions or hypotheses under examination led to the research design to meet the study aims.

Goals for Other Types of Papers. Introductions for other types of papers follow similar principles and articulate the specific motivation for the study. For instance, a replication study conducted as a quantitative study would have an introduction that follows the principles for the introduction of a quantitative study but that emphasizes the need to replicate a certain study or set of studies as well as the methods used to accomplish the desired replication.

Reporting Standards for Quantitative Research

3.5 Basic Expectations for Quantitative Research Reporting

Whereas standards for reporting information in the abstract and introduction of a paper are common to all kinds of research (see Sections 3.3–

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Participants
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Study Method
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Findings
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Conclusions
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Introduction
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Inclusion and Exclusion

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Participant Characteristics
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Sampling Procedures
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Data Collection
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Masking
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Psychometrics

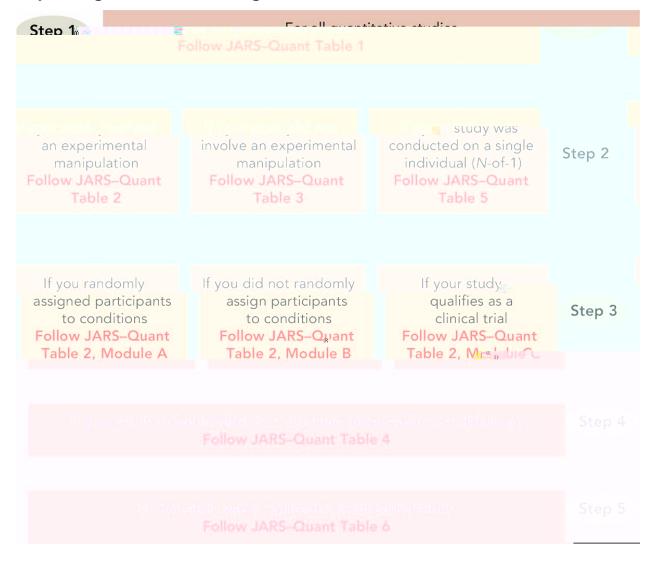
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Recruitment
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Statistics and Data Analysis
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Generalizability

Implications

Figure 3.1 Flowchart of Quantitative Reporting Standards to Follow Depending on Research Design



3.6 Quantitative Method Standards

The Method section of a paper provides most of the information that readers need to fully comprehend what was done in the execution of an empirical study. This section provides information that allows readers to understand the research being reported and that is essential for replication of the study, although the concept of replication may depend on the nature of the study. The basic information needed to understand the results should (as a rule) appear in the main article, whereas other methodological information (e.g., detailed descriptions of procedures) may appear in supplemental materials. Readability of the resulting paper must be part of the decision about where material is ultimately located. Details of what content needs to be presented in the Method section of a quantitative article are presented in Table 3.1 and must be used in conjunction with JARS—Quant Tables 2 to 9 on the JARS website (https://apastyle.apa.org/jars/quantitative).

Appropriate identification of research participants is critical to the science and practice of psychology, particularly for generalizing the findings, making comparisons across replications, and using the evidence in research syntheses and secondary data analyses.

Detail the major demographic characteristics of the sample, such as age; sex; ethnic and/or racial group; level of education; socioeconomic, generational, or immigrant status; disability status; sexual orientation; gender identity; and language preference, as well as important topic-specific characteristics (e.g., achievement level in studies of educational interventions). As a rule, describe the groups as specifically as possible, emphasizing characteristics that may have bearing on the interpretation of results. Participant characteristics can be important for understanding the nature of the sample and the degree to which results can be generalized. For example, the following is a useful characterization of a sample:

To help readers determine how far the data can be generalized, you may find it useful to identify subgroups.

Even when a characteristic is not used in analysis of the data, reporting it may give readers a more complete understanding of the sample and the generalizability of results and may prove useful in meta-analytic studies that incorporate the article's results. The descriptions of participant characteristics should be sensitive to the ways the participants understand and express their identities, statuses, histories, and so forth. Chapter 5 contains further guidance on writing without bias.

When nonhuman animal subjects are used, report the genus, species, and strain number or other specific identifier, such as the name and location of the supplier and the stock designation. Give the number of nonhuman animal subjects and their sex, age, weight, and physiological condition.

Describe the procedures for selecting participants, including (a) the sampling method, if a systematic plan was implemented; (b) the percentage of the sample approached that participated; and (c) whether self-selection into the study occurred (either by individuals or by units such as schools or clinics) and the number of participants who selected themselves into the sample. Report inclusion and exclusion criteria, including any restriction based on demographic characteristics.

Describe the settings and locations in which the data were collected and provide the dates of data collection as a general range of dates, including dates for repeated measurements and follow-ups. Describe any agreements with and payments made to participants. Note institutional review board approvals, data safety board arrangements, and with ra ogi undel qn.

go beyond what the achieved sample warrants. State how the intended sample size was determined (e.g., analysis of power or precision). If interim analysis and stopping rules were used to modify the desired sample size, describe the methodology and results of applying that methodology.

Include in the Method section definitions of all primary and secondary outcome measures and covariates, including measures collected but not included in the current report. Provide information on instruments used, including their psychometric and biometric properties and evidence of cultural validity (Section 3.10 for how to cite hardware and apparatuses; see Section 10.11 for how to cite tests, scales, and inventories).

Describe the methods used to collect data (e.g., written questionnaires, interviews, observations). Provide information on any masking of participants in the research (i.e., whether participants, those administering the manipulations, and/or those assessing the outcomes were unaware of participants' assignment to conditions), how masking was accomplished, and how the masking was assessed. Describe the instrumentation used in the study, including standardized assessments, physical equipment, and imaging protocols, in sufficient detail to allow exact replication of the study.

Describe methods used to enhance the quality of measurements, including training and reliability of data collectors, use of multiple observers, translation of research materials, and pretesting of materials on populations who were not included in the initial development of the instrumentation. Pay attention to the psychometric properties of the measurement in the context of contemporary testing standards and the sample being investigated; report the psychometric characteristics of the instruments used following the principles articulated in the Standards for Educational and Psychological Testing (American Educational Research Association et al., 2014). In addition to psychometric characteristics for paper-and-pencil measures, provide interrater reliabilities for subjectively scored measures and ratings. Internal consistency coefficients can be useful for understanding composite scales.

Specify the research design in the Method section. For example, were participants placed into conditions that were manipulated, or were they observed in their natural setting? If multiple conditions were created, how were participants assigned to conditions—through random assignment or some other selection mechanism? Was the study conducted as a between-subjects or a within-subjects design? Reporting standards vary on the basis of the research design (e.g., experimental manipulation with randomization, clinical trial without randomization, longitudinal design). Consult Figure 3.1 to determine which tables on the JARS website to use for your research design. See Sections 3.9 and 3.10 for a summary of design-specific reporting standards. See Section 3.11 for standards for particular analytic methods and Section 3.12 for quantitative meta-analysis standards.

Studies can be mixtures of various types; for instance, a study may involve an experimental manipulation with randomization with some factors repeated in a longitudinal fashion. For studies not currently covered by JARS, provide the commonly used name for that design. For more on mixed methods designs, see Section 3.18.

If experimental

manipulations or interventions were used in the study, describe their specific content. Include details of the interventions or manipulations intended for each study condition, including control groups (if any), and describe how and when interventions or experimental manipulations were administered. Describe the essential features of "treatment as usual" if that is included as a study or control condition.

Carefully describe the content of the specific interventions or experimental manipulations used. Often, this involves presenting a brief summary of instructions given to participants. If the instructions are unusual, or if the instructions themselves constitute the experimental manipulation, present them verbatim in an appendix or supplemental materials. If the text is brief, present it in the body of the paper if it does not interfere with the readability of the report.

Describe the methods of manipulation and data acquisition. If a mechanical apparatus was used to present stimulus materials or to collect data, include in the description of procedures the apparatus model number and manufacturer (when important, as in neuroimaging studies), its key settings or parameters

(e.g., pulse settings), and its resolution (e.g., stimulus delivery, recording precision). As with the description of the experimental manipulation or intervention, this material may be presented in the body of the paper, in an appendix, or in supplemental materials, as appropriate.

When relevant—such as in the delivery of clinical and educational interventions—the procedures should also contain a description of who delivered the intervention, including their level of professional training and their level of training in the specific intervention. Present the number of deliverers along with the mean, standard deviation, and range of number of individuals or units treated by each deliverer.

Provide information about (a) the setting in which the manipulation or intervention was delivered, (b) the intended quantity and duration of exposure to the manipulation or intervention (i.e., how many sessions, episodes, or events were intended to be delivered and how long they were intended to last), (c) the time span for the delivery of the manipulation or intervention of each unit (e.g., whether the manipulation delivery was completed in one session, or, if participants returned for multiple sessions, how much time passed between the first and last session), and (d) activities or incentives used to increase compliance.

When an instrument is translated into a language other than the language in which it was developed, describe the specific method of translation (e.g., back-translation, in which a text is translated into another language and then back into the first language to ensure that it is equivalent enough that results can be compared).

Describe how participants were grouped during data acquisition (i.e., was the manipulation or intervention administered individual by individual, in small groups, or in intact groupings such as classrooms?). Indentify the smallest unit (e.g., individuals, work groups, classes) that was analyzed to assess effects. If the unit used for statistical analysis differed from the unit used to deliver the intervention or manipulation (i.e., from the unit of randomization), describe the analytic method used to account for this (e.g., adjusting the standard error estimates, using multilevel analysis).

Describe how data were inspected after collection and, if relevant, any modifications of those data. These procedures may include

outlier detection and processing, data transformations based on empirical data distributions, and treatment of missing data or imputation of missing values.

Describe the quantitative analytic strategies (usually statistical) used in analysis of the data, being careful to describe error-rate considerations (e.g., experiment-wise, false discovery rate). The analytic strategies should be described for primary, secondary, and exploratory hypotheses. Exploratory hypotheses are ones that were suggested by the data collected in the study being reported, as opposed to ones generated by theoretical considerations or previously reported empirical studies.

When applying inferential statistics, take seriously the statistical power considerations associated with the tests of hypotheses. Such considerations relate to the likelihood of correctly rejecting the tested hypotheses given a particular alpha level, effect size, and sample size. In that regard, provide evidence that the study has sufficient power to detect effects of substantive interest. Be careful in discussing the role played by sample size in cases in which not rejecting the null hypothesis is desirable (i.e., when one wishes to argue that there are no differences), when testing various assumptions underlying the statistical model adopted (e.g., normality, homogeneity of variance, homogeneity of regression), and in model fitting. Alternatively, use calculations based on a chosen target precision (confidence interval width) to determine sample sizes. Use the resulting confidence intervals to justify conclusions reached concerning effect sizes.

3.7 Quantitative Results Standards

In the Results section of a quantitative paper, summarize the collected data and the results of any analyses performed on those data relevant to the discourse that is to follow. Report the data in sufficient detail to justify your conclusions. Mention all relevant results, regardless of whether your hypotheses were supported, including results that run counter to expectation; include small effect sizes (or statistically nonsignificant findings) when theory predicts large (or statistically significant) ones. Do not hide uncomfortable results by omission. In the spirit of data sharing (encouraged by APA and other professional associations and sometimes required by funding agencies; see Section 1.14), raw data, including study characteristics

and individual effect sizes used in a meta-analysis, can be made available as supplemental materials (see Section 2.15) or archived online (see Section 10.9). However, raw data (and individual scores) generally are not presented in the body of the article because of length considerations. The implications of the results should be discussed in the Discussion section.

For experimental and quasi-experimental designs, provide a description of the flow of participants (humans, nonhuman animals, or units such as classrooms or hospital wards) through the study. Present the total number of participants recruited into the study and the number of participants assigned to each group. Provide the number of participants who did not complete the experiment or who crossed over to other conditions and explain why. Note the number of participants used in the primary analyses. (This number might differ from the number who completed the study because participants might not show up for or complete the final measurement.) See Figure 7.5 in Section 7.36 for an example flowchart that displays the flow of participants through each stage of a study.

Provide dates defining the periods of recruitment and followup and the primary sources of participants, when appropriate. If recruitment and follow-up dates differ by group, provide the dates for each group.

Analyses of the data and reporting of the results of those analyses are fundamental aspects of the conduct of research. Accurate, unbiased, complete, and insightful reporting of the analytic treatment of data (be it quantitative or qualitative) must be a component of all research reports. Researchers in the field of psychology use numerous approaches to the analysis of data, and no one approach is uniformly preferred as long as the method is appropriate to the research questions being asked and the nature of the data collected. The methods used must support their analytic burdens, including robustness to violations of the assumptions that underlie them, and must provide clear, unequivocal insights into the data. In reporting your statistical and data analyses, adhere to the organizational structure suggested in the Method section (see Section 3.6): primary hypotheses, secondary hypotheses, and exploratory hypotheses. Ensure that you have reported the results of data diagnoses (see Section 3.6) in the

Method section before you report the results linked to hypothesis confirmation or disconfirmation. Discuss any exclusions, transformations, or imputation decisions that resulted from the data diagnosis.

Historically, researchers in psychology have relied heavily on null hypothesis significance testing (NHST) as a starting point for many of their analytic approaches. Different fields and publishers have different policies; APA, for example, stresses that NHST is but a starting point and that additional reporting elements such as effect sizes, confidence intervals, and extensive description are needed to convey the most complete meaning of the results (Wilkinson & the Task Force on Statistical Inference, 1999; see also APA, n.d.-b). The degree to which any journal emphasizes NHST is a decision of the individual editor. However, complete reporting of all tested hypotheses and estimates of appropriate effect sizes and confidence intervals are the minimum expectations for all APA journals. Researchers are always responsible for the accurate and responsible reporting of the results of their research study.

Assume that readers have a professional knowledge of statistical methods. Do not review basic concepts and procedures or provide citations for the

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Reporting Results of Inferential Statistical Tests. When reporting the results of inferential statistical tests or when providing estimates of parameters or effect sizes, include sufficient information to help readers fully understand the analyses conducted and possible alternative explanations for the outcomes of those analyses. Because each analytic technique depends on different aspects of the data and assumptions, it is impossible to specify what constitutes a "sufficient set of statistics" in general terms. However, such a set usually includes at least the following: per-cell sample sizes, observed cell means (or frequencies of cases in each category for a categorical variable), and cell standard deviations or pooled within-cell variance. In the case of multivariable analytic systems, such as multivariate analyses of variance, regression analyses, structural equation modeling, and hierarchical linear modeling, the associated means, sample sizes, and variance-covariance (or correlation) matrix or matrices often represent a sufficient set of statistics. At times, the amount of information that constitutes a sufficient set of statistics is extensive; when this is the case, the information could be supplied in a supplementary data set or an appendix (see Sections 2.14–2.15). For analyses based on small samples (including N-of-1 investigations; see Section 3.10), consider providing the complete set of raw data in a table or figure, provided that confidentiality can be maintained. Your work will more easily become a part of the cumulative knowledge of the field if you include enough statistical information to allow its inclusion in future meta-analyses.

For inferential statistical tests (e.g., t, F, and chi-square tests), include the obtained magnitude or value of the test statistic, the degrees of freedom, the probability of obtaining a value as extreme as or more extreme than the one obtained (exact p value), and the size and direction of the effect. When point estimates (e.g., sample means, regression coefficients) are provided, always include an associated measure of variability (precision), with an indication of the specific measure used (e.g., standard error).

Inclusion of Confidence Intervals. It can be extremely effective to include confidence intervals (for estimates of parameters; functions of parameters, such as differences in means; and effect sizes) when reporting results. Because confidence intervals combine information on location and precision and can be directly used to infer significance levels, they are generally the best reporting strategy. As a rule, it is best to use a single confidence level,

specified on an a priori basis (e.g., a 95% or 99% confidence interval), throughout the article. Wherever possible, base discussion and interpretation of results on point and interval estimates.

When using complex data-analytic techniques—such as structural equation modeling, Bayesian techniques, hierarchical linear modeling, factor analysis, multivariate analysis, and similar approaches—provide details of the models estimated (see Section 3.11). Also provide (usually in supplemental materials) the associated variance—covariance (or correlation) matrices. Identify the software used to run the analysis (e.g., SAS PROC GLM or a particular R package) and any parametric settings used in running the analyses (references are not necessary for these software programs). Report any estimation problems (e.g., failure to converge), regression diagnosis issues, or analytic anomalies. Report any problems with statistical assumptions or data issues that might affect the validity of the findings.

Effect Sizes. For readers to appreciate the magnitude or importance of a study's findings, it is recommended to include some measure of effect size in the Results section. Effect sizes are statistical estimates; therefore, whenever possible, provide a confidence interval for each effect size reported to indicate the precision of estimation of the effect size. Effect sizes may be expressed in the original units (e.g., mean number of questions answered correctly, kilograms per month for a regression slope) and are most easily understood when reported as such. It is valuable to also report an effect size in some standardized or units-free or scale-free unit (e.g., Cohen's d value) or a standardized regression weight. Multiple degree-of-freedom effect-size indicators are less useful than effect-size indicators that decompose multiple degree-of-freedom tests into meaningful one degree-of-freedom effects, particularly when the latter are the results that inform the discussion. The general principle to follow is to provide readers with enough information to assess the magnitude of the observed effect.

Studies With Experimental Manipulations or Interventions. In studies reporting the results of experimental manipulations or interventions, clarify whether the analysis was by intent to treat. That is, were all participants assigned to conditions included in the data analysis regardless of whether they actually received the intervention, or were only participants who

completed the intervention satisfactorily included? Give a rationale for the choice.

Report any other analyses performed, including subgroup analyses and adjusted analyses, indicating those that were prespecified and those that were exploratory (although not necessarily in the level of detail of primary analyses). Consider putting the detailed results of ancillary analyses in supplemental materials. Discuss the implications, if any, of the ancillary analyses for statistical error rates.

Be sure to provide baseline demographic and/or clinical characteristics of each group.

If interventions were studied, detail all important adverse events (i.e., events with serious consequences) and/or side effects in each intervention group. If none occurred, note this as well.

3.8 Quantitative Discussion Standards

After presenting the results, you are in a position to evaluate and interpret their implications, especially with respect to your original hypotheses. In the Discussion section of a quantitative paper, examine, interpret, and qualify the results of your research and draw inferences and conclusions from them. In the case of empirical studies, there should be a tight relationship between the results that are reported and their discussion. Emphasize any theoretical or practical consequences of the results. When the discussion is relatively brief and straightforward, you can combine it with the Results section, creating a section called "Results and Discussion." If a manuscript presents multiple studies, discuss the findings in the order that the studies were presented within the article.

Open the Discussion section with a clear statement of support or nonsupport for all hypotheses, distinguished by primary and secondary hypotheses. In the case of ambiguous outcomes, explain why the results are judged as such. Discuss the implications of exploratory analyses in terms of both substantive findings and error rates that may be uncontrolled. Similarities and differences between your results and the work of others (where they exist) should be used to contextualize, confirm, and clarify your conclusions. Do not simply reformulate and repeat points already made; each new statement should contribute to your interpretation and to readers' understanding of the problem.

Your interpretation of the results should take into account (a) sources of potential bias and other threats to internal validity, (b) the imprecision of measures, (c) the overall number of tests and/or overlap among tests, (d) the adequacy of sample sizes and sampling validity, and (e) other limitations or weaknesses of the study. If an intervention or manipulation is involved, discuss whether it was successfully implemented, and note the mechanism by which it was intended to work (i.e., its causal pathways and/or alternative mechanisms). Discuss the fidelity with which the intervention or manipulation was implemented, and describe the barriers that were responsible for any lack of fidelity. Acknowledge the limitations of your research, and address alternative explanations of the results. Discuss the generalizability, or external validity, of the findings. This critical analysis should take into account differences between the target population and the accessed sample. For interventions, discuss characteristics that make them more or less applicable to circumstances not included in the study, what outcomes were measured and how (relative to other measures that might have been used), the length of time to measurement (between the end of the intervention and the measurement of outcomes), incentives, compliance rates, and specific settings involved in the study as well as other contextual issues.

End the Discussion section with a reasoned and justifiable commentary on the importance of your findings. This concluding section may be brief, or it may be extensive if it is tightly reasoned, self-contained, and not overstated. In the conclusion, consider returning to a discussion of why the problem is important (as stated in the introduction); what larger issues, meaning those that transcend the particulars of the subfield, might hinge on the findings; and what propositions are confirmed or disconfirmed by the extrapolation of these findings to such overarching issues.

Also consider the following issues:

- What is the theoretical, clinical, or practical significance of the outcomes, and what is the basis for these interpretations?
- If the findings are valid and replicable, what real-life psychological phenomena might be explained or modeled by the results?
- Are applications warranted on the basis of this research?
- What problems remain unresolved or arise anew because of these findings?

The responses to these questions are the core of the contribution of your study and justify why readers both inside and outside your specialty should attend to the findings. Readers should receive clear, unambiguous, and direct answers.

3.9 Additional Reporting Standards for Typical Experimental and Nonexperimental Studies

As mentioned in Section 3.5, the reporting standards in Table 3.1 apply to all quantitative studies. Additional standards apply because of particular design features or empirical claims made. Studies with experimental (e.g., studies using random assignment, studies using nonrandom assignment, clinical trials) and nonexperimental designs have these additional specific reporting standards. See Figure 3.1 for a flowchart of what standards to use for your research and links to the associated standards on the JARS website.

Describe the unit of randomization and the procedures used to generate assignments. Be careful to note when units such as classrooms are the unit of randomization, even though data collection may be from individual students within the classroom. Indicate the unit of randomization in the analysis of such study outcomes as well. Describe masking provisions used to ensure the quality of the randomization process.

Describe the unit of assignment and the method (rules) used to assign the unit to the condition, including details of any assignment restrictions such as blocking, stratification, and so forth. Describe any procedures used to minimize selection bias such as matching or propensity score matching.

Within the JARS context, a clinical trial or a randomized clinical trial is a research investigation that evaluates the effects of one or more health-related interventions (e.g., psychotherapy, medication) on health outcomes by prospectively assigning people to experimental conditions. As used here, a clinical trial is a subset of a class of studies called "randomized control studies," and the reporting standards for clinical trials apply to randomized control studies as well. Most clinical trials are experimental studies with random assignment, so all reporting standards for those types of studies also apply. Report information about the clinical trial aspect of the study. If the trial has been registered (e.g., on ClinicalTrials.gov), report its registration on the title page in the author note (see Section 2.7) and in the text. In the Method section, provide details of any site-specific considerations if the trial is a multisite trial. Provide access to the study protocol; if the study is a comparison to a current "standard" treatment, describe that standard treatment in sufficient detail that it can be accurately replicated in any followup or replication study. Describe the data safety and monitoring board and any stopping rules if used. If there was a follow-up, provide the rationale for the length of the follow-up period.

Nonexperimental studies (in which no variable is manipulated) are sometimes called, among other things, "observational," "correlational," or "natural history" studies. Their purpose is to observe, describe, classify, or analyze naturally occurring relationships between variables of interest. In general, describe the design of the study, methods of participant selection and sampling (e.g., prospective, retrospective, casecontrol, cohort, cohort-sequential), and data sources. Define all variables and describe the comparability of assessment across natural groups. Indicate how predictors, confounders, and effect modifiers were included in the analysis. Discuss the potential limitations of the study as relevant (e.g., the possibility of unmeasured confounding).

3.10 Reporting Standards for Special Designs

Studies with some special designs (e.g., longitudinal, N-of-1, replication) have specific reporting standards. See Figure 3.1 for a flowchart of what

standards to use for your research, including studies with special designs, and links to the associated standards on the JARS website.

A longitudinal study involves the observation of the same individuals using the same set of measurements (or attributes) at multiple times or occasions. This multiple observational structure may be combined with other research designs, including those with and without experimental manipulations, randomized clinical trials, or any other study type. Reporting standards for longitudinal studies must combine those for the basic underlying study structure with those specific to a longitudinal study.

Thus, in addition to the information dictated by the underlying structure of the study, report information about the longitudinal aspects of the study. For example, describe sample recruitment and retention methods, including attrition at each wave of data collection and how any missing data were handled. Describe any contextual changes that occurred during the progress of the study (e.g., a major economic recession). Report any changes in instrumentation that occurred over the course of the study, such as a change in level of a measure of school achievement. Because longitudinal studies are often reported in a segmental fashion, report where any portions of the data have been previously published and the degree of overlap with the current report (see Section 1.16).

Studies with N-of-1 designs occur in several different forms; however, the essential feature of all these designs is that the unit of study is a single entity (usually a person). In some N-of-1 studies, several individual results are described, and consistency of results may be a central point of the discussion. No N-of-1 study, however, feralma% m ufer scu ap handl s:

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For a replication article (see Section 1.4), indicate the type of replication (e.g., direct [exact, literal], approximate, conceptual [construct]). Provide comparisons between the original study and the replication being reported so readers can evaluate the degree to which there may be factors present that would contribute to any differences between the findings of the original study and the findings of the replication being reported. Compare recruitment procedures; demographic characteristics of participants; and instrumentation, including hardware and "soft" measures (e.g., questionnaires, interviews, psychological tests), modifications made to measures (e.g., translation or back-translation), psychometric characteristics of scores analyzed, and informants and methods of administration (e.g., paper-and-pencil vs. online). Report results of the same analytic methods (statistical or other quantitative manipulations) used in the original study, as well as any results from additional or different analyses. Report in detail the rules (e.g., comparison of effect sizes) that were used in deciding the degree to which the original results were replicated in the new study being reported.

3.11 Standards for Analytic Approaches

Although reporting standards are generally associated with entire research designs, some quantitative procedures (e.g., structural equation modeling, Bayesian techniques) are of sufficient complexity and open to such internal variation that additional information (beyond just the name of the technique and a few parameters) must be reported for readers to be able to fully comprehend the analysis. Other researchers may need additional information to evaluate the conclusions the authors have drawn or to replicate the analysis with their own data. Standards for structural equation modeling and Bayesian techniques are on the JARS website (https://apastyle.apa.org/jars/quantitative).

Structural equation modeling is a family of statistical techniques that involve the specification of a structural or measurement model. The analysis involves steps that estimate the effects represented in the model (parameters) and evaluate the extent of correspondence between the model and the data. These standards are complex and call for a comprehensive description of data preparation,

specification of the initial model(s), estimation, model fit assessment, respecification of the model(s), and reporting of results.

Bayesian techniques are inferential statistical procedures in which researchers estimate parameters of an underlying distribution on the basis of the observed distribution. These standards are complex and address the needs of this analytic approach, including how to specify the model, describe and plot the distributions, describe the computation of the model, report any Bayes factors, and report Bayesian model averaging.

3.12 Quantitative Meta-Analysis Standards

Quantitative meta-analyses (see Section 1.5) have specific reporting available on standards that full **JARS** website are in the (https://apastyle.apa.org/jars/quant-table-9.pdf). These standards are specific to meta-analyses but can easily generalize to other quantitative research synthesis approaches. One feature of meta-analyses that makes them different (in reporting demands) from other study types is that the units of analysis are research reports—usually articles that have been published or archived. The primary features of the included studies are numerical estimates of the effect sizes of the phenomena of interest. The reporting standards for quantitative meta-analyses are complex and include how to describe study selection, study inclusion and exclusion criteria, and data collection, as well as how to summarize the selected studies and their characteristics (e.g., through tables and figures; see Table 7.4 in Section 7.21 for a sample summary metaanalysis table).

Reporting Standards for Qualitative Research

3.13 Basic Expectations for Qualitative Research Reporting

Whereas standards for reporting information in the abstract and introduction of a paper are common to all kinds of research (see Sections 3.3–3.4), there are specific reporting standards for qualitative research articles, including the Method (Section 3.14), Findings or Results (Section 3.15), and Discussion (Section 3.16) sections. Standards specific to quantitative and mixed methods research are presented in Sections 3.5 to 3.12 and 3.18, respectively.

The basic expectations for reporting qualitative research are presented in Table 3.2. An additional table on the JARS website describes the reporting standards for qualitative meta-analyses (see Section 3.17). There are many qualitative procedures and methods as well as many designs and approaches to inquiry in which they can be embedded; because of this variation, all the elements described in Table 3.2 and the guidelines in Sections 3.14 to 3.16 may not be appropriate for all qualitative studies.

Table 3.2 Qualitative Design Reporting Standards (JARS–Qual)

Title Page Title Author Note Abstract Guidance for Authors o

Introduction
Description of Research Problem or Question
• • Guidance for Reviewers
Study Objectives/Aims/Research Goals
• • •
Guidance for Authors
∘ Guidance for Reviewers ∘ ∘
Method
Research Design Overview
Guidance for Reviewers o o o
Study Participants or Data Sources
RESEARCHER DESCRIPTION •

Guidance for Authors o
Guidance for Reviewers o
PARTICIPANTS OR OTHER DATA SOURCES • •
• • •
RESEARCHER-PARTICIPANT RELATIONSHIP •
Participant Recruitment
RECRUITMENT PROCESS •
•
•
• Guidance for Authors/Reviewers o
Guidance for Reviewers o
PARTICIPANT SELECTION •
•
Guidance for Authors o
Guidance for Authors/Reviewers

Data Collection
DATA-COLLECTION OR IDENTIFICATION PROCEDURES • •
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Guidance for Reviewers o
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RECORDING AND DATA TRANSFORMATION •
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Fir	ndings/Results
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Discussion

Discussion Subsections

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Guidance for Reviewers

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Authors must decide how sections should be organized within the context of their specific study. For example, qualitative researchers may combine the Results and Discussion sections because they may not find it possible to separate a given finding from its interpreted meaning within a broader context. Qualitative researchers may also use headings that reflect the values in their tradition (such as "Findings" instead of "Results") and omit ones that do not. As long as the necessary information is present, the paper does not need to be segmented into the same sections and subsections as a quantitative paper.

Qualitative papers may appear different from quantitative papers because they tend to be longer. This added length is due to the following central features of qualitative reporting: (a) In place of referencing statistical analyses, researchers must include detailed rationales and procedural descriptions to explain how an analytic method was selected, applied, and adapted to fit each specific question or context; (b) researchers must include a discussion of their own backgrounds and beliefs and how they managed them throughout the study; and (c) researchers must show how they moved from

cultural information relevant to the research topic; and perspectives of participants and characteristics of data sources relevant to the research topic. As applicable, data sources should be described (e.g., newspapers, internet, archive). Information about data repositories used for openly shared data should be reported if used. The processes entailed in performing archival searches or locating data for analysis should be described as well.

Qualitative researchers should report participant characteristics (listed in Section 3.6) and personal history factors (e.g., age, trauma exposure, abuse history, substance abuse history, family history, geographic history) that are relevant to the specific contexts and topics of their research (see Morse, 2008). Certain characteristics hold influence across many spheres of participants' lives within a given context and would be expected in most research reports; in the United States, these typically include age, gender, race, ethnicity, and socioeconomic status, but other features may be highly relevant as well to a given research question and context (e.g., sexual orientation, immigration status, disability). The descriptions of participant characteristics should be sensitive to the participants and the ways in which they understand and express their identities, statuses, historm in the context of the participants in the context of the participants and the ways in which they understand and express their identities, statuses, historm in the context of the participants and the ways in which they understand and express their identities, statuses, historm in the context of the participants and the ways in which they understand and express their identities, statuses, historm

characteristic! tbouta othgb pab# part% per i\$ ur% id bol\$ reportco M M ve R ; h%researcper atioesM may be exporientell,M reportin co theP researchP process aheP pantto anyP pact theP research increasing trust and facilitating disclosure) or harmful (e.g., by decreasing trust and inhibiting disclosure), so the specific dynamics of the relationships should be considered and reported.

There is no minimum number of participants for a qualitative study (see Levitt et al., 2017, for a discussion on adequacy of data in qualitative research). Authors should provide a rationale for the number of participants chosen, often in light of the method or approach to inquiry that is used. Some studies begin with researchers recruiting participants to the study and then selecting participants from the pool that responds. Other studies begin with researchers selecting a type of participant pool and then recruiting from within that pool. The content of Method sections should be ordered to reflect the study's process. Specifically, participant selection might follow participant recruitment or vice versa; thus, discussion of the number of participants is likely to be placed in reference to whichever process came second.

Recruitment Process. Report the method of recruitment (e.g., face-to-face, telephone, mail, email) and any recruitment protocols, and describe how you conveyed the study purpose to participants, especially if it was different from the purpose stated in the study objectives (see Section 3.4). For instance, researchers might describe a broader study aim to participants (e.g., to explore participants' experience of being on parole) but then focus their analysis in a specific manuscript on one aspect of that aim (e.g., the relationships between participants and parole officers). Provide details on any incentives or compensation given to participants, and state relevant ethical processes of data collection and consent, potentially describing institutional review board approval, any adaptations for vulnerable populations, or safety monitoring practices. Present the process for determining the number of participants in relation to the study design (e.g., approaches to inquiry, datacollection strategies, data-analytic strategies). Any changes in this number through attrition (e.g., refusal rates, reasons for dropout) and the final number of participants or sources should be conveyed, as should the rationale for decisions to halt data collection (e.g., saturation).

Participant Selection. To describe how participants were selected from within an identified group, explain any inclusion and/or exclusion criteria as well as

the participant and/or data source selection process that was used. This selection process can consist of purposive sampling methods, such as maximum variation; convenience sampling methods, such as snowball selection; theoretical sampling; or diversity sampling. Provide the general context for your study (e.g., when data were collected, sites of data collection). If you selected participants from an archived data set, describe the recruitment and selection process for that data set and any decisions affecting the selection of participants from that data set.

Researchers may use terms for data collection that are coherent with their research approach and process, such as "data identification," "collection," or "selection." Descriptions should be provided, however, in terms that are accessible to readers.

Data-Collection or Identification Procedures. In addition to describing the form of data collected (e.g., interviews, questionnaires, media, observation), convey any alterations to the data-collection strategy (e.g., in response to evolving findings or the study rationale). It may not be useful to reproduce all of the questions asked in an interview, especially in the case of unstructured or semi-structured interviews in which questions are adapted to the content of each interview. The content of central or guiding questions should be communicated, however, and the format of the questions can be described (e.g., open questions, nonleading paraphrases, written prompts). Describe the process of data selection or data collection (e.g., whether others were present when data were collected, number of times data were collected, duration of collection, context). Convey the extensiveness of the researchers' engagement (e.g., depth of engagement, time intensiveness of data collection). Describe the management or use of reflexivity in the data-collection process when it illuminates the study.

Recording and Data Transformation. Identify how data were recorded for analysis and explain whether and how data were transformed. This might include a statement regarding audio or visual recording methods, field notes, or transcription.

The two primary topics to report in the description of qualitative analyses are the data analysis and the establishment of methodological

integrity. Researchers may use terms for data analysis that are coherent within their research approach and process (e.g., "interpretation," "unitization," "eidetic analysis," "coding"). Descriptions should be provided, however, in terms that are accessible to readers.

Data-Analytic Strategies. Describe the methods and procedures of data analysis and the purpose or goal for which they were used. Explain in detail the process of analysis. Describe the process of arriving at an analytic approach (e.g., whether a set of categories of coding was developed before or during the analysis, whether findings emerged from an inductively driven process of analysis; see the glossary on the JARS website at https://apastyle.apa.org/jars/glossary). Also include a discussion of analytic procedures (e.g., coding, thematic analysis) and a description of coders or analysts and their training if not already described in the researcher description section. In this description, identify units of analysis (e.g., entire transcript, unit, text) and how units were formed, if applicable. Indicate whether any categories or codes emerged from the analyses or were developed a priori, and outline the process used in each case. Provide illustrations and descriptions of their development, if relevant. Indicate software, if used.

Methodological Integrity. Highlight procedures that support methodological integrity throughout the paper or summarize central points in a separate section of the Method section when elaboration or emphasis would be helpful (for more on methodological integrity, see Levitt et al., 2017, and the glossary on the JARS website at https://apastyle.apa.org/jars/glossary). Demonstrate that the claims made from the analysis are warranted. Highlight key features of methodological integrity, as follows:

- Assess the adequacy of the data in terms of their ability to capture forms of diversity most relevant to the research questions, research goals, and inquiry approach.
- Describe how the researchers' perspectives were managed in both the data collection and the analysis (e.g., to limit their effect on the data collection, to structure the analysis).
- Demonstrate that findings are grounded in the evidence (e.g., using quotes, excerpts, or descriptions of researchers' engagement in

data collection).

- Demonstrate that the contributions are insightful and meaningful (e.g., in relation to the current literature and the study goals).
- Provide relevant contextual information for findings (e.g., setting of the study, information about participants; present the interview question asked before an excerpt as needed).
- Present findings in a coherent manner that makes sense of contradictions or disconfirming evidence in the data (e.g., reconcile discrepancies, describe why a conflict might exist in the findings).
- As relevant, comment on consistency with regard to the analytic processes, especially in the face of changing conditions or contexts (e.g., use demonstrations of analyses to support consistency or to describe the development of a stable perspective, such as through the use of interrater reliability or consensus), or describe responses to inconsistencies (e.g., coders switching in the middle of analysis, an interruption in the analytic process).

Support for claims of methodological integrity may be supplemented by any checks added to the qualitative analysis. Approaches to inquiry have different traditions in terms of using checks, and researchers do not need to use all or any of the checks, but their use can augment a study's methodological integrity. The following are examples of supplemental checks that can strengthen the research:

- transcripts or data returned to participants for feedback;
- triangulation across multiple sources of information, findings, or investigators;
- checks on interview thoroughness or interviewer demands;
- consensus or auditing processes;
- member checks or participant feedback on findings;
- data displays or matrices;
- in-depth thick description, case examples, and illustrations;
- structured methods of researcher reflexivity (e.g., memos, field notes, logbooks, diaries, journals, bracketing); and
- checks on the utility of findings in responding to the study problem (e.g.,

evaluation of whether a solution worked).

3.15 Qualitative Findings or Results Standards

In qualitative research papers, findings may or may not include quantified information, depending on the study's goals, approach to inquiry, and study characteristics. Note that the heading "Findings" may be used rather than "Results."

Describe research findings (e.g., themes, categories, narratives) and the meaning and understandings that the researchers derived from the data analysis in relation to the purpose of the study. Descriptions of results often include quotes, evidence, or excerpts that demonstrate the process of data analysis and of reaching findings (e.g., thick, evocative description; field notes; text excerpts). These should not replace the description of the findings of the analysis, however. Instead, balance these illustrations with text descriptions that make clear the meanings drawn from individual quotes or excerpts and how they answer the study question.

Findings should be presented in a manner that is compatible with the study design. For instance, findings of a grounded theory study might be described using categories organized in a hierarchical form and marked by discrete divisions, whereas findings of an ethnographic study might be written in a chronological narrative format. Also, findings should be written in a style that is coherent with the approach to inquiry used.

Qualitative findings can be presented in various ways. Illustrations (e.g., diagrams, tables, models; see Chapter 7) may be used to organize and convey findings. Photographs or links to videos can be used as well (see Sections 2.15 and 7.30). Findings presented in an artistic manner (e.g., link to a dramatic presentation), however, should also include the information called for in the reporting standards to support the research presentation and a description that clarifies the analytic process and meanings drawn from the findings.

3.16 Qualitative Discussion Standards

The purpose of a qualitative Discussion section is to communicate the contributions of the study in relation to the prior literature and the study goals. In this process, the interpretations of the findings are described in a way that takes into account the limitations of the study as well as plausible alternative explanations. The Discussion section conveys applications of your findings and provides directions for future investigators. If you present multiple studies isce® tm

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reporting of future studies. In addition, implications for policy, clinical practice, and advocacy can be communicated to assist readers in implementing your findings.

3.17 Qualitative Meta-Analysis Standards

Qualitative meta-analyses (see Section 1.5) have unique reporting standards that are available in full on the JARS website (https://apastyle.apa.org/jars/qual-table-2.pdf). Two features of qualitative meta-analysis reporting highlighted in this section are reporting on the aggregative process and reporting situatedness.

The methodological integrity of the results of meta-analyses rests largely on the extent to which those carrying out the analysis can detail and defend the choices they made of studies to review and the process they undertook to weigh and integrate the findings of the studies. Authors of meta-analyses often aggregate qualitative studies from multiple methodological or theoretical approaches, and they must communicate the approaches of the studies they reviewed as well as their own approach to secondary data analysis. Qualitative meta-analysis involves the interpretive aggregation of thematic findings rather than reanalysis of primary data. Forms of qualitative meta-analysis range on a continuum from assessing the ways findings do or do not replicate each other to arranging interpreted findings into narrative accounts that relate the studies to one another. Authors of meta-analyses enhance their fidelity to the findings by considering the contradictions and ambiguities within and across studies.

Another factor that distinguishes qualitative metaanalyses from primary qualitative analyses is that they often include an examination of the situatedness of the authors of the primary studies reviewed (e.g., the perspectives of the primary researchers as well as their social positions and contexts and their studies' reflection of these perspectives). Situatedness can be considered in the Findings/Results or Discussion section and may be presented narratively or in tables when simplifying the presentation of trends. See the online table for complete information on reporting qualitative meta-analyses.

Reporting Standards for Mixed Methods Research

3.18 Basic Expectations for Mixed Methods Research Reporting

Whereas standards for reporting information in the abstract and introduction of a paper are common to all kinds of research (see Sections 3.3–3.4), there are specific reporting standards for mixed methods research articles. The basic expectations for reporting mixed methods research are presented in Table 3.3. Standards specific to quantitative and qualitative research are presented in Sections 3.5 to 3.12 and 3.13 to 3.17, respectively.

Table 3.3 Mixed Methods Design Reporting Standards (JARS-Mixed)

Title and Title Page Title Guidance for Authors Author Note Abstract Guidance for Authors

Introduction

Description of Research Problems/Questions

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Guidance for Authors o
Guidance for Reviewers o
Study Objectives/Aims/Research Goals
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Guidance for Reviewers o
Method
Research Design Overview
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Guidance for Reviewers o
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PARTICIPANTS OR OTHER DATA SOURCES • •

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Guidance for Authors o
0
RESEARCHER DESCRIPTION
Guidance for Authors o
Guidance for Reviewers o
Participant Recruitment
PARTICIPANT SAMPLING OR SELECTION • •
PARTICIPANT RECRUITMENT •
Data Collection
DATA-COLLECTION/IDENTIFICATION PROCEDURES •
RECORDING AND TRANSFORMING THE DATA •
Data Analysis
•
Validity, Reliability, and Methodological Integrity
•

Findings/Results

Findings/Results Subsections

•

Guidance for Authors

0

Guidance for Reviewers

0

Discussion

Discussion Subsections

Guidance for Authors

The inherent assumption of mixed methods research is that the combined qualitative findings and quantitative results lead to additional insights not gleaned from the qualitative or quantitative findings alone (Creswell, 2015; Greene, 2007; Tashakkori & Teddlie, 2010). In mixed methods research, the thoughtful integration of qualitative findings and quantitative results leads to a deeper understanding of the data and enhanced insights. In addition, authors can publish multiple papers from a single mixed methods study, such as a qualitative study paper, a quantitative study paper, and a mixed methods overview paper.

The

thoughtful and robust use of mixed methods requires researchers to meet the standards of both quantitative and qualitative research methodology in the design, implementation, and reporting stages. To this end, various mixed methods designs have emerged in the literature (Creswell & Plano Clark, 2017), and they help inform the procedures used in reporting studies (e.g., convergent design, exploratory sequential design, explanatory sequential design). Typically, additional mixed methods standards also need to be met along with quantitative and qualitative standards. Authors may use their discretion in presenting the sequence of studies but are encouraged to present them in a way that shows a logical progression of narrative as well as an audit trail (Merriam & Tisdell, 2016).

The standards for mixed methods designs emphasize the need to not only present both qualitative and quantitative aspects of the research but also describe their integration throughout the sections of the paper. The mixed methods guidelines assist authors in describing the combination of qualitative and quantitative methods. Authors should convey not only how the qualitative and quantitative methods contribute to the study goals but also how they enhance one another to provide a greater depth of understanding or further the research aims.

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WRITING STYLE AND GRAMMAR

The main objective of scholarly writing is clear communication, which can be achieved by presenting ideas in an orderly and concise manner. Establishing a tone that conveys the essential points of your work in an interesting way will engage readers and communicate your ideas effectively. Precise, clear word choice and sentence structure also contribute to the creation of a substantive, impactful work.

In this chapter, we provide guidance on achieving the four qualities of effective scholarly writing: continuity, flow, conciseness, and clarity. This is followed by general rules for grammar and usage and suggested strategies for improving your writing.

Effective Scholarly Writing

Being able to communicate ideas clearly and succinctly is a recipe for success for all writers, be they students submitting assignments to their instructor or professionals submitting manuscripts to a journal. Effective scholarly writing balances continuity and flow with conciseness and clarity. By implementing the techniques and principles described in Sections 4.1 to 4.11, writers will improve these aspects of their communication and become more effective communicators.

Continuity and Flow

4.1 Importance of Continuity and Flow

Effective writing is characterized by continuity, the logical consistency of expression throughout a written work, and by flow, the smooth cadence of words and sentences. Inconsistencies, contradictions, omissions, and irrelevancies in your writing style and presentation of ideas can make your arguments seem less credible. A work that lacks continuity and flow may seem disorganized or confusing, and details may seem incomplete or inconsistent. Readers will better understand your ideas if you aim for continuity in words, concepts, and thematic development from the opening statement to the conclusion. Explain relationships between ideas clearly, and present ideas in a logical order to improve the readability of your paper.

4.2 Transitions

To improve continuity and flow in your writing, check transitions between sentences, paragraphs, and ideas to ensure that the text is smooth and clear rather than abrupt or disjointed. When editing your writing, use additional transitional devices to make it less choppy. Text that sounds choppy or disjointed may indicate that you have abandoned an argument or theme prematurely—instead consider amplifying its discussion.

Punctuation marks contribute to continuity and flow by signaling transitions and demonstrating relationships between ideas. They also reflect the pauses, inflections, subordination, and pacing normally heard in speech. Use the full range of punctuation. Neither overuse nor underuse one type of punctuation, such as commas or dashes: Overuse may annoy readers, whereas underuse may cause confusion. Instead, use punctuation to support meaning.

Likewise, transitional words and phrases help maintain the flow of ideas, especially when the material is complex or abstract. For example, using a pronoun that refers to a noun in the preceding sentence not only serves as a transition but also avoids repetition. Be sure the referent is obvious. Other transitional words and phrases include the following:

- time links (e.g., "then," "next," "after," "while," "since")
- cause–effect links (e.g., "therefore," "consequently," "as a result")
- addition links (e.g., "in addition," "moreover," "furthermore," "similarly")
- contrast links (e.g., "but," "conversely," "nevertheless," "however," "although")

Use adverbs judiciously as introductory or transitional words (e.g., adverbs such as "certainly," "consequently," "conversely," "fortunately," "importantly," "interestingly," "more importantly," "regrettably," and "similarly"). Writers often overuse adverbs, so ask yourself whether the introduction or transition is needed. For example, both "importantly" and "interestingly" can often be recast to enhance the message of a sentence or simply omitted without a loss of meaning.

4.3 Noun Strings

Noun strings, meaning several nouns placed one after another to modify a final noun, can confuse readers and force them to question how the words relate to one another. Although skillful hyphenation can clarify the relationships between words, often the best option is to untangle the string. One approach to untangling is to move the final noun earlier in the string and show relationships between the other nouns by using verbs and prepositions. For example, "culturally sensitive qualitative interview techniques" can be rearranged to "culturally sensitive techniques for qualitative interviews." Consider the following, nearly uninterpretable noun strings and how each could be better structured:

Noun string	Better sentence structure
	•
	•
	•

Conciseness and Clarity

4.4 Importance of Conciseness and Clarity

Say only what needs to be said in your writing: The author who is more concise—that is, more frugal with words—writes a more readable paper. Authors seeking publication and students completing assignments increase their chances of success when they write concisely. Likewise, writing that is clear and precise is more accurate and transparent. In combination, conciseness and clarity in your writing ensure that readers understand your meaning.

Some writers may fear that writing concisely will make their papers too short. However, adding extraneous material or "fluff" to make your paper longer will dilute its focus and meaning and will not improve your chances of publication or of getting a favorable grade. If your paper is too short when written concisely, your ideas and themes may need to be further developed to add substance.

Where possible, tighten language to eliminate wordiness, redundancy (see Section 4.5), evasiveness, overuse of the passive voice, circumlocution, and clumsy prose. Shorten or eliminate overly detailed descriptions of equipment or apparatus, participants, or procedures (beyond those called for in journal article reporting standards; see Chapter 3); elaborations of the obvious; and irrelevant observations or asides. Information that would cause the paper to be too long and is not essential to understanding the research—but would nonetheless be helpful to a subset of readers—may be placed, when appropriate, in supplemental materials (see Section 2.15).

Short words and short sentences are easier to comprehend than long ones (see Section 4.6). A long technical term, however, may be more precise than several short words, and technical terms are inseparable from scientific reporting. However, a paper with too much jargon or terminology familiar to only a few specialists does not sufficiently contribute to the literature because its meaning is obfuscated (see Section 4.9). Rather, the technical terms in a paper should be either readily understood by readers across disciplines or defined for readers who may be unfamiliar with them.

Concise writing must also be clear. Be deliberate in your word choices,

4.5 Wordiness and Redundancy

Wordiness can impede readers' understanding by forcing them to sort through unnecessary words to decipher your ideas. Unconstrained wordiness lapses into embellishment and flowery writing, which are inappropriate in academic style. Consider the following examples of wordy and concise language:

Wordy	Concise

Whereas wordiness refers to using more words than are necessary, redundancy means using multiple words with the same meaning. Writers often use redundant language to be emphatic. Instead, use sentence structure to convey emphasis, for example, by placing the words to be emphasized at the beginning or end of a sentence. When possible and appropriate for the context, use the active voice (see Section 4.13) to reduce wordiness and redundancy. In the following examples, the highlighted words are redundant and should be omitted:



4.6 Sentence and Paragraph Length

There is no minimum or maximum sentence length in APA Style. Overuse of short, simple sentences produces choppy prose, however, and overuse of long, Å

language. Varied sentence length helps readers maintain interest and comprehension. When involved concepts require long sentences, the components should proceed logically. Avoid including multiple ideas in a single sentence; instead, break the sentence into shorter ones. Direct, declarative sentences with simple, common words are usually best.

Similar cautions apply to paragraph length. Single-sentence paragraphs are abrupt and should be used infrequently. Paragraphs that are too long (i.e., longer than one double-spaced manuscript page) risk losing readers' attention. A new paragraph signals a shift to a new idea and provides a pause for readers—a chance to assimilate one step in the conceptual development before beginning another. Look for a logical place (or places) to break up a long paragraph or reorganize the material.

4.7 Tone

Although scientific writing differs in form and content from creative or literary writing, it need not lack style or be dull. When writing a scholarly paper, keep in mind that scientific prose and creative or literary writing serve different purposes. Devices that are often used in creative writing—for example, setting up ambiguity; inserting the unexpected; omitting the expected; and suddenly shifting the topic, tense, or person—do not support the objective of clear communication in scientific writing. Similarly, devices or embellishments that attract attention to words and sounds instead of to ideas are inappropriate in scientific writing.

Thus, when describing your research, present the ideas and findings in a direct, straightforward manner, while also aiming for an interesting and compelling style—for example, by fully elaborating on an idea or concept (see Section 4.2), making word choices that reflect your involvement with the problem (see Section 4.4), and varying sentence and paragraph lengths (see Section 4.6). Use language that conveys professionalism and formality (see Section 4.8). For example, scientific writing often contrasts the positions of different researchers, and these differences should be presented in a professional, noncombative manner: Stating "Gerard (2019) did not address" is acceptable, whereas "Gerard (2019) completely overlooked" is not.

One way to achieve the right tone is to imagine a specific reader you intend to reach and write in a way that will inform and persuade that individual. For example, your reader might be a researcher in a related field who is trying to keep abreast of the literature but is not familiar with the jargon or insider perspectives of your field. What would facilitate this reader's understanding of and appreciation for the importance of your work?

4.8 Contractions and Colloquialisms

Avoid using contractions and colloquialisms, which detract from a professional tone in scholarly writing. Contractions—shortened forms of one or two words in which an apostrophe is used in place of missing letters—generally do not appear in scholarly writing because they convey an informal tone. To avoid contractions and improve your writing, evaluate words with apostrophes carefully. Except for cases noted, rewrite a word like "can't" into "cannot." Use apostrophes to indicate possession (e.g., "the student's work"), but remember that possessive pronouns do not include apostrophes (e.g., write "its purpose was" not "it's purpose was"). However, contractions can be appropriately used in some circumstances, such as in reproducing a direct quotation that contains a contraction (e.g., when quoting a research participant, do not change a participant's use of "let's go" to "let us go"), referring to a contraction as a linguistic example (e.g., when discussing confusion of "who's" with "whose"), or referring to an idiom or common saying that contains a contraction (e.g., "you can't take it with you").

Likewise, avoid colloquialisms, which are informal expressions used in everyday speech and writing (e.g., "to write up" instead of "to report," "gonna" instead of "going to"). These expressions often diffuse meaning, as aiffuraÃtoomations iele r, cs¦ o,hese—# amng re§ci e ead pe, y

and you should avoid using jargon in this way. Bureaucratic jargon has had the greatest publicity, but academic or scientific jargon may also grate on readers, encumber communication, and waste space. Ensure that the language you use allows readers to understand your writing even if they are not experts in your field, and define on first use any specialized terms that are key to your topic.

4.10 Logical Comparisons

Ensure that the comparisons you make are expressed clearly and logically. Ambiguous or illogical comparisons result from the omission of key words or from nonparallel structure (see Section 4.24). Consider, for example, "Twelve-year-olds were more likely to play with age peers than 6-year-olds." Does this sentence mean that 12-year-olds were more likely than 6-year-olds to play with age peers? Or does it mean that 12-year-olds were more likely to play with age peers and less likely to play with 6-year-olds? Ambiguity occurs when parallelism is overlooked for the sake of brevity, as in "The responses of transgender participants were more positive than cisgender participants." One correct way to write this sentence would be "The responses of transgender participants were more positive than those of cisgender participants." Thoughtful attention to good sentence structure and word choice reduces the chance of this kind of ambiguity.

4.11 Anthropomorphism

Do not attribute human characteristics to animals or to inanimate sources—doing so is called anthropomorphism.

Correct	Incorrect	Rationale

Pair active verbs with human actors (e.g., write "we extrapolated the rate of change" rather than "the study extrapolated the rate of change"). However, many acceptable constructions in widespread use do not constitute anthropomorphism because they do not impede understanding or mislead readers. When describing the content of different sections of a paper, you may write, for example, "this section addresses" or "the chapter focuses on" as well as "in this section we address" or "in this chapter, we focus on" (see Section 6.3 for comma use with introductory phrases). Similarly, when describing the results of a study, you may write "the results suggest," "the data provide," "the research contributes," "the study found," and so forth.

Determining what constitutes anthropomorphism can be challenging, and even distinguished scholars may disagree. In ambiguous cases, we recommend that authors keep the principle of clear communication at the forefront of their word choice and sentence structure.

Grammar and Usage

Incorrect grammar and careless construction of sentences distract readers, introduce ambiguity, and impede clear communication. The examples in this section represent common grammar and usage errors that often appear in papers submitted to journal editors and academic instructors.

Verbs

4.12 Verb Tense

Verbs are vigorous, direct communicators. The past tense is appropriate when expressing an action or a condition that occurred at a specific, definite time in the past, such as when discussing another researcher's work. The present perfect tense is appropriate to express a past action or condition that did not occur at a specific, definite time or to describe an action beginning in the past and continuing to the present.

Use verb tenses consistently, and stay within the chosen tense to ensure smooth expression. Sudden, unnecessary shifts in verb tense in the same paragraph or in adjacent paragraphs may confuse readers. Use the verb tenses shown in Table 4.1 to report information in various parts of the paper.

Table 4.1 Recommended Verb Tenses in APA Style Papers

Paper section	Recommended tense	Example

4.13 Active and Passive Voice

Voice describes the relationship between a verb and the subject and object associated with it. In the active voice, the subject of a sentence is presented

first, followed by the verb and then the object of the verb (e.g., "students completed surveys"). In the passive voice, the object of the verb is presented first, followed by the verb (usually a form of "to be" + past participle + the word "by") and then the subject last (e.g., "surveys were completed by students"); sometimes, the subject is omitted altogether, resulting in confusion about who is performing the action.

Choose voice carefully. Both the active and passive voices are permitted in APA Style, but many writers overuse the passive voice. Use the active voice as much as possible to create direct, clear, and concise sentences. For example, use the active voice to describe the actions of participants and others involved in your study (see Section 5.6), as in "the patients took the medication orally," not "the medication was taken orally by the patients."

The passive voice is acceptable in expository writing when focusing on the object or recipient of the action rather than on the actor. For example, a description of the experimental setup in the Method section might read, "the speakers were attached to either side of the chair," which appropriately emphasizes the placement of the speakers, not who placed them. Similarly, "the tests were gathered promptly" emphasizes the importance of the tests and their timely collection. When it is important to know who performed the action, use the active voice.

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When a compound subject

is composed of a singular and a plural noun joined by "or" or "nor," the verb agrees with the noun that is closer to the verb.

Correct:		
Incorrect:		

Pronouns

4.16 First- Versus Third-Person Pronouns

Pronouns replace nouns, and each pronoun should refer clearly to its antecedent. To avoid ambiguity in attribution, use the first person rather than the third person when describing the work you did as part of your research and when expressing your own views. If you are writing a paper by yourself, use the pronoun "I"; do not use the pronoun "we" to refer to yourself if you do not have coauthors (see also Section 4.17). If you are writing a paper with coauthors, use the pronoun "we." Do not refer to yourself or your coauthors in the third person as "the author(s)" or "the researcher(s)."

However, use the third person to refer to the specific contribution of a particular coauthor within a paper with multiple authors. In the following example, Sonia J. Cousteau is one of the authors of the paper:

Keep in mind that if you refer to coauthors by name in the text of your manuscript, you may need to mark out their names each time they appear if your paper is to undergo masked review (see Section 12.7).

4.17 Editorial "We"

Do not use "we" to refer to people in general, as in "We live on the same planet, but we rarely truly understand each other"; this use is called the editorial "we." It is especially important to avoid the editorial "we" in multiauthored papers because readers may wonder whether you are referring to all people, members of your professional group(s), or yourself and your coauthors. Substitute a more specific noun or clarify your usage.

Correct:	
Incorrect:	

Some alternatives to "we" are "people," "humans," "researchers," "psychologists," "nurses," and so on. However, "we" is an appropriate and useful referent once a specific subject has been established.

Correct: Incorrect:

4.18 Singular "They"

Writers should always use the singular "they" to refer to a person who uses "they" as their pronoun (see Section 5.5 for more on gender and pronoun usage). Also use "they" as a generic third-person singular pronoun to refer to a person whose gender is unknown or irrelevant to the context of the usage. Although usage of the singular "they" was once discouraged in academic writing, many advocacy groups and publishers have accepted and endorsed it, including Merriam-Webster's Dictionary (Merriam-Webster, n.d.-b). The use of the singular "they" is inclusive of all people, helps writers avoid making assumptions about gender, and is part of APA Style.

When using the singular "they," use the forms "they," "them," "their," "theirs," and "themselves." The variant "themself" is also acceptable because the referent is clearly singular, although "themselves" is currently the more common usage. The following are examples of correct usage of the singular "they."

Do not use "he" or "she" alone as a generic third-person pronoun. Use "he or she" and "she or he" sparingly, and ensure that these pronouns match the pronouns of the people being described; if you do not know the pronouns used by the people being described, use "they" instead or rewrite the sentence. Do not use the combination forms "(s)he" and "s/he" or alternate "he" and "she" (unless you know that a person uses these forms); these

choices may have unintentional implications. For further discussion of gender and pronoun usage, see Section 5.5.

Keep in mind that there are typically many possible ways to write a sentence. If the singular "they" as a generic third-person pronoun seems awkward or distracting, try one of the following strategies to rewrite the sentence.

Strategy	Gender neutral	Gender biased

4.19 Pronouns for People and Animals ("Who" vs. "That")

Relative pronouns introduce subordinate clauses linked to nouns. Use the relative pronoun "who" for human beings; use the relative pronoun "that" or "which" for nonhuman animals (e.g., rats, chimpanzees) and for inanimate objects.



Use neuter pronouns to refer to animals (e.g., "the dog . . . it"). However, it is acceptable to use gendered pronouns if

the animal has been named and its sex is known, as in the following example:

4.20 Pronouns as Subjects and Objects ("Who" vs. "Whom")

Relative pronouns can be subjects or objects of verbs or prepositions. Use "who" as the subject of a verb and "whom" as the object of a verb or a preposition. You can determine whether a pronoun is the subject or object of a verb by turning the subordinate clause around and substituting a personal pronoun. If you can substitute "he," "she," or "they," then "who" is correct. In the following examples, "who" and its replacement personal pronoun are highlighted to show the substitutions. The sentence with the substitution is a way to verify whether the original sentence is correct.

Use of "who"	Original sentence	Substitution sentence

Likewise, if you can substitute "him," "her," or "them," then "whom" is correct.

Use of "whom"	Original sentence	Substitution sentence

4.21 Pronouns in Restrictive and Nonrestrictive Clauses ("That"

vs. "Which")

Relative pronouns (e.g., "who," "whom," "that," "which") introduce an element that is subordinate to the main clause of the sentence, and that subordinate clause may be either restrictive or nonrestrictive.

Restrictive clauses—also called "that" clauses—are essential to the meaning of the sentence. Restrictive clauses are not set off with commas.

In the example, only self-disclosure that conflicts with the patient's story, not all self-disclosure, might hinder the therapeutic process.

Nonrestrictive clauses—also called "which" clauses—add further information to the sentence but are not essential to its meaning. Nonrestrictive clauses are set off with commas.

In the example, all interviews were conducted at the offices, and all offices provided suitable privacy.

Although some writers use "which" for both restrictive and nonrestrictive clauses, APA Style reserves "which" for nonrestrictive clauses and "that" for restrictive clauses. Consistent use of "that" for restrictive clauses and "which" for nonrestrictive clauses will help make your writing clear and precise.

Sentence Construction

4.22 Subordinate Conjunctions

Subordinate conjunctions (e.g., "since," "while," "although," "because," "whereas"), like relative pronouns (see Sections 4.19–4.21), introduce subordinate clauses. Select these conjunctions with care; interchanging conjunctions with more than one meaning may reduce the precision of your writing. Although some writers use "while" and "since" when they do not refer strictly to time, restricting your use of "while" and "since" to their temporal meanings can be helpful to readers.

Use "while" to link events occurring simultaneously.

Otherwise, use "although," "despite," "and," or "but" in place of "while."

Precise:

Imprecise:

In cases where the meaning of "since" is ambiguous (it could be either "from a time in the past" or "because"), replace "since" with "because." If the meaning is not ambiguous, it is acceptable to use either "since" or "because" to mean "because."

Precise: Imprecise:

4.23 Misplaced and Dangling Modifiers

An adjective or an adverb, whether a single word or a phrase, must clearly refer to the word that it modifies. Having modifiers without clear referents can make it hard for readers to follow the logic of your sentence.

Because of their placement in a sentence, misplaced modifiers ambiguously or illogically modify a word. Eliminate misplaced modifiers by placing an adjective or an adverb as close as possible to the word it modifies.

Incorrect	Rationale
	Incorrect

Many writers misplace the word "only." Place "only" next to the word or phrase it modifies.

Correct	Incorrect	Rationale	

Squinting modifiers are a type of misplaced modifier. Because of their ambiguous placement, they make it difficult to tell whether the modifier refers to the phrase before or after the modifier.

Correct		Incorrect	Rationale

Dangling modifiers have no referent in the sentence. Many of these result from the use of the passive voice (see Section 4.13). You can avoid many dangling modifiers by writing in the active voice.

Incorrect	Rationale	
	Incorrect	

4.24 Parallel Construction

To enhance readers' understanding, present parallel ideas in parallel or coordinate form. Use parallel structure in compound sentences, series and lists (see Sections 6.49–6.52), and table stubs (see Section 7.12).

Ensure that all elements of the parallelism are present before and after the coordinating conjunction (e.g., "and," "but," "or," "nor"). For example, if the first part of the clause is introduced by "that," the second part of the clause should be as well. When a clause has two parts (and not three or more), do not use a comma or semicolon before the conjunction.



With coordinating conjunctions used in pairs ("between . . . and," "both . . . and," "neither . . . nor," "either . . . or," "not only . . . but also"), place the first conjunction immediately before the first part of the parallelism.

Incorrect:			

Strategies to Improve Your Writing

Good writing is a skill learned through practice. In this section, we recommend strategies to improve your writing. These strategies can aid both professionals preparing manuscripts for journal submission and students preparing papers for course submission.

4.25 Reading to Learn Through Example

Reading is one of the most effective practices for authors to improve their writing because it enables them to learn through example. For instance, a student tasked with writing a literature review would benefit from reading other literature reviews (including the literature review sections of longer works) to see the various ways in which information can be organized and discussed. Likewise, an author who needs to present complex statistical information in a table would benefit from seeing how other authors have organized similar information in their tables. Careful reading in your chosen area of study will help you learn about not only new developments in the field but also ways to effectively convey information on the page.

4.26 Writing From an Outline

Writing from an outline ensures that the flow of your paper reflects the logic of your research or ideas. Creating and using an outline helps you identify main ideas, define subordinate ideas, focus your writing, avoid tangential excursions, and find omissions. In the outline, you can also designate headings and subheadings you will use in your paper (see Sections 2.26–2.27 for more on principles of organization and levels of heading). Outlines can take many forms, including the traditional format with Roman numeral headings or a concept map.

4.27 Rereading the Draft

Rereading your own work after setting it aside for a few hours or days allows you to look at it from a fresh perspective. Taking the further step of reading

your paper aloud may reveal faults that you previously overlooked and may help strengthen the tone and style of your writing. You can also try reading the sections of your paper in reverse order—from the conclusion back to the introduction—to ensure that you have set up arguments appropriately. Budget ample time when writing to allow yourself to take advantage of these strategies.

4.28 Seeking Help From Colleagues

After you have reread your draft, give a revised copy to a colleague—preferably a person who has published in or studied a related field but who is not familiar with your own work—for a critical review. Even better, get critiques from two colleagues, and you will have a trial run of a journal's review process. Students are also encouraged to solicit feedback from their instructor and peers.

4.29 Working With Copyeditors and Writing Centers

Some writers, particularly new writers and those writing in a nonnative language, may benefit from extra help with their writing. They might hire a copyeditor to review and proofread their paper or visit a tutor at a university writing center. A copyeditor or writing center tutor can assist with idiomatic language use, organization, and other areas. We highly recommend use of these services for authors who consistently face obstacles in getting their work published or students who would like to attain more success in the classroom. Students should check the academic integrity policies of their institution to determine what kinds of assistance are acceptable.

4.30 Revising a Paper

Revising a draft into a polished paper takes time and effort. Writers should develop a revision plan. It is best to start with the big picture and work down to the details. Consider the following broad questions when reviewing your paper:

• Is the central point or thesis of your paper clear? Do the arguments follow logically from the thesis?

- Is the information well organized?
- For students, does the draft meet the parameters of the assignment? If there is a rubric for the assignment, does the paper address each element of the rubric?
- For authors seeking publication, does the draft fit the journal style and formatting requirements (see Sections 12.2–12.4)?

At the detail level, check sentences for correct grammar and usage (see Sections 4.12–4.24). Also check for spelling and grammar errors using the automatic spell-check and grammar-check functions of your word-processing program. Although an electronic spell-check cannot take the place of careful proofreading (because words spelled correctly may be used incorrectly), it will lessen the chances that typographical errors make their way into the published article or the submitted assignment. APA uses Merriam-Webster's Dictionary and the APA Dictionary of Psychology as its authorities on spelling (for additional information on spelling, see Sections 6.11–6.12). Grammar-check functions are useful for identifying problematic sentence structure. Keep in mind, however, that grammar is complex and therefore grammar-checkers are not infallible.

Although the Publication Manual addresses many aspects of grammar and usage, it focuses on the areas that are the most problematic for writers of scholarly work. For grammatical questions not addressed in the Publication Manual, consult a trusted grammar reference.

BIAS-FREE LANGUAGE GUIDELINES

Authors must strive to use language that is free of bias, meaning the implied or irrelevant evaluation of the group or groups they are writing about. As an organization, APA is committed to both the advancement of science and the fair treatment of individuals and groups. These principles require that authors and students who use APA Style avoid perpetuating demeaning attitudes in their writing. It is unacceptable to use constructions that might imply prejudicial beliefs or perpetuate biased assumptions against persons on the basis of age, disability, gender, participation in research, racial or ethnic identity, sexual orientation, socioeconomic status, or some combination of these or other personal factors (e.g., marital status, immigration status, religion). Instead, authors should use affirming and inclusive language.

Long-standing cultural practice can exert a powerful influence over even the most conscientious writer. Just as you have learned to check what you write for spelling, grammar, and wordiness, practice rereading your work for preconceptions about groups of people. Ask people from the groups about which you are writing to read and comment on your material or consult self-advocacy groups to determine appropriate terminology. If you work directly with participants, ask them what terms they use to describe themselves. Language changes over time, and it is important to use the terms that individuals and/or communities use to describe themselves, their experiences, and their practices.

Some attempts to follow the guidelines in this chapter may result in wordiness or clumsy prose. As always, good judgment is required—these are not rigid rules. If your writing reflects respect for your participants and your readers, and if you write with appropriate specificity and precision, you contribute to the goal of accurate, unbiased communication. This chapter contains general guidelines for writing without bias that apply across a range of issues and additional guidelines that address specific topics, including age, disability, gender, participation in research, race and ethnicity, sexual orientation, socioeconomic status, and intersectionality. Additional examples of bias-free language can be found on the APA Style website (https://apastyle.apa.org).

General Guidelines for Reducing Bias

5.1 Describe at the Appropriate Level of Specificity

Precision is essential in scholarly writing; when you refer to a person or persons, choose words that are accurate, clear, and free from bias or prejudicial connotations. Bias, like inaccurate or unclear language, can be a form of imprecision. For example, using "man" to refer to all human beings is not as accurate or inclusive as using the terms "individuals," "people," or "persons."

Be mindful to describe only relevant characteristics. Although it is possible to describe a person's age, disability, gender identity, participation in research, racial and ethnic identity, sexual orientation, socioeconomic status, or other characteristic without bias, it is not always necessary to include all of this information in your report (for a more detailed discussion of participant characteristics to report in quantitative and qualitative studies, refer to Sections 3.6 and 3.14, respectively). For example, you would be unlikely to mention participants' sexual orientation in a study of cognition because sexual orientation is not relevant to cognition; however, you would likely mention participants' gender in a study of stereotype threat because gender is relevant to the examination of stereotype threat. Furthermore, there may be multiple relevant characteristics to discuss; when this is the case, address the ways in which the characteristics intersect, as appropriate (see Section 5.10).

Part of writing without bias is not only recognizing that differences should be mentioned only when relevant but also acknowledging relevant differences when they do exist. Evaluate the meaning of the word "difference" carefully in relation to the target population, not the dominant group. For example, a researcher who wants to generalize the study results to people overall, or students overall, and so forth, should assess and report whether the sample studied is different from the target population and, if so, describe how it is different.

Once you have determined which characteristics to describe, choose terms that are appropriately specific, which will depend on the research question and the present state of knowledge in the field. Do not mention characteristics gratuitously; however, when in doubt, be more specific rather than less because it is easier to aggregate data than to disaggregate them. Consider the appropriate level of specificity early in the research process—such as when designing the study—because it may not be possible to gather more data once the study is underway or finished. Using specific terms improves readers' ability to understand the generalizability of your findings and other researchers' ability to use your data in a meta-analysis or replication.

Next, we present examples of specific language for the topics covered in these bias-free language guidelines; again, the proper choice will depend on the situation, and these examples represent just some of the possible options.

- When writing about age, exact ages or age ranges (e.g., 15–18 years old, 65–80 years old) are more specific than broad categories (e.g., under 18 years old, over 65 years old; see Section 5.3). Also include the age mean and median in addition to the range of ages to increase the specificity of the reporting.
- When writing about disability, names of conditions (e.g., Alzheimer's disease) are more specific than categories of conditions (e.g., types of dementia) or general references such as "people with disabilities" (see Section 5.4).
- When writing about gender identity, descriptors with modifiers (e.g., cisgender women, transgender women) are more specific than descriptors without modifiers (e.g., women) or general nongendered terms (e.g., people, individuals; see Section 5.5 for how to differentiate between gender and sex).
- When writing about people who took part in research, terms that indicate the context of the research (e.g., patients, participants, clients) are more specific than general terms (e.g., people, children, women; see Section 5.6).

- When writing about racial or ethnic groups, the nation or region of origin (e.g., Chinese Americans, Mexican Americans) is more specific than a generalized origin (e.g., Asian Americans, Latin Americans; see Section 5.7).
- When writing about sexual orientation, the names of people's orientations (e.g., lesbians, gay men, bisexual people, straight people) are more specific than broad group labels (e.g., gay; see Section 5.8).
- When writing about socioeconomic status, income ranges or specific designations (e.g., below the federal poverty threshold for a family of four) are more specific than general labels (e.g., low income; see Section 5.9).

5.2 Be Sensitive to Labels

Respect the language people use to describe themselves; that is, call people what they call themselves. Accept that language changes with time and that individuals within groups sometimes disagree about the designations they use. Make an effort to determine what is appropriate for your study or paper, particularly when these designations are debated within groups. You may need to ask your participants which designations they use and/or consult self-advocacy groups that represent these communities to research the issue if you are not working directly with participants. However, note that some individuals may use slurs or stigmatizing language to refer to themselves; researchers should use extreme caution before repeating this language because doing so can propagate that stigma (see Sections 5.3–5.4 for more on the use of stigmatizing language with regard to age and disability, respectively).

Choose labels with sensitivity, ensuring that the individuality and humanity of people are respected. Avoid using adjectives as nouns to label people (e.g., "the gays," "the poor") or labels that equate people with their condition (e.g., "amnesiacs," "schizophrenics," "the learning disabled," "drug users"). Instead, use adjectival forms (e.g., gay men, older adults) or nouns with descriptive phrases (e.g., people living in poverty, people with learning disabilities, people who use drugs). Some groups (e.g., the Deaf) have chosen to use a capitalized label to identify and

promote a sense of unity and community (Solomon, 2012); use the label that the community uses, even when that label is adjectival (note, however, that not everyone who has hearing loss identifies as Deaf). In particular, the use of labels where disability is concerned is evolving, and people may disagree about the preferred approach. When writing about disability, person-first language (e.g., "a person with paraplegia" rather than "a paraplegic"), identity-first language (e.g., "an autistic person" rather than "a person with autism"), or both may be acceptable depending on the group you are writing about (see Section 5.4).

If you provide operational definitions of groups early in your paper (e.g., "participants scoring a minimum of X on the Y scale constituted the high verbal group, and those scoring below X constituted the low verbal group"), the best practice is to describe participants thereafter in terms of the measures used to classify them (e.g., "the contrast for the high verbal group was statistically significant"), provided the terms are not inappropriate. A pejorative label should not be used in any form. Abbreviations or series labels for groups usually sacrifice clarity and may be problematic: "LDs" or "LD group" to describe people with specific learning difficulties is problematic; "HVAs" for "high verbal ability group" is difficult to decipher. "Group A" is not problematic, but it is also not descriptive. Instead, ensure that operational group labels are clear and appropriate (e.g., "group with dysgraphia").

Compare groups with care. Bias occurs when authors use one group (often their own group) as the standard against which others are judged (e.g., using citizens of the United States as the standard without specifying why that group was chosen). For example, usage of "normal" may prompt readers to make the comparison with "abnormal," thus stigmatizing individuals with differences. Likewise, contrasting lesbians with "the general public" or "normal women" portrays lesbians as marginal to society. More appropriate comparison groups for lesbians might be straight individuals, straight women, or gay men. Use parallel designations for groups, especially when presenting racial and ethnic information (see Section 5.7).

Be aware that the order of social group presentation may imply that the first-mentioned group is the norm or standard and that later-mentioned groups are abnormal or deviant. Thus, the phrases "men and women" and "White Americans and racial minorities" subtly reflect the perceived dominance of men and White people over other groups (furthermore, listing specific racial minority groups is preferable to writing about racial minorities in general; see Section 5.7). Similarly, when presenting group data, placing socially dominant groups such as men and White people on the left side of a graph or at the top of a table may also imply that these groups are the universal standard (Hegarty & Buechel, 2006). When referring to multiple groups, thoughtfully consider the order in which to present them. Do not put groups in order of social dominance by default; instead, consider options such as alphabetical order or sample size order. For ease of comprehension, list groups in the same order consistently throughout a paper.

Reducing Bias by Topic

5.3 Age

Age should be reported as part of the description of participants in the Method section. Be specific in providing age ranges, means, and medians (see also Section 5.1). Avoid open-ended definitions such as "under 18 years" or "over 65 years," unless referring, for instance, to broad research study eligibility criteria.

Different terms are used for individuals of different ages, and these terms are often gendered (see Section 5.5). Use the terms individuals use to self-describe, whether these are binary gender categories of boy–girl or man–woman or descriptive and possibly nonbinary categories of transgender, genderqueer, agender, or gender-fluid.

- For an individual of any age, appropriate terms are "person," "individual," and so on. In general, avoid using "males" and "females" as nouns; instead use "men" and "women" or other age-appropriate words (see Section 5.5). "Males" and "females" are appropriate when groups include individuals with a broad age range (e.g., "males" to describe a group that includes both boys and men).
- For an individual aged 12 years and younger, appropriate terms are "infant" (for a very young child), "child," "girl," "boy," "transgender girl," "transgender boy," "gender-fluid child," and so on.
- For an individual aged 13 to 17 years, appropriate terms are "adolescent," "young person," "youth," "young woman," "young man," "female adolescent," "male adolescent," "agender adolescent," and so on.
- For an individual aged 18 years and older, appropriate terms are "adult," "woman," "man," "transgender man," "trans man," "transgender woman," "trans woman," "genderqueer adult," "cisgender adult," and so on.

Older adults are a subgroup of adults, and the age groups of older adults may be described with adjectives. On first reference to

a group of older people, be as specific as possible by including the age range, average age, and median age, when available. Terms such as "older persons," "older people," "older adults," "older patients," "older individuals," "persons 65 years and older," and "the older population" are preferred. Avoid using terms such as "seniors," "elderly," "the aged," "aging dependents," and similar "othering" terms because they connote a stereotype and suggest that members of the group are not part of society but rather a group apart (see Lundebjerg et al., 2017; Sweetland et al., 2017). Do not use these stigmatizing terms in your research even if your participants use them to refer to themselves (see Section 5.4 for similar guidance regarding disability). Likewise, avoid negativistic and fatalistic attitudes toward aging, such as age as being an obstacle to overcome (Lindland et al., 2015). Do not use "senile"; it is an outdated term with no agreed-upon meaning. Use "dementia" instead of "senility"; specify the type of dementia when known (e.g., dementia due to Alzheimer's disease). Be sure your language conveys that aging is a normal part of the human experience and is separate from disease and disorder.

Gerontologists may use combination terms for older age groups (e.g., "young-old," "old-old," "oldest old"); provide the specific ages of these groups when introducing them in your paper, and use the group names only as adjectives, not as nouns (i.e., refer to "young-old individuals," not to "the young-old"). When contrasting older adults with adults of other ages, describe that other age group specifically (e.g., young adults vs. older adults, middle-aged adults vs. older adults). You can use decade-specific descriptors if desired (e.g., octogenarian, centenarian). Generational descriptors such as "baby boomers," "Gen X," "millennials," "centennials," "Gen Z," and so on should be used only when discussing studies related to the topic of generations. For more information on writing about age, see "Guidelines for the Evaluation of Dementia and Age-Related Cognitive Change" (APA, 2012c) and "Guidelines for Psychological Practice With Older Adults" (APA, 2014).

5.4 Disability

Disability is a broad term that is defined in both legal and scientific ways and encompasses physical, psychological, intellectual, and socioemotional impairments (World Health Organization, 2001, 2011). The members of

some groups of people with disabilities—effectively subcultures within the larger culture of disability—have particular ways of referring to themselves that they would prefer others to adopt. When you use the disability language choices made by groups of disabled individuals, you honor their preferences. For example, some Deaf individuals culturally prefer to be called "Deaf" (capitalized) rather than "people with hearing loss" or "people who are deaf" (Dunn & Andrews, 2015). Likewise, use the term "hard of hearing" rather than "hearing-impaired." Honoring the preference of the group is not only a sign of professional awareness and respect for any disability group but also a way to offer solidarity.

The language to use where disability is concerned is evolving. The overall principle for using disability language is to maintain the integrity (worth and dignity) of all individuals as human beings. Authors who write about disability are encouraged to use terms and descriptions that both honor and explain person-first and identity-first perspectives. Language should be selected with the understanding that the expressed preference of people with disabilities regarding identification supersedes matters of style.

In person-first language, the person is emphasized, not the individual's disabling or chronic condition (e.g., use "a person with paraplegia" and "a youth with epilepsy" rather than "a paraplegic" or "an epileptic"). This principle applies to groups of people as well (e.g., use "people with substance use disorders" or "people with intellectual disabilities" rather than "substance abusers" or "the mentally retarded"; University of Kansas, Research and Training Center on Independent Living, 2013).

In identity-first language, the disability becomes the focus, which allows the individual to claim the disability and choose their identity rather than permitting others (e.g., authors, educators, researchers) to name it or to select terms with negative implications (Brown, 2011/n.d.; Brueggemann, 2013; Dunn & Andrews, 2015). Identity-first language is often used as an expression of cultural pride and a reclamation of a disability that once conferred a negative identity. This type of language allows for constructions such as "blind person," "autistic person," and "amputee,"

whereas in person-first language, the constructions would be "person who is blind," "person with autism," and "person with an amputation," respectively.

Both

person-first and identity-first approaches to language are designed to respect disabled persons; both are fine choices overall. It is permissible to use either approach or to mix person-first and identity-first language unless or until you know that a group clearly prefers one approach, in which case, you should use the preferred approach (Dunn & Andrews, n.d.). Mixing this language may help you avoid cumbersome repetition of "person with . . ." and is also a means to change how authors and readers regard disability and people within

"person with a physical disability," "person with a mental illness," "person with alcohol use disorder," or "person with substance use disorder" instead, or be more specific (e.g., "person with schizophrenia"). Labels such as "high functioning" or "low functioning" are both problematic and ineffective in describing the nuances of an individual's experience with a developmental and/or intellectual disability; instead, specify the individual's strengths and weaknesses. As with other diverse groups, insiders in disability culture may use negative and condescending terms with one another; it is not appropriate for an outsider (nondisabled person) to use these terms.

Avoid euphemisms that are condescending when describing individuals with disabilities (e.g., "special needs," "physically challenged," "handicapable"). Many people with disabilities consider these terms patronizing and inappropriate. When writing about populations or participants with disabilities, emphasize both capabilities and concerns to avoid reducing them to a "bundle of deficiencies" (Rappaport, 1977). Refer to individuals with disabilities as "patients" (or "clients") within the context of a health care setting (see Section 5.6).

5.5 Gender

Gender offers an added layer of specificity when interpreting patterns or phenomena of human behavior. However, the terms related to gender and sex are often conflated, making precision essential to writing about gender and/or sex without bias. The language related to gender identity and sexual orientation has also evolved rapidly, and it is important to use the terms people use to describe themselves (Singh, 2017; for how to determine appropriate terms, see Section 5.2; for a list of terms and definitions, see APA, n.d.-a).

Gender refers to the attitudes, feelings, and behaviors that a given culture associates with a person's biological sex (APA, 2012b). Gender is a social construct and a social identity. Use the term "gender" when referring to people as social groups. For example, when reporting the genders of participants in the Method section, write something like this: "Approximately 60% of participants identified as cisgender women, 35% as cisgender men, 3% as transgender women, 1% as transgender men, and 1%

as nonbinary." Sex refers to biological sex assignment; use the term "sex" when the biological distinction of sex assignment (e.g., sex assigned at birth) is predominant. Using "gender" instead of "sex" also avoids ambiguity over whether "sex" means "sexual behavior." In some cases, there may not be a clear distinction between biological and acculturative factors, so a discussion of both sex and gender would be appropriate. For example, in the study of sexual orientation (see Section 5.8), researchers continue to examine the extent to which sexuality or sexual orientation—attraction to sex, gender, or some combination of both—is a biological and/or acculturative phenomenon.

Gender identity is a component of gender that describes a person's psychological sense of their gender. Many people describe gender identity as a deeply felt, inherent sense of being a boy, a man, or male; a girl, a woman, or female; or a nonbinary gender (e.g., genderqueer, gendernonconforming, gender-neutral, agender, gender-fluid) that may or may not correspond to a person's sex assigned at birth, presumed gender based on sex assignment, or primary or secondary sex characteristics (APA, 2015a). Gender identity applies to all individuals and is not a characteristic only of transgender or gender-nonconforming individuals. Gender identity is distinct from sexual orientation (see Section 5.8); thus, the two must not be conflated (e.g., a gay transgender man has a masculine gender identity and a gay sexual orientation, a straight cisgender woman has a feminine gender identity and a straight sexual orientation).

Authors are strongly encouraged to explicitly designate information about the gender identities of the participants making up their samples (e.g., whether participants are transgender, cisgender, or other gender identities) rather than assuming cisgender identities. Cisgender refers to individuals whose sex assigned at birth aligns with their gender identity (APA, 2015a). Cisgenderism or cissexism refers to the belief that being cisgender is normative, as indicated by the assumption that individuals are cisgender unless otherwise specified (both terms are in use). Genderism refers to the belief that there are only two genders and that gender is automatically linked to an individual's sex assigned at birth (American Psychological Association of Graduate Students, 2015).

Transgender is used as

an adjective to refer to persons whose gender identity, expression, and/or role does not conform to what is culturally associated with their sex assigned at birth. Some transgender people hold a binary gender, such as man or woman, but others have a gender outside of this binary, such as gender-fluid or nonbinary. Individuals whose gender varies from presumptions based on their sex assigned at birth may use terms other than "transgender" to describe their including "gender-nonconforming," "genderqueer," "gendernonbinary," "gender-creative," "agender," or "two-spirit," to name a few. (Note that "two-spirit" is a term specific to Indigenous and Native American communities.) Transprejudice and transnegativity denote discriminatory attitudes toward individuals who are transgender. Diverse identity terms are used by transgender and gender-nonconforming (TGNC) people, and "TGNC" is a generally agreed-upon umbrella term. These terms are generally used in an identity-first way (e.g., "transgender people," "TGNC people"). However, there is some variation in the field; for example, clinicians often refer to individuals according to identity (self-identified) or describe gender variance, gender expansiveness, or gender diversity rather than gender nonconformity or nonbinary gender. Be sure to use identity labels that are in accordance with the stated identities of the people you are describing, and clearly define how you are using such identity labels within your writing.

The terms "birth sex," "natal sex," "tranny," and "transvestite" are considered disparaging by scholars in TGNC psychological research; by many individuals identifying as transgender, gender-nonconforming, or nonbinary; and by people exhibiting gender diversity. Thus, these disparaging terms should be avoided. Additionally, "birth sex" and "natal sex" imply that sex is an immutable characteristic without sociocultural influence. It is more appropriate to use "assigned sex" or "sex assigned at birth," as this functionally describes the assignment of a sex term (frequently binary male or female; however, intersex is an accurate assignment for some) predicated on observation of genitalia and/or determination of chromosomes and anatomical structures of the body at birth, which necessarily is interpreted within a sociocultural context. The term "transsexual" is largely outdated, but some people identify with it; this term should be used only for an individual who specifically claims it.

between "he and/or she" and "they," whereas others use no pronouns at all and use their name in place of pronouns. Refer to a transgender person using language appropriate to the person's gender, regardless of sex assigned at birth—for example, use the pronouns "he," "him," and "his" in reference to a transgender man who indicates use of these pronouns.

When referring to individuals whose identified pronouns are not known or when the gender of a generic or hypothetical person is irrelevant within the context, use the singular "they" to avoid making assumptions about an individual's gender. Use the forms "they," "them," "theirs," and so forth. Sexist bias can occur when pronouns are used carelessly, as when the pronoun "he" is used to refer to all people, when a gendered pronoun is used exclusively to define roles by sex (e.g., "the nurse . . . she"), or when "he" and "she" are alternated as though these terms are generic. Pronouns associated with a specific gender have been found to induce readers to think of individuals of that gender even when the pronoun use is intended to be generic (Gastil, 1990; Moulton et al., 1978). In addition, exposure to genderspecific language in a professional context has been linked with a lower sense of belonging, reduced motivation, and professional disidentification for individuals who do not identify with that gender (Stout & Dasgupta, 2011). When writers use the singular "they," it reduces bias in the way that readers perceive the individuals referred to in the text and thereby helps ensure that readers do not feel ostracized by that text.

Avoid using combinations such as "he or she," "she or he," "he/she," and "(s)he" as alternatives to the singular "they" because such constructions imply an exclusively binary nature of gender and exclude individuals who do not use these pronouns. These forms can also appear awkward and distracting, especially with repetition. However, the combinations "he or she" or "she or he" (but not the combinations with slashes or parentheses) can be used sparingly if all people being referred to by the pronouns use these terms. For further guidance on and examples of how to use the singular "they," see Section 4.18.

Avoid referring to one sex or gender as the "opposite sex" or "opposite gender"; appropriate wording may be "another sex" or "another gender." The word "opposite" implies strong differences between two sexes or genders; however, there are more similarities than

differences among people of different genders or sexes (see, e.g., Zell et al., 2015). As noted previously, some individuals do not identify with either binary gender, and these phrases ignore the existence of individuals who have disorders or differences of sex development or who are intersex (for more information, see Accord Alliance, n.d.; APA, 2015a; Blackless et al., 2000; Intersex Society of North America, n.d.). To describe members of a relationship (e.g., romantic couples, people in polyamorous relationships), use the phrases "mixed gender" or "mixed sex" when the partners have different genders or sexes, rather than "opposite gender" or "opposite sex"; use the phrases "same gender" or "same sex" when the partners have the same gender or sex.

5.6 Participation in Research

People participate in research in a variety of settings, including laboratories, homes, schools, businesses, clinics, and hospitals. Specific terms are used in certain contexts. When writing about people who participate in research, descriptive terms such as "college students," "children," or "respondents" as well as the more general terms "participants" and "subjects" are acceptable. "Subjects" and "sample" are also customary when discussing established statistical terms and experimental designs (e.g., "within-subjects design," "between-subjects design," "sample-size-adjusted Bayesian information criterion," "between-samples estimate of the variance").

Use the term "patient" to describe an individual diagnosed with a mental health, behavioral health, and/or medical disease, disorder, or problem who is receiving services from a health care provider (e.g., psychologist, physician, nurse, or other provider). This language is consistent with the language used in the health care system and promotes psychologists as being perceived a part of, and consistently integrated into, the culture of interprofessional, integrated health care. However, in academic, business, school, or other settings, the term "client" (or some other term) might be preferred instead of "patient." Within all contexts, respect the individual and/or cultural preferences expressed by recipients of psychological services and their families when you choose language to describe those individuals, families, or populations. (For further information, see Resolution for the Use of the Term Patient; APA, 2018.)

It is also important to recognize the difference between a case, which is an occurrence of a disorder or illness, and a person who is affected by the disorder or illness and is receiving care from a health care professional. For instance, "manic-depressive cases were treated" is problematic; revising the sentence to read "the people with bipolar disorder were treated" differentiates the people from the disorder. Likewise, in the medical context, avoid the terms "patient management" and "patient placement"; in most cases, the treatment, not the patient, is managed; some alternatives are "coordination of care," "supportive services," and "assistance."

Broad clinical terms such as "borderline" and "at risk" should be properly explained when used. Avoid using these terms in a broad sense (e.g., "the diagnosis was borderline," "at-risk students") because such usage obscures the specific clinical or psychometric meaning of the terms. For example, "the diagnosis was borderline" in a neuropsychology and psychometric testing context may be clarified to specify a score on a specific test or instrument (e.g., "standard scores between 70 and 80 are considered psychometrically borderline, or between the low average and mildly impaired ranges, indicating a risk for a diagnosis of X"), whereas in a diagnostic context, "the diagnosis was borderline" may be clarified to specify a diagnosis (e.g., borderline personality disorder). When using the term "at risk," specify who is at risk and the nature of that risk (e.g., "adolescents who use substances are at risk for early school dropout").

Across contexts, write about the people who participated in your work in a way that acknowledges their contributions and agency. Sentence structure plays a key role in this acknowledgment, as does using professional language (see Section 4.7). Use the active voice to describe your actions and the actions of participants (see Section 4.13); the passive voice suggests individuals are acted upon instead of being actors (e.g., "the subjects completed the trial" and "we collected data from the participants" are preferable to "the trial was completed by the subjects" and "the participants were run"). Avoid the term "failed," as in "eight participants failed to complete the Rorschach test," because it can imply a personal shortcoming instead of a research result; "did not complete" is a more neutral choice (Knatterud, 1991). These choices will help ensure that you convey respect for the people about whom you are writing.

5.7 Racial and Ethnic Identity

Terms used to refer to racial and ethnic groups continue to change over time. One reason for this is simply personal preference; preferred designations are as varied as the people they name. Another reason is that designations can become dated over time and may hold negative connotations. When describing racial and ethnic groups, be appropriately specific and sensitive to issues of labeling (see Sections 5.1–5.2).

Race refers to physical differences that groups and cultures consider socially significant. For example, people might identify their race as Aboriginal, African American or Black, Asian, European American or White, Native American, Native Hawaiian or Pacific Islander, M ori, or some other race. Ethnicity refers to shared cultural characteristics such as language, ancestry, practices, and beliefs. For example, people might identify as Latino or another ethnicity. Be clear about whether you are referring to a racial group or to an ethnic group. Race is a social construct that is not universal, so one must be careful not to impose racial labels on ethnic groups. Whenever possible, use the racial and/or ethnic terms that your participants themselves use. Be sure that the racial and ethnic categories you use are as clear and specific as possible. For example, instead of categorizing participants as Asian American or Hispanic American, you could use more specific labels that identify their nation or region of origin, such as Japanese American or Cuban American. Use commonly accepted designations (e.g., census categories) while being sensitive to participants' preferred designation.

Racial and ethnic

groups are designated by proper nouns and are capitalized. Therefore, use "Black" and "White" instead of "black" and "white" (do not use colors to refer to other human groups; doing so is considered pejorative). Likewise, capitalize terms such as "Native American," "Hispanic," and so on. Capitalize "Indigenous" and "Aboriginal" whenever they are used. Capitalize "Indigenous People" or "Aboriginal People" when referring to a specific group (e.g., the Indigenous Peoples of Canada), but use lowercase for "people" when describing persons who are Indigenous or Aboriginal (e.g., "the authors were all Indigenous people but belonged to different nations").

Do not use hyphens in multiword names, even if the names act as unit modifiers (e.g., write "Asian American participants," not "Asian-American participants"). If people belong to multiple racial or ethnic groups, the names of the specific groups are capitalized, but the terms "multiracial," "biracial," "multi-ethnic," and so on are lowercase.

Designations for specific ethnic and racial groups are described next. These groups frequently are included in studies published in APA journals; the examples provided are far from exhaustive but illustrate some of the complexities of labeling.

People of African Origin. When writing about people of African ancestry, several factors inform the appropriate terms to use. People of African descent have widely varied cultural backgrounds, family histories, and family experiences. Some will be from Caribbean islands, Latin America, various regions in the United States, countries in Africa, or elsewhere. Some American people of African ancestry prefer "Black," and others prefer "African American"; both terms are acceptable. However, "African American" should not be used as an umbrella term for people of African ancestry worldwide because it obscures other ethnicities or national origins, such as Nigerian, Kenyan, Jamaican, or Bahamian; in these cases use "Black." The terms "Negro" and "Afro-American" are outdated; therefore, their use is generally inappropriate.

People of Asian Origin. When writing about people of Asian ancestry from Asia, the term "Asian" is appropriate; for people of Asian descent from the United States or Canada, the appropriate term is "Asian American" or "Asian Canadian," respectively. It is problematic to group "Asian" and "Asian American" as if they are synonymous. This usage reinforces the idea that Asian Americans are perpetual foreigners. "Asian" refers to Asians in Asia, not in the United States, and should not be used to refer to Asian Americans. The older term "Oriental" is primarily used to refer to cultural objects such as carpets and is pejorative when used to refer to people. To provide more specificity, "Asian origin" may be divided regionally, for example, into South Asia (including most of India and countries such as Afghanistan, Pakistan, Bangladesh, and Nepal), Southeast Asia (including the eastern parts of India and countries such as Vietnam, Cambodia, Thailand, Indonesia, and the

Philippines), and East Asia (including countries such as China, Vietnam, Japan, South Korea and North Korea, and Taiwan). The corresponding terms (e.g., East Asian) can be used; however, refer to the specific nation or region of origin when possible.

People of European Origin. When writing about people of European ancestry, the terms "White" and "European American" are acceptable. Adjust the latter term as needed for location, for example, "European," "European American," and "European Australian" for people of European descent living in Europe, the United States, and Australia, respectively. The use of the term "Caucasian" as an alternative to "White" or "European" is discouraged because it originated as a way of classifying White people as a race to be favorably compared with other races. As with all discussions of race and ethnicity, it is preferable to be more specific about regional (e.g., Southern European, Scandinavian) or national (e.g., Italian, Irish, Swedish, French, Polish) origin when possible.

Indigenous Peoples Around the World. When writing about Indigenous Peoples, use the names that they call themselves. In general, refer to an Indigenous group as a "people" or "nation" rather than as a "tribe."

- In North America, the collective terms "Native American" and "Native North American" are acceptable (and may be preferred to "American Indian"). "Indian" usually refers to people from India. Specify the nation or people if possible (e.g., Cherokee, Navajo, Sioux).
- Hawaiian Natives may identify as "Native American," "Hawaiian Native," "Indigenous Peoples of the Hawaiian Islands," and/or "Pacific Islander."
- In Canada, refer to the Indigenous Peoples collectively as "Indigenous Peoples" or "Aboriginal Peoples" (International Journal of Indigenous Health, n.d.); specify the nation or people if possible (e.g., People of the First Nations of Canada, People of the First Nations, or First Nations People; Métis; Inuit).
- In Alaska, the Indigenous People may identify as "Alaska Natives." The Indigenous Peoples in Alaska, Canada, Siberia, and Greenland may identify as a specific nation (e.g., Inuit, Iñupiat). Avoid the term "Eskimo"

because it may be considered pejorative.

- In Latin America and the Caribbean, refer to the Indigenous Peoples collectively as "Indigenous Peoples" and by name if possible (e.g., Quechua, Aymara, Taíno, Nahuatl).
- In Australia, the Indigenous Peoples may identify as "Aboriginal People" or "Aboriginal Australians" and "Torres Strait Islander People" or "Torres Strait Island Australians." Refer to specific groups when people use these terms to refer to themselves (e.g., Anangu Pitjantjatjara, Arrente).
- In New Zealand, the Indigenous People may identify as "M ori" or the "M ori people" (the proper spelling includes the diacritical macron over the "a").

For information on citing the Traditional Knowledge or Oral Traditions of Indigenous Peoples as well as the capitalization of terms related to Indigenous Peoples, see Section 8.9.

People of Middle Eastern Origin. When writing about people of Middle Eastern and North African (MENA) descent, state the nation of origin (e.g., Iran, Iraq, Egypt, Lebanon, Israel) when possible. In some cases, people of MENA descent who claim Arab ancestry and reside in the United States may be referred to as "Arab Americans." In all cases, it is best to allow individuals to self-identify.

People of Hispanic or Latinx Ethnicity. When writing about people who identify as Hispanic, Latino (or Latinx, etc.), Chicano, or another related designation, authors should consult with their participants to determine the appropriate choice. Note that "Hispanic" is not necessarily an allencompassing term, and the labels "Hispanic" and "Latino" have different connotations. The term "Latino" (and its related forms) might be preferred by those originating from Latin America, including Brazil. Some use the word "Hispanic" to refer to those who speak Spanish; however, not every group in Latin America speaks Spanish (e.g., in Brazil, the official language is Portuguese). The word "Latino" is gendered (i.e., "Latino" is masculine and "Latina" is feminine); the use of the word "Latin@" to mean both Latino and Latina is now widely accepted. "Latinx" can also be used as a gender-neutral or nonbinary term inclusive of all genders. There are compelling reasons to

use any of the terms "Latino," "Latina," "Latino/a," "Latin@," and/or "Latinx" (see de Onís, 2017), and various groups advocate for the use of different forms.

Use the term(s) your participants or population uses; if you are not working directly with this population but it is a focus of your research, it may be helpful to explain why you chose the term you used or to choose a more inclusive term like "Latinx." In general, naming a nation or region of origin is preferred (e.g., Bolivian, Salvadoran, or Costa Rican is more specific than Latino, Latinx, Latin American, or Hispanic).

Nonparallel designations (e.g., "African Americans and Whites," "Asian Americans and Black Americans") should be avoided because one group is described by color, whereas the other group is not. Instead, use "Blacks and Whites" or "African Americans and European Americans" for the former example and "Asian Americans and African Americans" for the latter example. Do not use the phrase "White Americans and racial minorities"; the rich diversity within racial minorities is minimized when it is compared with the term "White Americans."

Language that essentializes or reifies race is strongly discouraged and is generally considered inappropriate. For example, phrases such as "the Black race" and "the White race" are essentialist in nature, portray human groups monolithically, and often perpetuate stereotypes.

To refer to non-White racial and ethnic groups collectively, use terms such as "people of color" or "underrepresented groups" rather than "minorities." The use of "minority" may be viewed pejoratively because it is usually equated with being less than, oppressed, or deficient in comparison with the majority (i.e., White people). Rather, a minority group is a population subgroup with ethnic, racial, social, religious, or other characteristics different from those of the majority of the population, though the relevance of this term is changing as the demographics of the population change (APA, 2015a). If a distinction is needed between the dominant racial group and nondominant racial groups, use a modifier (e.g., "ethnic," "racial") when using the word "minority" (e.g., ethnic minority,

racial minority, racial-ethnic minority). When possible, use the specific name of the group or groups to which you are referring.

Do not assume that members of minority groups are underprivileged; underprivileged means having less money, education, resources, and so forth than the other people in a society and may refer to individuals or subgroups in any racial or ethnic group. Terms such as "economically marginalized" and "economically exploited" may also be used rather than "underprivileged." Whenever possible, use more specific terms (e.g., schools with majority Black populations that are underfunded) or refer to discrimination or systematic oppression as a whole.

5.8 Sexual Orientation

Sexual orientation is a part of individual identity that includes "a person's sexual and emotional attraction to another person and the behavior and/or social affiliation that may result from this attraction" (APA, 2015a, p. 862). Use the term "sexual orientation" rather than "sexual preference," "sexual identity," or "sexual orientation identity." All people choose their partners regardless of their sexual orientation; however, the orientation itself is not a choice.

Sexual orientation can be conceptualized first by the degree to which a person feels sexual and emotional attraction; some parallel terms are "sexual," "demisexual" (or "gray-asexual" or "gray-A"), and "asexual" (see The Asexual Visibility & Education Network, n.d.). A person who identifies as sexual feels sexual and emotional attraction toward some or all types of people, a person who identifies as demisexual feels sexually attracted only within the context of a strong emotional connection with another person, and a person who identifies as asexual does not experience sexual attraction or has little interest in sexual behavior (see APA, 2015b).

Second, sexual orientation can be conceptualized as having a direction. For people who identify as sexual or demisexual, their attraction then may be directed toward people who are similarly gendered, differently gendered, and so on. That is, sexual orientation indicates the gendered directionality of attraction, even if that directionality is very inclusive (e.g., nonbinary). Thus, a person might be attracted to men, women, both, neither, masculinity, femininity, and/or to people who have other gender identities such as

genderqueer or androgynous, or a person may have an attraction that is not predicated on a perceived or known gender identity.

Some examples of sexual orientation are lesbian, gay, heterosexual, straight, asexual, bisexual, queer, polysexual, and pansexual (also called multisexual and omnisexual). For example, a person who identifies as lesbian might describe herself as a woman (gender identity) who is attracted to women (sexual orientation)—the sexual orientation label of "lesbian" is predicated on a perceived or known gender identity of the other person. However, someone who identifies as pansexual might describe their attraction to people as being inclusive of gender identity but not determined or delineated by gender identity. Note that these definitions are evolving and that self-identification is best when possible.

Use the umbrella term "sexual and gender minorities" to refer to multiple sexual and/or gender minority groups, or write about "sexual orientation and gender diversity" (these terms are used by the Office on Sexual Orientation and Gender Diversity at APA and the Sexual & Gender Minority Research Office at the National Institutes of Health). Abbreviations such as LGBTQ, LGBTQ+, LGBTQIA, and LGBTQIA+ may also be used to refer to multiple groups. The form "LGBT" is considered outdated, but there is not consensus about which abbreviation including or beyond LGBTQ to use. If you use the abbreviation LGBTQ (or a related one), define it (see Section 6.25) and ensure that it is representative of the groups about which you are writing. Be specific about the groups to which you refer (e.g., do not use LGBTQ and related abbreviations to write about legislation that primarily affects transgender people; instead, specify the impacted group). However, if in doubt, use one of the umbrella terms rather than a potentially inaccurate abbreviation.

When using specific terms for orientations, define them if there is ambiguity. For example, the adjective "gay" can be interpreted broadly, to include all genders, or more narrowly, to include only men, so define "gay" when you use it in your paper, or use the phrase "gay men" to clarify the usage. By convention, the term "lesbians" is appropriate to use interchangeably with "lesbian women," but "gay men" or "gay people" should be used, not "gays."

Avoid the terms "homosexual" and "homosexuality." Instead, use specific, identity-first terms to describe people's sexual orientation (e.g., bisexual people, queer people). These specific terms refer primarily to identities and to the culture and communities that have developed among people who share those identities. It is inaccurate to collapse these communities into the term "homosexual." Furthermore, the term "homosexuality" has been and continues to be associated with negative stereotypes, pathology, and the reduction of people's identities to their sexual behavior. Homoprejudice, biprejudice, homonegativity, and so forth are terms used to denote prejudicial and discriminatory attitudes toward lesbians, gay men, bisexual individuals, or other sexual minorities. Heterosexism refers to the belief that heterosexuality is normative, as indicated in the assumption that individuals are heterosexual unless otherwise specified (American Psychological Association of Graduate Students, 2015). The terms "straight" and "heterosexual" are both acceptable to use when referring to people who are attracted to individuals of another gender; the term "straight" may help move the lexicon away from a dichotomy of heterosexual and homosexual. For more information regarding sexual orientation, see "Guidelines for Psychological Practice With Transgender and Gender Nonconforming People" (APA, 2015a).

5.9 Socioeconomic Status

Socioeconomic status (SES) encompasses not only income but also educational attainment, occupational prestige, and subjective perceptions of social status and social class. SES encompasses quality of life attributes and opportunities afforded to people within society and is a consistent predictor of a vast array of psychological outcomes. Thus, SES should be reported as part of the description of participants in the Method section. Because SES is complex, it is not indexed similarly in all studies; therefore, precise terminology that appropriately describes a level of specificity and sensitivity is essential to minimize bias in language around SES (for a discussion, see Diemer et al., 2013).

When reporting SES, provide as much detailed information as possible about people's income, education, and occupations or

employment circumstances. For example, when referring to "low-income participants" or "high-income participants," classify whether reported incomes take into account household size, or provide information about the relation between household incomes and federal poverty guidelines. Additionally, SES can be described by providing information related to specific contextual and environmental conditions such as participants' housing arrangement (e.g., renting a home, owning a home, residing in subsidized housing) and neighborhood characteristics such as median household income, percentage of unemployed people, or proportion of students who qualify for free or reduced-price lunch in local schools.

Avoid using broad, pejorative, and generalizing terms to discuss SES. Specifically, negative connotations are associated with terms such as "the homeless," "inner-city," "ghetto," "the projects," "poverty stricken," and "welfare reliant." Instead, use specific, person-first language such as "mothers who receive TANF benefits" rather than "welfare mothers" ("TANF" stands for "Temporary Assistance for Needy Families" and is the proper term for the current welfare program in the United States). When discussing people without a fixed, regular, or adequate nighttime residence, use specific language that addresses the quality or lack of housing or length of time without housing, not whether the people consider their residence a home. That is, use language like "people experiencing homelessness," "people who are homeless," "people in emergency shelter," or "people in transitional housing," rather than calling people "the homeless."

It is important to note that SES terms such as "low income" and "poor" have historically served as implicit descriptors for racial and/or ethnic minority people. Thus, it is critical that authors include racial and/or ethnic descriptors within SES categories—for example, "This sample includes low-income and middle-income Puerto Rican fathers." Implicit biases around economic and occupational status can result in deficit-based language that blames individuals for their occupational, educational, or economic situation (e.g., "attendant economic deficits") rather than recognizing a broader societal context that influences individual circumstances. Deficit-based language also focuses on what people lack rather than on what they possess. Instead of labeling people as "high school dropouts," "being poorly educated," or "having little education," provide more sensitive and specific

descriptors such as "people who do not have a high school diploma or equivalent." Alternatively, by adopting a strengths-based perspective, authors can write about "people who have a grade school education." Likewise, instead of writing about an "achievement gap," write about an "opportunity gap" to emphasize how the context in which people live affects their outcomes or opportunities.

5.10 Intersectionality

When authors write about personal characteristics, they should be sensitive to intersectionality—that is, to the way in which individuals are shaped by and identify with a vast array of cultural, structural, sociobiological, economic, and social contexts (Howard & Renfrow, 2014). Intersectionality is a paradigm that addresses the multiple dimensions of identity and social systems as they intersect with one another and relate to inequality, such as racism, genderism, heterosexism, ageism, and classism, among other variables (APA, 2017b). Thus, individuals are located within a range of social groups whose structural inequalities can result in marginalized identities.

Because people are unique, many identities are possible. As one example of a group with an intersectional identity, Black lesbian women may have similarities to and differences from other oppressed groups in the meanings that are assigned to their multiple positionalities. Black women may identify with the oppressive and discriminatory experiences of White women as well as with those of Black men. At the same time, Black lesbian women's experiences may not be equivalent to those of these other groups. They may experience discrimination as a response to their race, gender, and/or sexual orientation. Thus, their experience does not necessarily reflect the sum of oppressions of racism, sexism, and heteronormativity (i.e., race + sex + heterosexism) but rather their unique identities and social locations as Black lesbian women that are not based in or driven by the perspectives of White women or of Black men (Bowleg, 2008; Crenshaw, 1989). That is, for example, even though Black women and White women are both women, and Black women and Black men are both Black, this does not mean that the perspectives and experiences of the latter groups are the same as or related to those of Black lesbian women.

Intersectional identities also include experiences of privileged contexts that intersect with those of oppression. For example, a Laotian immigrant woman with a disability may experience a sense of safety and privilege because of her legal immigration status in the United States, but she may experience discrimination and a lack of access to appropriate resources within and outside of her family and ethnic community on the basis of her disability status. A Jewish American adolescent may experience privilege as a result of being perceived as White but may b b he dat e& mf

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discussion of intersectionality, see the Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality (APA, 2017b).

MECHANICS OF STYLE

Style refers to guidelines for ensuring clear, consistent communication and presentation in written works. APA Style, as described in this Publication Manual, provides guidelines for writing scholarly papers. Publishers and instructors often require authors writing for publication and students writing for a course or degree requirement to follow specific style guidelines to avoid inconsistencies among and within journal articles, book chapters, and academic papers. For example, without style guidelines, authors might use the spellings "health care," "health-care," and "healthcare" interchangeably in one work. Although their meaning is the same and the choice of one style over another may seem arbitrary (in this case, "health care," with a space and no hyphen, is APA Style), such variations in style can distract or confuse readers.

In this chapter, we provide essential style guidelines for scholarly writing, including punctuation, spelling, capitalization, italics, abbreviations, numbers, statistical and mathematical copy, and lists. These guidelines often overlap with those for general good writing practices. However, we omit general grammar rules explained in widely available writing manuals and examples of grammar or usage with little relevance to manuscripts submitted to journals that use APA Style. Style manuals agree more often than they disagree; when they disagree, the Publication Manual takes precedence for APA Style papers or publications.

Punctuation

Punctuation establishes the cadence of a sentence, telling readers where to pause (comma, semicolon, and colon), stop (period and question mark), or take a detour (dash, parentheses, and square brackets). Punctuation of a sentence usually denotes a pause in thought; different kinds of punctuation indicate different kinds and lengths of pauses.

6.1 Spacing After Punctuation Marks

Insert one space after the following:

- periods or other punctuation marks at the end of a sentence
- commas, colons, and semicolons
- periods that separate parts of a reference list entry (see Section 9.5)
- periods following initials in names (M. P. Clark)

Do not insert a space in the following cases:

- after internal periods in abbreviations (e.g., a.m., i.e., U.S.)
- after periods in identity-concealing labels for study participants (F.I.M.)
- around colons in ratios (1:4)

6.2 Period

Use a period or periods in the following cases:

- to end a complete sentence
- with initials in names (Bazerman, M. H.)

- in the abbreviations for "United States" and "United Kingdom" when they are used as adjectives (U.S. Navy; it is not required to abbreviate these terms)
- in identity-concealing labels for study participants (F.I.M.)
- in Latin abbreviations (a.m., cf., e.g., i.e., p.m., vs.)
- in reference abbreviations (Vol. 1, 2nd ed., p. 6, paras. 11–12, F. Supp.)
- in era designations (B.C.E., C.E., B.C., A.D.; see Section 9.42)
- to end each element within a reference (except DOIs and URLs; see Section 9.5)

Do not use periods in the following cases:

- in abbreviations of state, province, or territory names (NY; CA; Washington, DC; BC; ON; NSW)
- in capital letter abbreviations and acronyms (APA, NDA, NIMH, IQ)
- in abbreviations for academic degrees (PhD, PsyD, EdD, MD, MA, RN, MSW, LCSW, etc.; see Section 2.5)
- in abbreviations for routes of administration (icv, im, ip, iv, sc)
- in metric and nonmetric measurement abbreviations (cm, hr, kg, min, ml, s)
- after URLs in the text (see Section 8.22); instead, place URLs in the middle of the sentence or in parentheses to avoid ending a sentence with a URL
- after DOIs or URLs in the reference list (see Section 9.35)

6.3 Comma

Use a comma in the following cases:

• between elements in a series of three or more items, including before the

final item (see also Section 6.49); this last comma is called a serial comma or Oxford comma

Correct: Incorrect:

• after an introductory phrase (if the introductory phrase is short, the comma after it is optional)

- to set off a nonessential or nonrestrictive clause (see Section 4.21)—that is, a clause that embellishes a sentence but if removed would leave the grammatical structure and meaning of the sentence intact
- to set off statistics in the text that already contain parentheses, to avoid nested parentheses

- to separate two independent clauses joined by a conjunction
- to set off the year in exact dates in the text or in a retrieval date (see Section 9.16); however, when only a month and year appear in the text, do not use a comma

• to set off the year in parenthetical in-text citations
• to separate groups of three digits in most numbers of 1,000 or more (se for exceptions)
Do not use a comma in the following cases:
• before an essential or restrictive clause (see Section 4.21) because removing such a clause from the sentence would alter the intended meaning
 between the two parts of a compound predicate Correct:
Incorrect:
• to separate parts of measurement
6.4 Semicolon
• to separate two independent clauses that are not joined by a conjunction
• to separate two independent clauses joined by a conjunctive adverb suc

- to separate items in a list that already contain commas (see Section 6.49)
- to separate multiple parenthetical citations (see Section 8.12)
- to separate different types of information in the same set of parentheses, to avoid back-to-back parentheses
- to separate sets of statistics that already contain commas

A hyphen rather than an en dash is generally used in an abbreviation that contains dashes, such as the abbreviation for a test or scale (e.g., MMPI-2) or a diagnostic manual (DSM-5, ICD-11; see Section 6.25).

6.7 Quotation Marks

This section addresses how to use quotation marks other than with direct quotations (see Sections 8.25–8.36). Quotation marks often appear with other punctuation marks. Place commas and periods inside closing quotation marks. Place other punctuation marks (e.g., colons, semicolons, ellipses) outside closing quotation marks.

Use double quotation marks in the following cases:

• to refer to a letter, word, phrase, or sentence as a linguistic example or as itself

• to present stimuli in the text (long lists of stimuli may be better presented in a table, where quotation marks are not needed)

• to reproduce material from a test item or verbatim instructions to participants (if instructions are long, present them in an appendix or set them off from text in block quote format without quotation marks; see Sections 2.14 and 8.27)

•	to introduce a word or phrase used as an ironic comment, as slang, or as an invented or coined expression; use quotation marks only for the first occurrence of the word or phrase, not for subsequent occurrences
	First occurrence: Subsequent occurrence:
•	to introduce a label; after the label has been used once, do not use quotation marks for subsequent occurrences
•	to set off the title of a periodical article or book chapter when the title is used in the text or in a copyright attribution (do not use quotation marks around the article or book chapter title in the reference list entry) In text:
	In the reference list:

- to identify the anchors of a scale; instead, use italics (see Section 6.22)
- to refer to a numeral as itself because the meaning is sufficiently clear without quotation marks
- to hedge or downplay meaning (do not use any punctuation with these expressions)

Correct:

Incorrect:

6.8 Parentheses

Use parentheses in the following cases:

- to set off structurally independent elements
- to set off in-text citations (see Section 8.11)
- to introduce an abbreviation in the text (see also Section 6.25)
- to set off letters that identify items in a list within a sentence or paragraph (see also Section 6.50)

- to group mathematical expressions (see also Sections 6.9 and 6.46)
- to enclose numbers that identify displayed formulas and equations

• to enclose statistical values that do not already contain parentheses
• to enclose degrees of freedom
Do not use parentheses in the following cases:
• to enclose text within other parentheses; instead, use square brackets to avoid nested parentheses
• to enclose statistics that already contain parentheses; instead, use a comma before the statistics to avoid nested parentheses
• to enclose back-to-back parenthetical information; instead, place the information in one set of parentheses, separated with a semicolon
Correct: Incorrect:
6.9 Square Brackets
Use square brackets in the following cases:
• to enclose parenthetical material that is already in parentheses

• to enclose abbreviations when the abbreviated term appears in parentheses
• to enclose values that are the limits of a confidence interval
• to enclose material inserted in a quotation by someone other than the original author (see also Section 8.31)
• to enclose a description of form for some works (e.g., those outside the typical peer-reviewed academic literature; see Section 9.21) in a reference list entry
Do not use square brackets in the following cases:
• to set off statistics that already include parentheses
Correct: Incorrect: Incorrect:
• around the year in a narrative citation when the sentence containing the narrative citation appears in parentheses; instead, use commas (see Section 8.11)
Correct: Incorrect:
6.10 Slash

Use a slash (also called a "virgule," "solidus," or "shill") in the following cases:

- to clarify a comparison in a compound adjective, especially when one of the elements is a hyphenated compound (alternatively, use an en dash; see Section 6.6)
- to specify either of two possibilities (use sparingly)
- to separate a numerator from a denominator
- to separate units of measurement accompanied by a numeric value (see Section 6.27); if no numeric value appears with the unit of measurement, spell out the word "per."
- to set off phonemes
- in citations of translated, reprinted, reissued, or republished works in the text (see Section 9.41)

Do not use a slash in the following cases:

• more than once to express compound units; use centered dots and parentheses as needed to prevent ambiguity

Correct:

Incorrect:

• when a phrase would be clearer

Correct: Incorrect:

Spelling

6.11 Preferred Spelling

Spelling in APA Style papers should conform to the Merriam-Webster.com Dictionary (https://www.merriam-webster.com). The spellings of psychological terms should conform to the APA Dictionary of Psychology (https://dictionary.apa.org). If a word appears differently in these two dictionaries, follow the spelling in the APA Dictionary of Psychology. If a word is not in either of these dictionaries, consult an unabridged edition of Webster's dictionary (see https://unabridged.merriam-webster.com). If the dictionary offers a choice of spellings, select one and use it consistently throughout your paper.

The plural forms of some words of Latin or Greek origin can be troublesome (particularly those that end in the letter "a"). A list of preferred spellings of some of the more common ones follows.

Singular: Plural:

Remember that plural nouns take plural verbs.

Correct:

Incorrect:

In general, form the possessive of a singular name by adding an apostrophe and an "s" (e.g., "Milner's theory"). This guideline also applies when a name ends in "s" (e.g., "Descartes's philosophy," "James's work").

The spellings of terms related to technology evolve over time. Use the following spellings for some common technology words in APA Style papers:

6.12 Hyphenation

Compound words—words composed of two or more words—take many forms; they may be written as (a) two separate words (open), (b) one hyphenated word, or (c) one solid word. Compound words are often introduced into the language as separate or hyphenated words; as they become more commonplace, they tend to fuse into a solid word. For example, "data base" has become "database," and "e-mail" has become "email." The dictionary is an excellent guide for choosing the proper form: When a compound appears in the dictionary, its usage is established, and it is considered a permanent compound (e.g., "health care," "self-esteem," "caregiver"). In general, follow the hyphenation shown in the dictionary for permanent compounds (e.g., write "health care" without a hyphen, even in a phrase like "health care setting"); adjust hyphenation only to prevent misreading. Dictionaries do not always agree on the way a compound should be written (open, hyphenated, or solid); Section 6.11 specifies the dictionaries to use for APA Style papers.

Another form of compound—the temporary compound—is made up of two or more words that occur together, perhaps only in a particular paper, to express a thought. Temporary compounds are not usually listed in the dictionary. To determine how to hyphenate temporary compounds, follow these guidelines:

- If a temporary compound can be misread or expresses a single thought, use a hyphen, especially when the temporary compound appears as an adjective before the noun. When in doubt, use a hyphen for clarity. For example, "Adolescents resided in two parent homes" may mean that two homes served as residences or that each adolescent lived with two parents; a hyphen in "two-parent homes" specifies the latter meaning.
- If the compound appears after the noun it modifies, do not use a hyphen because, in almost all cases, the phrase is sufficiently clear without one. See Table 6.1 for further examples of hyphen use in temporary compounds.

Table 6.1 Guide to Hyphenating Temporary Compound Terms

Grammar guideline	Example

• Write most words formed with prefixes and suffixes as one word without a hyphen. See Table 6.2 for examples of prefixes and suffixes that do not require hyphens; see Table 6.3 for examples of prefixed and suffixed words that do require hyphens. The same suffix may be hyphenated in some cases and not in others (e.g., "nationwide" and "worldwide" vs.

"industry-wide").

• When two or more compound modifiers have a common base, that base is sometimes omitted in all except the last modifier, but the hyphens are retained. Leave a space after the hyphen when the base has been omitted, unless punctuation follows the hyphen.

Table 6.2 Prefixes and Suffixes That Do Not Require Hyphens

Table 0.2 Treffixes and odffixes that be not require tryphens						
Prefix or suffix	Example					

1

Table 6.3 Compound Words That Require Hyphens

Occurrence	Example
•	
•	
•	
•	

Capitalization

APA Style is a "down" style, meaning that words are lowercase unless there is specific guidance to capitalize them, as described in the following sections.

6.13 Words Beginning a Sentence

Capitalize the following:

- the first word in a complete sentence
- the first word after a colon if what follows the colon is a complete sentence

Do not capitalize the following:

- a personal name that begins with a lowercase letter when the name begins a sentence; alternatively, reword the sentence
- a proper noun (other than a personal name) that begins with a lowercase letter (e.g., iPad, eBay) or a lowercase statistical term (e.g., t test, p value) when it begins a sentence (see Section 6.26); instead, reword the sentence to avoid beginning with a lowercase letter

6.14 Proper Nouns and Trade Names

Capitalize the following:

- proper nouns and proper adjectives
- names of racial and ethnic groups (see also Section 5.7)
- names of specific university departments, academic institutions, and academic courses

Capitalize	Do not capitalize

• trade and brand names (in general, do not include the copyright or trademark symbol after a trade or brand name used in an academic paper; however, such symbols may be included in business and marketing materials)

Capitalize	Do not capitalize

Do not capitalize the following:

• proper adjectives that have a common meaning (consult a dictionary for guidance; see Section 6.11), except for personal names within these terms

6.15 Job Titles and Positions

Capitalize a job title or position when the title precedes a name (titles are not used in bylines; see Section 2.5):

Do not	capitalize	a job	title c	r po	osition	when	the	title	follows	the	name	or
refers to	a position	ı in ge	neral:									

6.16 Diseases, Disorders, Therapies, Theories, and Related Terms

Do not capitalize the names of the following:

- diseases or disorders
- therapies and treatments
- theories, concepts, hypotheses, principles, models, and statistical procedures

However, capitalize personal names that appear within the names of diseases, disorders, therapies, treatments, theories, concepts, hypotheses, principles, models, and statistical procedures.

6.17 Titles of Works and Headings Within Works

APA Style uses two types of capitalization for titles of works and headings within works: title case and sentence case. In title case, major words are capitalized. In sentence case, most words are lowercased. Nouns, verbs (including linking verbs), adjectives, adverbs, pronouns, and all words of four letters or more are considered major words. Short (i.e., three letters or fewer) conjunctions, short prepositions, and all articles are considered minor words.

In title case, capitalize the following words in a title or heading:

- the first word, even a minor word such as "The"
- the first word of a subtitle, even if it is a minor word
- the first word after a colon, em dash, or end punctuation in a heading, even if it is a minor word
- major words, including the second part of hyphenated major words (e.g., "Self-Report," not "Self-report")
- words of four letters or more (e.g., "With," "Between," "From")

Lowercase only minor words that are three letters or fewer in a title or heading (except the first word in a title or subtitle or the first word after a colon, em dash, or end punctuation in a heading):

- short conjunctions (e.g., "and," "as," "but," "for," "if," "nor," "or," "so," "yet")
- articles ("a," "an," "the")
- short prepositions (e.g., "as," "at," "by," "for," "in," "of," "off," "on," "per," "to," "up," "via")

Use title case for the following:

• titles of articles, books, reports, and other works appearing in text

• titles of tests or measures, including subscales (see Section 6.18)

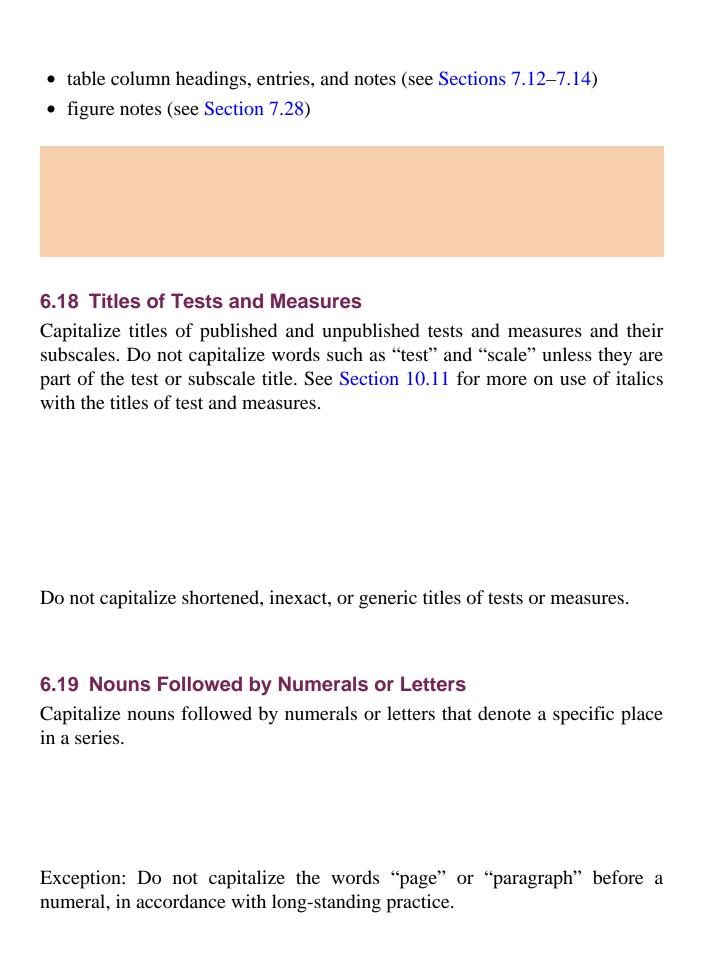
- all headings within a work (Levels 1–5; see Section 2.27)
- the title of your own paper and of named sections and subsections within it
- titles of periodicals (these are also italicized)
- table titles (these are also italicized; see Section 7.11)
- figure titles (these are also italicized), axis labels, and legends (see Sections 7.25–7.27)

In sentence case, lowercase most words in the title or heading. Capitalize only the following words:

- the first word of the title or heading
- the first word of a subtitle
- the first word after a colon, em dash, or end punctuation in a heading
- nouns followed by numerals or letters
- proper nouns

Use sentence case for the following:

• titles of articles, books, reports, webpages, and other works in reference list entries, even if title case was used in the original work (see also Section 9.19)



Do not capitalize the following:

- the words "numeral" or "letter" when referring to a numeral or letter as itself because the numeral or letter does not denote a place in a series beyond integers or the alphabet
- nouns that precede a variable

(The number and letter are not variables.)

• names of genes and proteins that include numerals or letters

6.20 Names of Conditions or Groups in an Experiment

Do not capitalize names of conditions or groups in an experiment.

6.21 Names of Factors, Variables, and Effects

Capitalize names of derived variables within a factor or principal components analysis. The words "factor" and "component" are not capitalized unless followed by a numeral (see Section 6.19).

Do not capitalize effects or variables unless they appear with multiplication signs. (Be careful not to use the term "factor" when you mean "effect" or "variable," e.g., in an interaction or analysis of variance.)

Italics

6.22 Use of Italics

Use italics for the following:

• key terms or phrases, often accompanied by a definition

- titles of books, reports, webpages, and other stand-alone works (see Section 9.19)
- titles of periodicals (see Section 9.25)
- genera, species, and varieties
- letters used as statistical symbols or algebraic variables
- some test scores and scales

• periodical volume numbers in reference lists • anchors of a scale (but not the associated number) • the first use of a word, phrase, or abbreviation from another language when readers may not be familiar with it; however, if the term appears in a dictionary for the language in which you are writing (see Section 6.11), do not use italics • gene symbols (see Section 6.31) Do not use italics for the following: • titles of book series (e.g., the Harry Potter series) • the punctuation mark after an italicized word or phrase • punctuation between elements of a reference list entry (e.g., the comma after a volume and issue number, the period after a book title)

• words, phrases, and abbreviations of foreign origin that appear in a dictionary for the language in which you are writing (see Section 6.11)

• chemical terms
• trigonometric terms
• nonstatistical subscripts to statistical symbols or mathematical expressions
• Greek letters
• letters used as abbreviations
• gen M es and gen M eins (see Section 6.31)
• mere emphasis
Incorrect:
6.23 R verse Italics

When words that would normally be italicized appear within text that is already italicized, those words should be set in standard (nonitalic) type, referred to as reverse italicization. For example, when the title of a book contains the title of another book, use standard type for the title within the title. In the text, use title case for both titles; in the reference list entry, use sentence case for both titles. In the following example, Marinelli and Mayer wrote a book about Freud's book The Interpretation of Dreams; Marinelli and Mayer's book title is italicized, and Freud's book title within it is written in standard type.

In the reference list:

Abbreviations

An abbreviation is a shortened form of a word or phrase; abbreviations of phrases are often composed of the first letter of each word of the phrase (i.e., acronym). To maximize clarity, use abbreviations sparingly and consider readers' familiarity with the abbreviation.

6.24 Use of Abbreviations

Although abbreviations can be useful for long, technical terms in scholarly writing, communication is often garbled rather than clarified if an abbreviation is unfamiliar to readers. In general, use an abbreviation if (a) it is conventional and readers are likely to be more familiar with the abbreviation than with the complete form and (b) considerable space can be saved and cumbersome repetition avoided. For example, the abbreviations "L" for large and "S" for small in a paper describing different sequences of reward (LLSS or LSLS) would be effective and readily understood shortcuts. In another paper, however, writing about the "L reward" and the "S reward" might be both unnecessary and confusing. In most instances, abbreviating experimental group names is ineffective because the abbreviations are not adequately informative or easily recognizable; some are more cumbersome than the full name. For the same reason, do not use the abbreviations "S," "E," and "O" for subject, experimenter, and observer in the text.

Sometimes the space saved by using abbreviations is not justified by the time necessary for readers to master the meaning, as in the following example:

Without abbreviations, the previous passage reads as follows:

Although there is no absolute limit for the use of abbreviations, writing is generally easier to understand when most words are written out rather than when overflowing with abbreviations.

In general, if you abbreviate a term, use the abbreviation at least three times in a paper. If you use the abbreviation only one or two times, readers may have difficulty remembering what it means, so writing the term out each time aids comprehension. However, a standard abbreviation for a long, familiar term is clearer and more concise even if it is used fewer than three times.

6.25 Definition of Abbreviations

In APA Style papers, do not define abbreviations that are listed as terms in the dictionary (e.g., AIDS, IQ). Also do not define measurement abbreviations (see Section 6.27), time abbreviations (see Section 6.28), Latin abbreviations (see Section 6.29), or many statistical abbreviations (see Section 6.44). Define all other abbreviations, even those that may be familiar to your readers (e.g., "RT" for reaction time or "ANOVA" for analysis of variance; see also Section 6.24). After you define an abbreviation, use only the abbreviation; do not alternate between spelling out the term and abbreviating it.

When you first use a term that you want to abbreviate in the text, present both the full version of the term and the abbreviation.

- When the full version of a term appears for the first time in a heading, do not define the abbreviation in the heading; instead define the abbreviation when the full version next appears. Use abbreviations in headings only if the abbreviations have been previously defined in the text or if they are listed as terms in the dictionary.
- When the full version of a term first appears in a sentence in the text, place the abbreviation in parentheses after it.
- When the full version of a term first appears in parenthetical text, place the abbreviation in square brackets after it. Do not use nested parentheses.

• If a citation accompanies an abbreviation, include the citation after the abbreviation, separated with a semicolon. Do not use nested or back-to-back parentheses.

Define abbreviations used in tables and figures within each table and figure, even if the abbreviations have already been defined in the text. The abbreviation can appear in parentheses after first use of the term within the table or figure, including in the table or figure title, or the definition can appear in a table or figure general note or a figure legend. If an abbreviation is used in multiple tables and figures, define it in each table or figure. Do not define abbreviations that do not appear in a table or figure. Do not define or write out standard abbreviations for units of measurement and statistics in a table or figure (see Sections 6.44 and 7.15).

6.26 Format of Abbreviations

To form the plural of most abbreviations and statistical symbols, add a lowercase "s" alone, without an apostrophe.

Never begin a sentence with a lowercase abbreviation (e.g., lb) or with a stand-alone symbol (e.g.,). Begin a sentence with a symbol connected to a word (e.g., -Endorphins) only when necessary to avoid indirect or awkward phrasing. When a chemical compound begins a sentence, capitalize the first letter of the word to which

the symbol is connected; keep the locant, descriptor, or positional prefix (i.e., Greek, small capital, and italic letters and numerals) intact.

In running text:

At beginning of sentence:

6.27 Unit of Measurement Abbreviations

APA uses the metric system in its journals. If you used instruments that record measurements in nonmetric units, report the nonmetric units followed by the established metric equivalents in parentheses.

Measurement in metric units:

Measurement in nonmetric units with the rounded metric equivalent:

Write out the full names of units of measurement that are not accompanied by numeric values.

Use abbreviations and symbols for units of measurement that are accompanied by numeric values; do not make symbols or abbreviations of units plural.

Also use the abbreviation or symbol in column and row (stub) headings of tables to conserve space, even when the term appears without a numeric value.

Do not define or spell out unit of measurement abbreviations, even the first time they are used. See Table 6.4 for a list of abbreviations for common units of measurement (for statistical symbols and abbreviations, including percentages and money symbols, see Section 6.44).

In most cases, use lowercase letters for symbols (e.g., kg), even in capitalized material. However, the following are exceptions:

- Symbols derived from the name of a person usually include uppercase letters (e.g., Gy).
- Symbols for prefixes that represent powers of 10 are usually written in uppercase letters: exa (E), peta (P), tera (T), giga (G), and mega (M).
- Use the symbol "L" for liter when it stands alone (e.g., 5 L, 0.3 mg/L) because a lowercase "l" may be misread as the numeral 1 (use lowercase "l" for fractions of a liter: 5 ml, 9 ng/dl).

Do not use a period after a symbol, except at the end of a sentence. An exception is to include a period after the abbreviation for "inch" (in.), which could be misread without the period.

Use a space between a symbol and the number to which it refers (e.g., degrees, minutes, and seconds). An exception is the measure of angles, in which case the symbol is written without a space after the measurement.

Do not repeat abbreviated units of measurement when expressing multiple amounts.

When reporting related statistics, such as means and standard deviations, report the unit with the main statistic but do not repeat it for the related statistic(s) when the unit remains the same.

Correct: Incorrect:

Use a centered dot between the symbols of a compound term formed by the multiplication of units.

Use a space between the full names of units of a compound unit formed by the multiplication of units; do not use a centered dot.

6.28 Time Abbreviations

To prevent misreading, do not abbreviate the words "day," "week," "month," and "year," even when they are accompanied by numeric values. Do abbreviate the words "hour," "minute," "second," "millisecond," "nanosecond," and any other division of the second when they are accompanied by numeric values.

Term	Abbreviation	Example

6.29 Latin Abbreviations

Use the following standard Latin abbreviations only in parenthetical material; in the narrative, use the translation of the Latin term. In both cases, punctuate as if the abbreviation were spelled out in the language in which you are writing.

Latin abbreviation	Translation
I	<u> </u>

_

SO4 (expression of a chemical name in combination with a formula is acceptable in this case).

Abbreviate a route of administration when it is paired with a number-and-unit combination. Do not use periods with abbreviations for routes of administration: icv = intracerebral ventricular, im = intramuscular, ip = intraperitoneal, iv = intravenous, sc = subcutaneous, and so forth.

6.31 Gene and Protein Name Abbreviations

Writing about genes can be challenging. Each gene has an official full name and symbol, designated by the HUGO Gene Nomenclature Committee, that describe the gene's function or location and often the protein it produces. Use standard gene names found in gene databases such as those from the National Center for Biotechnology Information (https://www.ncbi.nlm.nih.gov/gene) HUGO Gene Nomenclature Committee and the (https://www.genenames.org/). Gene names are organism specific (e.g., human, mouse), so use an appropriate database. Additionally, the same gene may be known by an "alias" (or alternate scientific, informal, and/or historical) name and symbol. For example, the glucocorticoid receptor gene, which is highly implicated in the response to stress, has the official name "nuclear receptor subfamily 3, group C, member 1"; has the official symbol NR3C1; and produces GR proteins; it is also commonly known as the "glucocorticoid receptor," abbreviated "GR." If a gene is known by more than one name or symbol, select one presentation and use it consistently; the first time you mention a gene in your paper, you may also note the other name and/or symbol by which it is known to alert readers who may not be familiar with the designation you chose. Also state whether you are referring to the gene or to its protein, and use appropriate terminology (e.g., use "expression" when discussing genes and "levels" when discussing proteins).

Do not italicize gene names written out in full (e.g., corticotropin-releasing hormone) and gene proteins (e.g., CRH). However, do italicize gene symbols (e.g., CRH). It is not required to abbreviate the full name of a gene and to use its symbol; follow the guidelines in Section 6.24 if you are considering using an abbreviation for a gene. For further discussion of gene names and formatting, see Wain et al. (2002) and the International Committee on Standardized Genetic Nomenclature for Mice and Rat Genome and Nomenclature Committee (2018).

Numbers

In general, use numerals to express numbers 10 and above and words to express numbers below 10. Consider on a case-by-case basis whether to follow the general guideline or if an exception applies.

6.32 Numbers Expressed in Numerals

Use numerals to express the following:

- numbers 10 and above throughout the paper, including the abstract (for exceptions, see Sections 6.33–6.34) and both cardinal and ordinal numbers (see Section 6.35)
- numbers that immediately precede a unit of measurement
- numbers that represent statistical or mathematical functions, fractional or decimal quantities, percentages, ratios, and percentiles and quartiles
- numbers that represent time, dates, ages, scores and points on a scale, exact sums of money, and numerals as numerals

• numbers that denote a specific place in a numbered series and parts of books and tables (the noun before the number is also capitalized when it denotes a specific place in a series; see Section 6.19); however, when the number precedes the noun, the usual guidelines for number use apply

Number after a noun	Number before a noun

6.33 Numbers Expressed in Words

Use words to express the following:

- numbers zero through nine (except as described in Sections 6.32 and 6.34) in the text, including the abstract
- any number that begins a sentence, title, or heading (when possible, reword the sentence to avoid beginning with a number)
- common fractions
- universally accepted usage

6.34 Combining Numerals and Words to Express Numbers

Use a combination of numerals and words to express back-to-back numerical modifiers.

However, if this makes the text more difficult for readers, consider rewording the sentence.

6.35 Ordinal Numbers

Treat ordinal numbers as you would cardinal numbers.

Ordinal	Cardinal base

The suffixes of ordinal numbers can be presented with or without a superscript (e.g., either 4th or 4th), but be consistent in presentation throughout your paper.

6.36 Decimal Fractions

Use a zero before the decimal point in numbers that are less than 1 when the statistic can exceed 1.

Do not use a zero before a decimal fraction when the statistic cannot be greater than 1 (e.g., correlations, proportions, levels of statistical significance).

The number of decimal places to use in reporting the results of experiments and data-analytic manipulations should be governed by the following principle: Round as much as possible while considering prospective use and statistical precision. As a general rule, fewer decimal digits are easier to comprehend than are more digits; therefore, it is usually better to round to two decimal places or to rescale the measurement (in which case effect sizes should be presented in the same metric). For instance, a difference in distances that must be carried to four decimals to be seen when scaled in meters can be more effectively illustrated in millimeters, which would require only a few decimal digits to illustrate the same difference.

When properly scaled, most data can be effectively presented with two decimal digits of accuracy. Report correlations, proportions, and inferential statistics such as t, F, and chi-square to two decimals. When reporting data measured on integer scales (as with many questionnaires), report means and standard deviations to one decimal place (as group measures, they are more stable than individual scores). Report exact p values (e.g., p = .031) to two or three decimal places. However, report p values less than .001 as p < .001. The tradition of reporting p values in the form of p < .10, p < .05, p < .01, and so forth was appropriate in a time when only limited tables of critical values were available. However, in tables the "p <" notation may be necessary for clarity (see Section 7.14). For guidance on the types of statistics to report in your paper, see the reporting standards for quantitative methods and results (Sections 3.6–3.7).

6.37 Roman Numerals

If Roman numerals are part of an established terminology, do not change them to Arabic numerals. For example, use "Type II error," not "Type 2 error." Use Arabic numerals for routine seriation (e.g., Step 1, Experiment 2, Study 3).

6.38 Commas in Numbers

Use commas between groups of three digits in most figures of 1,000 or more. Some exceptions are as follows:

Category	Example of exception

6.39 Plurals of Numbers

add "s" or "es" alone, without an apostrophe.

Statistical and Mathematical Copy

APA Style for presenting statistical and mathematical copy reflects (a) the standards of content and form agreed on in the field and (b) the requirements of clear communication. The Publication Manual addresses standards for presentation only; it does not provide guidance on how to choose statistics, conduct analyses, or interpret results. Consult a statistics reference work or a statistician for help if needed.

6.40 Selecting Effective Presentation

Statistical and mathematical copy can be presented in text, in tables, and/or in figures. In deciding which approach to take, follow these general guidelines:

- If you need to present three or fewer numbers, first try using a sentence.
- If you need to present four to 20 numbers, first try using a table.
- If you need to present more than 20 numbers, first try using a figure.

Select the mode of presentation that optimizes readers' understanding of the data. Detailed displays that allow fine-grained understanding of a data set may be more appropriate to include in supplemental materials (see Section 2.15) than in the print version of an article. However, editors publish tables and figures at their discretion; they may also request new tables and figures.

6.41 References for Statistics

Do not provide a reference for a statistic in common use (e.g., Cohen's d); this convention applies to most statistics used in journal articles. Provide a reference when (a) less common statistics are used, (b) a statistic is used in an unconventional or controversial way, or (c) the statistic itself is the focus of the paper.

6.42 Formulas

Do not provide a formula for a statistic in common use; however, provide a formula when the statistic or mathematical expression is new, rare, or

essential to the paper. The presentation of equations is described in Sections 6.46 and 6.47.

6.43 Statistics in Text

When reporting inferential statistics (e.g., t tests, F tests, chi-square tests, and associated effect sizes and confidence intervals), include sufficient information to allow readers to fully understand the analyses conducted. The data supplied, preferably in the text but possibly in supplemental materials depending on the magnitude of the data arrays, should allow readers to confirm the basic reported analyses (e.g., cell means, standard deviations, sample sizes, correlations) and should enable interested readers to construct some effect-size estimates and confidence intervals beyond those supplied in the paper per se. In the case of multilevel data, present summary statistics for each level of aggregation. What constitutes sufficient information depends on the analytic approach reported.

t values:

Hierarchical and other sequential regression statistics:

If you present descriptive statistics in a table or figure, do not repeat them in the text, although you should (a) mention the table in which the statistics can be found in the text and (b) emphasize particular data in the text when they aid in the interpretation of the findings.

When enumerating a series of similar statistics, be certain that the relation between the statistics and their referents is clear. Words such as "respectively" and "in order" can clarify this relationship.

When reporting confidence intervals, use the format 95% CI [LL, UL], where LL is the lower limit of the confidence interval and UL is the upper limit. Every report of a confidence interval must clearly state the level of confidence. However, when confidence intervals are repeated in a series or within the same paragraph, the level of confidence (e.g., 95%) has remained unchanged, and the meaning is clear, do not repeat "95% CI."

When a confidence interval follows the report of a point estimate, do not repeat the units of measurement.

6.44 Statistical Symbols and Abbreviations

Symbols and abbreviations are often used for statistics (e.g., "mean" is abbreviated "M"). Table 6.5 contains common statistical abbreviations and symbols.

- Do not define symbols or abbreviations that represent statistics (e.g., M, SD, F, t, df, p, N, n, OR, r) or any abbreviations or symbols composed of Greek letters (e.g., , , ²) in Table 6.5.
- However, define the other abbreviations in Table 6.5 (e.g., AIC, ANOVA, BIC, CFA, CI, NFI, RMSEA, SEM) when they are used anywhere in your paper (see Sections 6.25 and 7.14–7.15).

Table 6.5 Statistical Abbreviations and Symbols

Abbreviation	Unit of measurement

	$\sqrt{n-1}$
S	

	ê	

Some terms are used as both abbreviations and symbols. Use the abbreviation when referring to the concept and the symbol when specifying a numeric value. The symbol form will usually be either a non-English letter or an italicized English letter. Most abbreviations can be turned into symbols (for use when reporting numerical estimates) by simply italicizing the abbreviation.

operator, use the symbol or abbreviation. For example, write "(M = 7.74)," not "(mean = 7.74)."

Population parameters

are usually represented by Greek letters. Most estimators are represented by italicized Latin letters. For example, the population correlation would be ital cizea at q eiteru

Symbolp fop ap p Su

Symbolp fop Pmb sb mb

S

• Use bold type for symbols for vectors and matrices.

V

• Use italic type for all other statistical symbols.

On occasion, an element may serve as both an abbreviation and a symbol (e.g., SD); in this case, use the type style that reflects the function of the element (see Table 6.5).

6.45 Spacing, Alignment, and Punctuation for Statistics

Space mathematical copy as you would space words: a+b=c is as difficult to read as wordswithoutspacing. Instead, type a+b=c. For a minus sign indicating subtraction, use a space on each side of the sign (e.g., z-y=x); for a minus sign indicating a negative value, use a space before but not after the sign (e.g., -8.25).

Align signs and symbols carefully. Use the subscript and superscript functions of your word-processing program. In most cases, type subscripts first and then superscripts (x_a^2) . However, place a subscript or superscript such as the symbol for prime right next to its letter or symbol (x'_a) . Because APA prefers to align subscripts and superscripts one under the other ("stacking") for ease of reading instead of setting one to the right of the other ("staggering"), if you are publishing an article that includes statistics in an APA journal, your subscripts and superscripts will be stacked when they are typeset. If subscripts and superscripts should not be stacked, indicate this in a cover letter or in the manuscript.

Presentation of Equations

Punctuate all equations, whether they are in the line of text or displayed (i.e., typed on a separate line), to conform to their place in the syntax of the sentence (see the period following Equation 3 in Section 6.47). If your paper will be typeset and you have an equation that exceeds the column width of a typeset page, indicate in the accepted manuscript where breaks would be acceptable.

6.46 Equations in Text

Place short and simple equations, such as $a = [(1 + b)/x]^{1/2}$, in the line of text. To present fractions in the line of text, use a slash (/). To make the order of operations in an equation visually unambiguous, use parentheses, square brackets, and braces (together referred to as "fences"). Use parentheses first to enclose material; use square brackets to enclose material already in parentheses; and use braces (curly brackets) to enclose material already in square brackets and parentheses: first (), then [()], and finally {[()]}.

Equations in the line of text should not project above or below the line; for example, the equation at the beginning of this section would be difficult to set in the line of text if it were in this form:

$$a = \sqrt{\frac{1+b}{x}} \ .$$

Instead, such equations are displayed on their own line (see Section 6.47).

6.47 Displayed Equations

Display simple equations if they must be numbered for later reference. Display all complex equations. Number all displayed equations consecutively, with the number in parentheses near the right margin of the page.

$$w_i \pm z_{1-\alpha/2} \hat{\sigma}_{wi}. \tag{3}$$

When referring to numbered equations, include the full word "equation" (e.g., "Equation 3" or "the third equation," not "Eq. 3").

6.48 Preparing Statistical and Mathematical Copy for Publication

Display all mathematical signs and symbols in typed form, when possible. If a character cannot be produced by your word-processing program, insert it as an image. Type fences (i.e., parentheses, brackets, and braces), uppercase and lowercase letters, punctuation, subscripts and superscripts, and all other elements exactly as you want them to appear in the published article.

Lists

•

•

•

If bulleted list items are phrases or sentence fragments (i.e., not full sentences), begin each bulleted item with a lowercase letter (for exceptions, such as proper nouns, see Sections 6.14–6.21). There are two options for punctuating a bulleted list in which the items are phrases or fragments.

Phrases Without End Punctuation. The first option is to use no punctuation after the bulleted items (including the final one), which may be better when the items are shorter and simpler.

- •
- •
- •
- •

•

Phrases With End Punctuation. The second option is to insert punctuation Stephilosophi

When bulleted items

contain both phrases and sentences (as with a list of definitions in a glossary), various formats are possible, but the presentation should be consistent and logical. One approach is to lowercase the word or phrase at the beginning of the bullet in bold, followed by a colon. If what follows the colon is a sentence fragment, lowercase the first word after the colon.

• creativity:

Use a period after a sentence fragment when an additional sentence follows the fragment; otherwise, the punctuation after the fragment is optional.

• goal:

If what follows the colon is a complete sentence, capitalize the first word after the colon and end the sentence with a period or other end punctuation.

• problem solving:

TABLES AND FIGURES

Tables and figures enable authors to present a large amount of information efficiently and to make their data more comprehensible. Tables usually show numerical values (e.g., means and standard deviations) or textual information (e.g., lists of stimulus words, responses from participants) arranged in an orderly display of columns and rows. A figure may be a chart, graph, photograph, drawing, or any other illustration or nontextual depiction. At times, the boundary between tables and figures may be unclear; in general, tables are characterized by a row–column structure, and any type of illustration or image other than a table is considered a figure. In this chapter, we discuss the purpose of tables and figures; principles for designing, preparing, placing, and reproducing them; and guidelines for creating and formatting tables and figures in APA Style, with examples of various types.

General Guidelines for Tables and Figures

7.1 Purpose of Tables and Figures

The primary purpose of any table or figure is to facilitate readers' understanding of the work. For example, tables and figures can be used to summarize information (e.g., a theoretical model, qualities of studies included in a meta-analysis), to present the results of exploratory data analysis or data mining techniques (e.g., a factor analysis), to estimate some statistic or function (e.g., a nomograph), or to share full trial-level data (for more on data sharing, see Section 1.14). Although tables and figures attract attention, they should not be used for mere decoration in an academic paper. Instead, every table and figure should serve a purpose.

7.2 Design and Preparation of Tables and Figures

When preparing a table or figure, first determine the purpose of the display and the relative importance of that purpose (see Section 7.1); then, select a format that supports that purpose (see Sections 7.21 and 7.36 for sample tables and figures, respectively). For example, if the purpose is to illustrate a theoretical model, a chart is most likely the best option. Sometimes, multiple approaches are possible; for example, if your goal is to present group scores, a table would allow readers to see each group's exact scores, whereas a figure would emphasize similarities or differences between groups. When possible, use a standard, or canonical, form for a table or figure (examples are shown in Sections 7.21 and 7.36).

Design tables and figures with readers in mind. Communicate findings clearly while also creating attractive visual displays. Prepare tables and figures with the same care as the text of the paper; changes in text often demand changes in tables and figures, and a mismatch between data presented in the text versus in tables and figures may result in the need for a correction notice for published articles or in a lower grade for student assignments if the error is not corrected before publication or submission, respectively. Use the following principles when designing tables and figures:

- Label all columns in tables.
- Label all elements in figure images (e.g., label the axes of a graph).
- Place items that are to be compared next to each other.
- Place labels next to the elements they are labeling.
- In figure images, use sans serif fonts that are large enough to be read without magnification.
- Design the table or figure so it can be understood on its own (meaning readers do not have to refer to the text to understand it). Define abbreviations used in the table or figure even if they are also defined in the text (see Section 7.15 for some exceptions).
- Tables or figures designated as supplemental materials should also contain enough information to be understood on their own.
- Avoid decorative flourishes, which are distracting and can interfere with readers' comprehension; instead, ensure that every element supports the goal of effective communication.

7.3 Graphical Versus Textual Presentation

Be selective in choosing how many tables and figures to include in your paper. Readers may lose track of your message if there are a large number of tables and figures; for example, if many tables and figures accompany a small amount of text, it can cause problems with page layout for published articles. Moreover, graphical presentation is not always optimal for effective communication. For example, the results of a single statistical significance test or a few group means and standard deviations can be presented in text.

A table or figure is an effective choice to present the results of multiple statistical tests or many descriptive statistics (e.g., when reporting the results of numerous analyses of variance [ANOVAs] or summarizing participant demographic data). It may also be possible to combine several smaller tables or figures with similar content into one larger table or figure. Consider how the table or figure augments or supplements the text. For example, when the

components of a theoretical model are discussed in the text, a figure may help summarize the model; the value of the figure is the visual summary. However, tables or figures that are redundant with the text may be unnecessary.

7.4 Formatting Tables and Figures

Tables and figures follow the same structure: They have a table or figure number, a table or figure title, a body (for tables) or an image (for figures), and table or figure notes as needed. Tables and figures may be produced in many different file formats; publishers or instructors may limit the formats they accept.

Use the tables function of your word-processing program to create tables. If you copy and paste tables from another program (e.g., SPSS, Excel) into your word-processing program, you may need to adjust the formatting to comply with APA Style guidelines. Do not use the tab key or space bar to manually create the look of a table; this approach is prone to alignment errors and is especially problematic if the table will be typeset for publication.

Figures can be created in a variety of ways using many programs, such as Excel, PowerPoint, Photoshop, Illustrator, MATLAB, and Inkscape. Regardless of the program used to create the figure, the output should be of sufficient resolution to produce high-quality images. TIFF and EPS files are recommended for figures that are to be submitted for publication; file formats such as JPG or PNG are also acceptable for other works produced in APA Style (e.g., classroom assignments). Some types of figures require higher resolution than others; for example, line art requires finer detail than a photograph. Ensure that the format used supports the resolution needed for clear presentation of the image. Check the author guidelines for the journal or publisher to which you are submitting your work for specifications (for APA) Manuscript Preparation iournals. see the Journal Guidelines at http://on.apa.org/WDtxdW).

7.5 Referring to Tables and Figures in the Text

In the text, refer to every table and figure by its number—known as a callout (see Sections 7.10 and 7.24, respectively, for how to assign numbers for

tables and figures that accompany the main text; see

the manuscript regardless of where the figures are located within the manuscript.

Align all tables and figures with the left margin regardless of where they appear in the paper. When embedding a table or figure within the text, position it after a full paragraph, ideally the paragraph where it is first called out. Place the table or figure so that it fits on one page if possible (see Section 7.18 for tables longer or wider than a page). If text appears on the same page as a table or figure, add a double-spaced blank line between the text and the table or figure so that the separation between the text and table or figure is easier to see. Put a short table or small figure at the beginning or end of a page rather than in the middle.

Tables and figures that support but are not essential to the text may be placed in one or more appendices. Tables and figures may appear within an appendix that also contains text, or a table or figure may constitute a whole appendix by itself (see Section 2.14). Tables and figures can also be placed in supplemental materials when they would enrich understanding of the material presented in the article but are not essential to a basic understanding or cannot be fully displayed in print (see Section 2.15). If tables or figures are included as supplemental materials, call them out in the text but describe them only briefly (e.g., write "see Table 1 in the supplemental materials for the list of stimuli").

7.7 Reprinting or Adapting Tables and Figures

If you reprint or adapt a table or figure from another source in your paper (e.g., a table from your own published work, an image you found on the internet), you must include a copyright attribution in the table note or figure note indicating the origin of the reprinted or adapted material in addition to a reference list entry for the work. You may also need to obtain permission

Tables

7.8 Principles of Table Construction

Tables should be integral to the text but designed so that they are concise and can be understood in isolation. The principle of conciseness is relevant not only for tables included with the main text but also for tables to be placed in appendices and supplemental materials. Although supplemental tables may be longer and more detailed than tables that accompany the main text, they must be directly and clearly related to the content of the article (see Section 2.15).

All tables are meant to show something specific; for example, tables that communicate quantitative data are effective only when the data are arranged so that their meaning is obvious at a glance (Wainer, 1997). Often, the same data can be arranged in different ways to emphasize different features of the data, and which arrangement is better depends on your purpose. Above all, table layout should be logical and easily grasped by readers. Table entries that are to be compared should be next to one another. In general, different indices (e.g., means, sample sizes) should be presented in different rows or columns. Place variable and condition labels close to their values to facilitate comparison. See the sample tables (Section 7.21) for examples of effective layouts.

7.9 Table Components

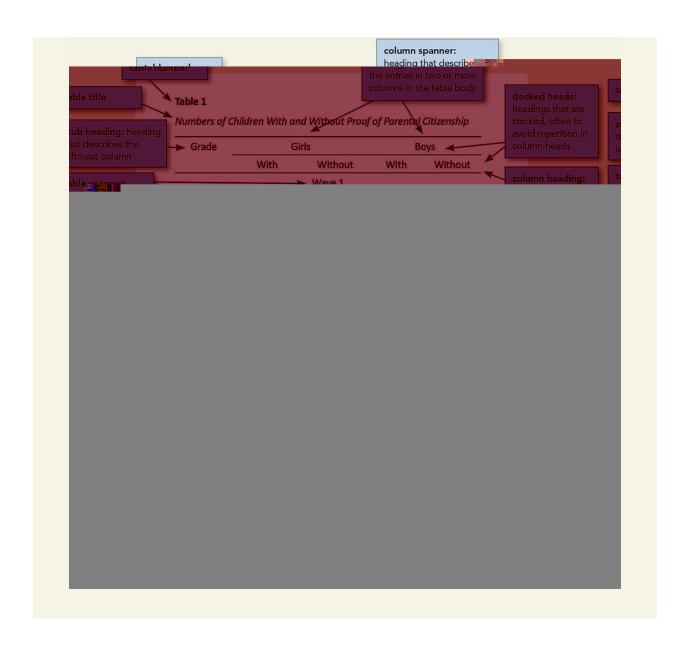
The basic components of a prototypical table are shown in Table 7.1 and are summarized as follows.

- The table number (e.g., Table 1) appears above the table in bold font (see Section 7.10).
- The table title appears one double-spaced line below the table number in italic title case (see Sections 6.17 and 7.11).
- Tables may include a variety of headings depending on the nature and arrangement of the data. All tables should include column headings, including a stub heading (heading for the leftmost column).

Some tables also include column spanners, decked heads, and table spanners (see Section 7.12).

- The table body includes all the rows and columns of a table (see Section 7.13). A cell is the point of intersection between a row and a column. The body may be single-spaced, one-and-a-half-spaced, or double-spaced.
- Three types of notes (general, specific, and probability) appear below the table as needed to describe contents of the table that cannot be understood from the table title or body alone (e.g., definitions of abbreviations, copyright attribution). Not all tables include table notes (see Section 7.14).





See Section 7.21 for sample tables.

7.10 Table Numbers

Number all tables that are part of the main text (i.e., not part of an appendix or supplemental materials) using Arabic numerals—for example, Table 1, Table 2, and Table 3. Assign the numbers in the order in which each table is first mentioned in the text, regardless of whether a more detailed discussion of the table occurs elsewhere in the paper. Write the word "Table" and the

number in bold and flush left (i.e., not indented or centered). Tables that appear in appendices follow a different numbering scheme (see Section 2.14).

7.11 Table Titles

Give every table a brief but clear and explanatory title; the basic content of the table should be easily inferred from the title. Write the table title in italic title case below the table number and double-space the table number and title. Avoid overly general and overly detailed table titles.

Example table title	Rationale
	Example table title

Abbreviations that appear in the headings or the body of a table may be parenthetically explained in the table title.

Abbreviations may also be defined in a general note to the table (see Section 7.14). Do not use a specific note to clarify an element of the title.

7.12 Table Headings

Headings establish the organization of information in the table and identify what is in each column. Column headings describe the entries below them. Table headings should be brief; if possible, the heading should be not much wider than the information in the column below it. Provide a heading for every column in a table, including the stub column or stub, which is the leftmost column of the table (see Table 7.1 for an illustration).

The stub column usually lists the major independent or predictor variables. In Table 7.1, for instance, the stub column lists the grades. For the stub column, the heading "Variable" is often used when no other heading is

suitable. Write the entries in the stub column in parallel form (see Section 4.24 for guidance on parallel construction). Number entries in the stub column only in a correlation matrix (see Tables 7.10–7.11 in Section 7.21) or when they are referred to by number in the text. To show subordination within the stub column, use indentation rather than creating an additional column (see, e.g., Table 7.2, in which "Single," "Married/Partnered," etc. are indented under the heading "Marital Status"). Set indentation using the paragraph-formatting feature of your word-processing program rather than by using the tab key. In typeset articles, the indentation is equal to one em space; this can be approximated in draft manuscripts by setting the paragraph indentation to 0.15 in. or inserting an em space from the special characters menu of your word-processing program.

The headings above the columns to the right of the stub column identify what is in each column. A column heading applies to just one column; a column spanner is a heading that covers two or more columns, each with its own column heading. Headings stacked in this way are called decked heads. Often, decked heads can be used to avoid repetition of words in column headings (see Table 7.1). If possible, do not use more than two levels of decked heads. More complex tables may require table spanners, which are headings within the body of the table that cover the entire width of the table, allowing for further divisions within the table when the column headings remain the same (see Table 7.1). Table spanners can also be used to combine two tables, provided they have identical column headings.

Any item within a column should be syntactically as well as conceptually comparable with the other items in that column, and all items should be described by the column heading. For example, a column with the heading "%" would contain only percentages; numbers in that column would not be followed by the percent symbol because the symbol is already in the heading (see Table 7.2 in Section 7.21).

Use sentence case for all headings in a table (see Section 6.17). Center all table headings above their column(s). Stub headings, column headings, and column spanners should be singular (e.g., Measure, Item) unless they refer to a group (e.g., Children, Women), but table spanners may be singular or plural.

7.13 Table Body

The main part of the table, the table body, contains information organized in cells. Information in a table body may be in the form of numbers, words, or a mixture of both. The body of the table (including table headings) may be single-spaced, one-and-a-half-spaced, or double-spaced, depending on which presentation most effectively conveys information to readers (e.g., single spacing may allow a table to fit on one page). If entries are longer than one line, use a hanging indent of 0.15 in. or one em space. In the stub column of the table, center the stub heading and align the entries flush left beneath it. If entries in this column are significantly shorter than the stub heading, it is permissible to center them beneath the stub heading (e.g., single-digit numbers in the stub column; see the partial table later in this section for an example). The entries in all other cells of the table should be centered (however, aligning them flush left is acceptable if doing so improves the readability of longer entries). Use sentence case for all word entries in the table body (see Section 6.17). Numbers that appear in the table body should be written as words or numerals according to the guidelines in Sections 6.32 to 6.39; however, it is permissible to use numerals for all numbers in tables if this would be clearer or save space.

Express numerical values to the number of decimal places that the precision of measurement justifies (see Section 6.36). If possible, carry all comparable values to the same number of decimal places. Numerical values should be centered in the column and may also be aligned on the decimal if desired (for the published version, the typesetter will typically center values and align on the decimal).

If a cell cannot be filled because data are not applicable, leave the cell blank. Use a general or specific table note if you need to explain why the cell is blank or the element is inapplicable (see Section 7.14). If a cell cannot be filled because data were not obtained or are not reported, insert a dash in that cell and explain the use of the dash in the general note to the table (see Section 7.14). By convention, a dash in the main diagonal position of a correlation matrix (see Tables 7.10–7.11 in Section 7.21) indicates the correlation of an item with itself, which must be 1.00, and is simply replaced by the dash with no explanation needed.

Be selective in your presentation. Do not include columns of data that can be calculated easily from other columns. For example, the following partial table is redundant because it shows both the number of responses per trial and the total number of responses; instead, show only whichever is more important to the discussion.

	No. o	f responses		
Participant	First trial	Second trial	Total responses	

If a table contains citations to other works, follow the formats described in Section 8.11. Use an ampersand (&) for the word "and" in all citations in tables to conserve space. Table 7.4 in Section 7.21 shows an example of a table containing citations to studies included in a meta-analysis.

7.14 Table Notes

Tables may have three kinds of notes, which are placed below the body of the table: general notes, specific notes, and probability notes. Table notes apply only to a specific table and not to any other table. If information in one table note is true for another table, repeat the information in the notes for both tables so that the tables can be understood on their own. Some tables do not require table notes at all.

A general note qualifies, explains, or provides information relating to the table as a whole and explains any abbreviations; symbols; special use of italics, bold, or parentheses; and the like. The general note also includes any acknowledgments that a table is reprinted or adapted from another source (see Section 7.7). General notes are designated by the word "Note" (italicized) followed by a period (see Table 7.1 and the sample tables in Section 7.21 for examples). Explanations of abbreviations and copyright attributions for reprinted or adapted tables appear at the end of the general note, in that order.

A specific note refers to a particular column, row, or cell. Specific notes are indicated by superscript lowercase letters (e.g., ^a, ^b, ^c). Do not add specific notes to a table title; instead, use a general note. Within each table that has specific notes, order the superscripts from left to right and from top to bottom, starting at the top left and beginning with the letter "a" (see, e.g., Tables 7.2, 7.10, and 7.15 in Section 7.21). The corresponding specific note below the table begins with the same superscript letter. Place a superscript space before the superscript letter in the table body (e.g., Group ^a). Place a superscript space after the superscript letter in the specific note. This space prevents specific notes from getting caught by spell-check and improves readability.

A probability note describes how asterisks and other symbols are used in a table to indicate p values and thus the significance of the results of statistical hypothesis testing. To report the results of significance testing, it is best to provide the exact probabilities to two or three decimal places (e.g., p = .023; see, e.g., Tables 7.8–7.9 in Section 7.21; see also Section 3.7 and Section 6.36). However, when p values are less than .001, it is acceptable to write the value as "<.001."

It may sometimes be difficult to report exact p values in a table because doing so would make the table difficult to read. An alternative to reporting exact p values in a table is to use the "p <" notation. Use this notation only in tables and figures (see Section 7.28 for more on figure notes), not in the text. In the "p <" notation, asterisks or daggers appear after table entries to indicate that the entries have reached the established threshold for significance; definitions of the asterisks and/or daggers appear in a corresponding probability note. Use the same number of asterisks to indicate the same p values across tables (or figures) within your paper, such as p < 0.05, p < 0.01, and p < 0.001 (see, e.g., Tables 7.10–7.11 in Section 7.21). In general, do not use any p value smaller than .001. Daggers are sometimes used to indicate nonsignificant trends based on the threshold established for

your study (e.g., $^{\dagger}p < .10$) or to distinguish between one-tailed and two-tailed tests. Use superscript formatting for asterisks and daggers. In a table body (or a figure), position asterisks and daggers immediately after the entries they belong to, with no space in between (e.g., $.02^*$). In the probability note, place asterisks and daggers immediately before the p, with no space in between (e.g., $^*p < .002$).

If you need to distinguish between one-tailed and two-tailed tests in the same table, use an asterisk for the two-tailed p values and an alternate symbol (e.g., dagger) for the one-tailed p values, and specify the convention in the probability note.

To indicate statistically significant differences between two or more table values—for example, when comparing values with post hoc tests such as Tukey's honestly significant

comparing values with post hoc tests such as Tukey's honestly significant difference (HSD) test, Bonferroni procedure, Scheffé method, Fisher's least significant difference, or Duncan's new multiple range test—use lowercase subscript letters (see Table 7.9 in Section 7.21 for an example). Explain the use of the subscripts in the table's general note, as in the following example:

Begin each kind of note on a new line below the table body. A general note appears first. A specific note begins on a new line under a general note; subsequent specific notes begin on the same line. A probability note begins on a new line under any general or specific notes; subsequent probability notes begin on the same line. Multiple specific or probability notes are separated from each other by a period and a space. Lengthy specific notes may be presented on separate lines if this improves readability. Double-space all table notes, and align all notes flush left (i.e., with no paragraph indentation).

Table notes can be useful for eliminating repetition from the body of a table. Certain types of information are appropriate either in the table body or in a note. To determine the placement of such material, remember that clearly and efficiently organized data enable readers to focus on those data. Thus, if probability values or subsample sizes are numerous, use a column rather than many notes. Conversely, if a row or column contains few entries (or the same entry), eliminate the column by adding a note to the table, as shown in the following partial tables.

Repetitive	Concise

7.15 Standard Abbreviations in Tables and Figures

Use standard abbreviations and symbols for all statistics (e.g., M, SD, SE, F, df, n, p), Greek letters (e.g., , , ²), and units of measurement (see Tables 6.4–6.5) used in tables without defining them in a note. This guidance also applies to statistics, Greek letters, and units of measurement appearing in figures (see Section 7.28 for more on figure notes). The abbreviation "no." (for "number") and the symbol "%" (for "percent") may also be used without providing a definition. Other abbreviations used in a table or figure should be defined in the table or figure title, body, or note, even if the abbreviations are also defined in the paper (see Sections 6.25 and 6.44). Except where it makes sense to group similar abbreviations, define the abbreviations in the order that they appear in the table, starting at the top left and moving left to right, top to bottom.

7.16 Confidence Intervals in Tables

When a table includes point estimates—for example, means, correlations, or regression slopes—it should also, when possible, include confidence intervals. Report confidence intervals in tables either by using square brackets, as in the text (see Section 6.9) and in Table 7.16 in Section 7.21, or by giving lower and upper limits in separate columns, as in Table 7.17 in Section 7.21. In every table that includes confidence intervals, state the confidence level (e.g., 95% or 99%). It is usually best to use the same confidence level throughout a paper.

7.17 Table Borders and Shading

Limit the use of borders or lines in a table to those needed for clarity. In general, use a border at the top and bottom of the table, beneath column headings (including decked heads), and above column spanners. You may also use a border to separate a row containing totals or other summary information from other rows in the table (see Table 7.1 for an example). Do not use vertical borders to separate data, and do not use borders around every cell in a table. Use spacing between columns and rows and strict alignment to clarify relations among the elements in a table.

Avoid the use of shading in tables. Do not use shading for mere decoration. To emphasize the content of a particular cell or cells, use a specific or probability note; italics or bold may also be used with explanation in the table's general note. Instead of using shading, add white space or borders between rows and columns to help readers distinguish them. If shading is necessary, explain its purpose in the table's general note.

7.18 Long or Wide Tables

If a table is longer than one page, repeat the heading row on each subsequent page of the table. It is best to use the automated table-formatting tools of your word-processing program rather than manually retyping the headings. Table 7.4 in Section 7.21 shows an example of a multipage table—in this case, a table summarizing the studies included in a meta-analysis.

Wide tables may be presented in landscape orientation (it is not important if landscape orientation impacts the position of the page header). If a table in landscape format is still too wide to fit on one page, the stub column (left

column) should repeat on each subsequent page. If a table is too wide and too long to fit on one page, create separate tables.

7.19 Relation Between Tables

Consider combining tables that repeat data. Ordinarily, identical columns or rows of data should not appear in two or more tables. Be consistent in the presentation of all tables within a paper to facilitate comparisons. Use similar formats, titles, and headings and the same terminology across tables whenever possible (e.g., do not use "response time" in one table and "reaction time" in another table to refer to the same concept). If multiple tables contain similar data but cannot be combined, number these tables separately (e.g., Table 1 and Table 2); do not use letters to indicate subtables (i.e., do not label two tables Table 1A and Table 1B).

7.20 Table Checklist

The table checklist may help ensure that the data in your table are effectively presented and conform to the style guidelines presented in this chapter.

7.21 Sample Tables

Some tables have certain standard, or canonical, forms (e.g., a correlation table). When possible, use a standard form rather than designing your own form. The advantage of using the canonical form is that readers generally already know where to look in the table for certain kinds of information. In some situations, you may want to use a form other than the canonical table form to make a specific point or to stress certain relationships. The judicious use of nonstandard forms can be effective but must always be motivated by the special circumstances of the data array. When using nonstandard forms, make certain that labeling is clear.

Sample tables are presented next; follow these samples to design basic tables. The exact contents and structure of your table will vary from the sample tables depending on the nature of the information being presented. For variations not addressed in this chapter, consult similar published articles to see examples of current standards and practices.

Table Checklist	
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• (Table 7.2):
Demographic data can help readers understand the generalizability of the

results. The demographic data you report will depend on the nature of the study.

- (Table 7.3): Describe the properties of study variables (e.g., means, standard deviations). If reporting psychometric information, clearly state the index of reliability (or other psychometric property) being used and the sample on which the reliability was based (if different from the study sample).
- (Table 7.4): The qualities of the studies included in a meta-analysis can be reported in a table as a summary for readers (what information is relevant to report will depend on the nature of the study).
- (Table 7.5): Complex designs can be summarized in a table, making the entire structure of the experiment(s) clear without the need for lengthy textual description.
- (Table 7.6): Descriptive statistics include means and standard deviations. The exact statistics you should provide will depend on the nature and purpose of the analyses.
- (Table 7.7): The results of individual chi-square tests are usually reported in the text only (see Section 6.43). The results of multiple chi-square tests may be summarized in a table, which typically also includes frequencies, p values, and any other relevant statistics such as effect sizes.
- (Table 7.8): When there is only one t test to report, the results should be incorporated into the text (see Section 6.43). Use a table

to report the results of multiple t tests.

- (e.g., Tukey's HSD test, Bonferroni procedure, Scheffé method, Fisher's least significant difference, Duncan's new multiple range test) are used to compare specific group means in studies in which the independent variables have more than two levels. Although these results are often presented in the text rather than in a table, a table can be used to summarize comparisons. This table is similar to the table for presenting descriptive statistics (Table 7.6) with the addition of subscripts to note significantly different means.
- (Tables 7.10–7.11): A correlation table presents correlations between study variables and may also incorporate descriptive statistics, alpha values, or other relevant statistics (Table 7.10). The perfect correlation along the diagonal is indicated by an em dash. Intercorrelations for two different groups can be presented in the same table, with correlations for one group above the diagonal and for the other group below the diagonal (Table 7.11). The variables in a correlation table should be numbered and named in the stub column, with corresponding numbers alone in the column headings to avoid repeating the variable names in the column headings.
- (Tables 7.12–7.13): The results of a single one-way ANOVA are typically reported in the text only. The results of multiple ANOVAs can be reported in a table; various presentations are possible. For example, degrees of freedom may be presented in the column heading when they are the same for all tests (Table 7.12) or in their own column when they differ (Table 7.13). Sums of squares and mean squares are not typically included in tables intended for publication.
- (Table 7.14): Factor coefficients or loadings (rotated or unrotated) can be presented in a variety of ways and may be accompanied by other indices such as the percentage of variance and eigenvalues. If a rotation is used, specify the type (e.g., varimax, oblimin). Factor coefficients or loadings above a prescribed threshold are typically indicated by the use of bold; the purpose of any bolding should be explained in the table note.

- (Tables 7.15–7.18): The results of multiple regression, including mediation and moderation analyses, can be presented in a variety of ways depending on the purpose of the table and need for detail. Clearly label the regression type (e.g., hierarchical) and the type of regression coefficients (raw or standardized) being reported. For hierarchical and other sequential regressions, be sure to provide the increments of change (see Section 6.43). Four options are shown in the sample tables: regression coefficients without confidence intervals (Table 7.15), regression coefficients and bracketed confidence intervals (Table 7.16), moderator analysis with confidence intervals in separate columns (Table 7.17), and hierarchical multiple regression (Table 7.18).
- (Tables 7.19–7.21): Model comparison tables are used to compare different models of data (Table 7.19), including multilevel models (Table 7.20), and to report the results of confirmatory factor analyses (Table 7.21). Ensure that the competing models are clearly identified and that the comparisons are clearly specified. Comparative fit indices can be useful for readers.
- (Tables 7.22–7.23): Qualitative data can be presented in tabular form in an innumerable variety of ways depending on the purpose of the table. Qualitative tables might include descriptions of variables (as in Table 7.22), referenced studies, test items, or quotations from research participants. Quantitative data may be incorporated alongside the qualitative data (e.g., quotations might be presented alongside response frequencies, as in Table 7.23).
- (Table 7.24): The procedures or findings of mixed methods research can be presented in tabular form in various ways depending on the purpose of the table.

Sample Tables

Table 7.2 Sample Demographic Characteristics Table

Table 1
Sociodemographic Characteristics of Participants at Baseline

Baseline characteristic	Guided	self-help	Unguided	d self-help	Wait-list	t control	Full s	ample
	n	%	n	%	n	%	n	%
Gender								
Female	25	50	20	40	23	46	68	45.3
Male	25	50	30	60	27	54	87	54 €



Table 7.3 Sample Properties of Study Variables Table Table 1

Table 7.4 Sample Meta-Analysis Summary Table

ole 7.5 Sample S	Summary of Complex	Experimental De	esign Table
Table 1			

Table 1Means and Standard Deviations of Scores on Baseline Measures

Scale	High BAS group	Moderate Market Co.	p	
BAS-T	46.17 (2.87)	37.99 (1.32)	<.001	Parenthetical values in
SR	17.94 (1.88)	11.52 (1.84)	<.001	a short table are easily
BDI	7.11 (6.50)	6.18 (6.09)	.254	read. In most tables, different indices should
ASRM	6.46 (4.01)	5.63 (3.69)	.109	be presented in different rows or columns.
M-SRM	11.05 (3.36)	11.76 (2.75)	.078	TOWS OF COIGHTHS.

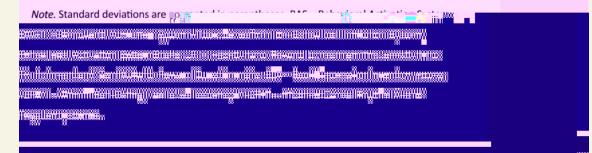


Table 7.7 Sample Chi-Square Analysis Table
Table 1
Table 7.8 Sample Results of Several t Tests Table

Table 2 exact p values Results of Curve-Fitting Analysis Examining the Time Course of Fixations to the Target Logistic parameter 9-year-olds 16-year-olds t(40) Cohen's d M SD M SD 0.951 Maximum asymptote, proportion .843 .135 .877 .082 .347 0.302 Crossover, in ms 759 87 42 0.840 694 2.877 .006 .001 .0002 .002 .0002 2.635 :012 2.078 Slope, as change in proportion per ms Note. For each particinant, the logistic function was fit to to the logistic function was fit to the logistic function. is the asymptotic degree of looking at the end of the time course of fixations. The crossover is the point in time when the function crosses the midway point between peak and baseline. The slope represents the rate of change in the function measured at the crossom and the crossom and the analyses are shown for the 9-year-olds (n = 24) and the 16-year-olds (n = 18), as well as the results of t tests (assume 24).

Table 3 Analyses for the In	teraction of F	Professor Type a	nd Timing of F	Respo <u>n</u> s <mark>e on P</mark> e	erceptions (of Professo	r Traits
Professor trait		semester sor type	Start of semester professor type		F ratio	p	η²
	Typical	Effective	Typical	Effective		4	Taxable or and
Dedicated	4.706 _b	4.789 ₆	4.154 _c	5.000 _a	19.26	.001	.15
Easy to understand	3.059 _c	4.895 _a	3.231 _c	4.429 _b	5.01	.028	.03
Fair	4.000 _b	4.263 _b	3.731 _c	4.667a	5.75	.019	.06
Manipulative	1.471,	1.632	1.731 _a	1.238 _a	3.92	.051	.05
Insensitive	2.059 _b	1.526 _c	2.538a	1.143。	8.12	.006	.06

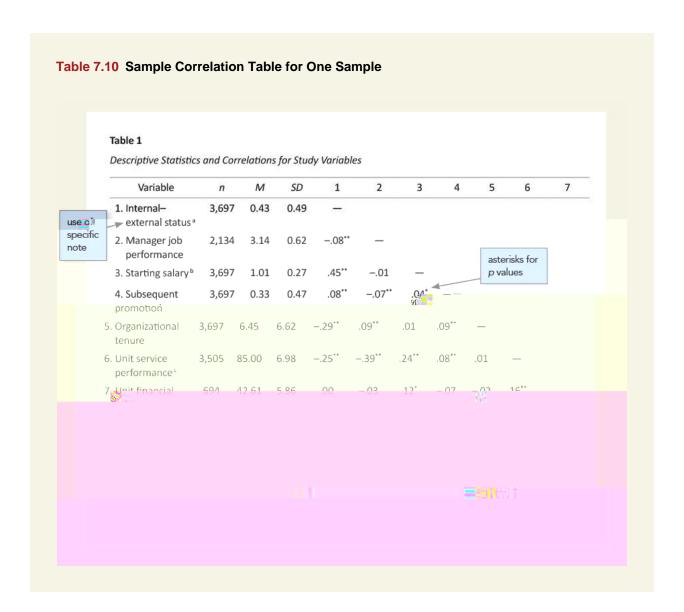




Table 1Intercorrelations for Study Variables Disaggregated by Gender

Variable	1	2	3	4
1. Grade point average	<u> </u>	5 .911	.35**	05
. Academic self-concept				.02
3. Teacher trust				
1. Age	.10	.21	15	

Note. The results for the female sample (n = 199) are shown above the diagonal. The results for the male sample (n = 120) are shown below the diagonal.

p < .05, p < .01.

Table 7.13 Sample Analysis of Variance Table (Option 2) Table 2

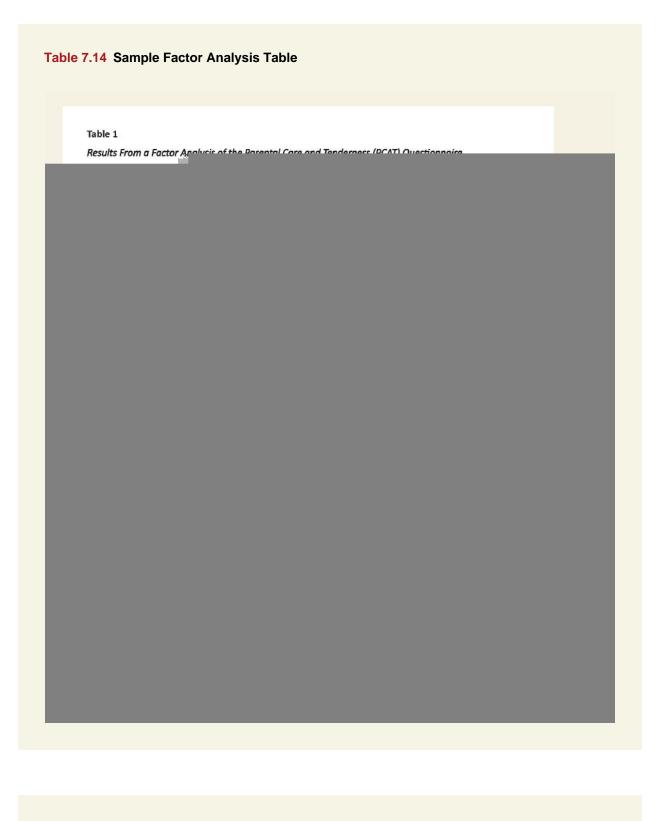


Table 7.15 Sample Regression Table, Without Confidence Intervals

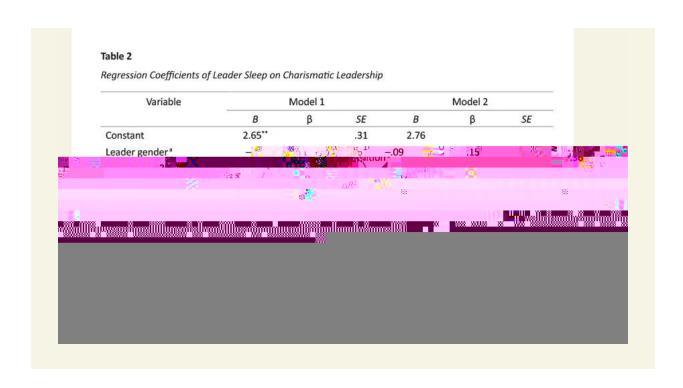


Table 7.16 Sample Regression Table, With Confidence Intervals in Brackets Table 4 Regressions of Associations Between Marital Satisfaction and Average Levels of Marital Behavior Variable В SE 95% CI t p Angry behavior Actor -98.9040.20 -2.46.016 [-179.1, -18.7] $H \rightarrow H$ $W \rightarrow W$ -.87.11 30.87 -2.82.006 [-148.7, -25.6] Partner 39.43 -76.18 -1.93.057 $W \rightarrow H$ [-154.8, 2.4] square brackets $H \rightarrow W$ -91.80 38.16 -2.41.019 [-167.9, -15.7] around confidence Disregard intervals Actor $H \rightarrow H$ -38.62 27.86 -1.39 .170 [-94.2, 16.9] $W \rightarrow W$ -47.54 26.99 -1.76.082 [-101.4, 6.3] Partner -82.8 -2.59 $W \rightarrow H$ 32.01 .012 [-146.6, -19.0] -79.36 27.16 [-133.5, -25.2] $H \rightarrow W$ -2.92 .005 Distancing Actor $H \rightarrow H$ -47.42 24.72 -1.92.059 [-96.7, 1.9] $W \rightarrow W$ 3.04 23.48 [-43.8, 49.8] 0.13 .897 Partner -0.05 $W \rightarrow H$ 23.91 0.00 .998 [-47.7, 47.6] $H \rightarrow W$ -53.50 24.47 -2.19 J 27-14-1

Table 7.17 Sample Regression Table, With Confidence Intervals in Separate Columns

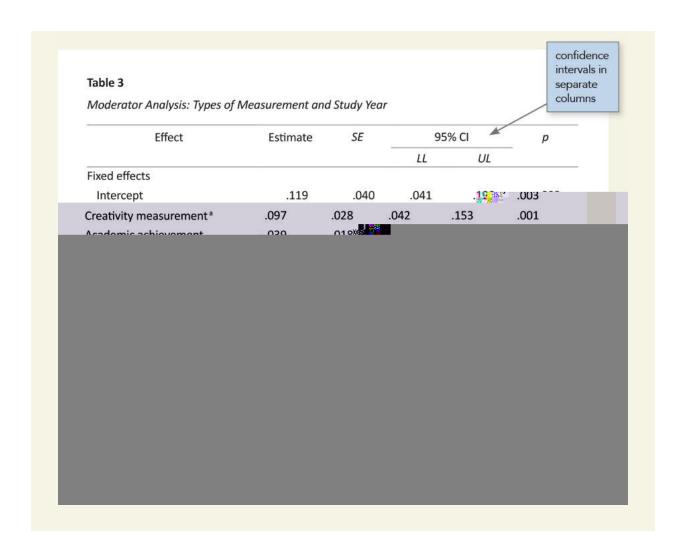


Table 7.18 Sample Hierarchical Multiple Regression Table Table 2

Table 7.19 Sample Model Comparison Table Table 1

Table 7.20 Sample Multilevel Model Comparison Table Model Parameters and Goodness of Fit for Linear and Quadratic Changes in Emotions by Behavior Type

Table 7.21 Sample Confirmatory Factor Analysis Model Comparison Table Table 2

Table 7.22 Sample Qualitative Table With Variable Descriptions Table 2

Table 7.23 Sample Qualitative Table Incorporating Quantitative Data Table 1

Table 7.24 Sample Mixed Methods Table Table 3

Figures

7.22 Principles of Figure Construction

All types of graphical displays other than tables are considered figures in APA Style. Ensure that all figures add substantively to readers' understanding and do not duplicate other elements of the paper. Also consider whether a figure is the best way to communicate the information. In some cases (particularly when quantitative information is being conveyed), a table may offer more precision than, say, a graph. If you focus on the principle of enhancing readers' understanding, other questions—for example, use of color, use of photographic images, or magnitude of cropping of a picture—should be relatively easy to resolve.

The standards for good figures are simplicity, clarity, continuity, and (of course) information value. A good figure

- augments rather than duplicates the text,
- conveys only essential information,
- omits visually distracting detail,
- is easy to read—its elements (e.g., type, lines, labels, symbols) are large enough to be seen and interpreted with ease,
- is easy to understand—its purpose is readily apparent,
- is carefully planned and prepared, and
- is consistent with and in the same style as similar figures in the same article.

For figures of all types, check that

- images are clear,
- lines are smooth and sharp,
- font is simple and legible,
- units of measurement are provided,
- axes are clearly labeled, and
- elements within the figure are labeled or explained.

Be certain, for instance, to distinguish between error bars and confidence intervals. When using confidence intervals, clearly specify the size of the interval (e.g., 95%); when using error bars, provide the label for the error (e.g., standard error of the mean) in the figure image or note. In addition, check all figures to ensure that

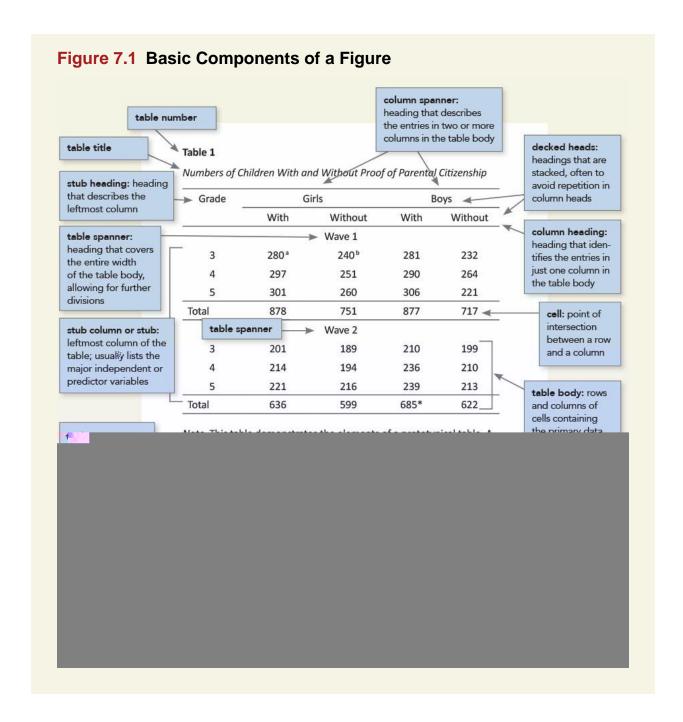
- sufficient information is given in the legend and/or note to make the figure understandable on its own (i.e., apart from the text),
- symbols are easy to differentiate, and
- the graphic is large enough for its elements to be discernible.

Even when using high-quality graphics software to construct figures, examine figures carefully and make any necessary adjustments to follow these guidelines.

7.23 Figure Components

The basic components of a prototypical figure are shown in Figure 7.1 and are summarized as follows:

- The figure number (e.g., Figure 1) appears above the figure in bold (see Section 7.24).
- The figure title appears one double-spaced line below the figure number in italic title case (see Sections 6.17 and 7.25).
- The image portion of the figure is the chart, graph, photograph, drawing, or other illustration itself (see Section 7.26).
- A figure legend, or key, if present, should be positioned within the borders of the figure and explains any symbols used in the figure image (see Section 7.27).
- Three types of notes (general, specific, and probability) can appear below the figure to describe contents of the figure that cannot be understood from the figure title, image, and/or legend alone (e.g., definitions of abbreviations, copyright attribution). Not all figures include figure notes (see Section 7.28).



See Section 7.36 for sample figures.

7.24 Figure Numbers

Number all figures that are part of the main text (i.e., not part of an appendix or supplemental materials) using Arabic numerals—for example, Figure 1, Figure 2, and Figure 3. Assign the numbers in the order in which each figure

is first mentioned in the text, regardless of whether a more detailed discussion of the figure occurs elsewhere in the paper. Write the word "Figure" and the number in bold and flush left (i.e., not indented or centered). Figures that appear in appendices follow a different numbering scheme (see Section 2.14).

7.25 Figure Titles

Give every figure a brief but clear and explanatory title; the basic content of the figure should be easily inferred from the title. Write the figure title in italic title case below the figure number and double-space the figure number and title. Avoid overly general and overly detailed figure titles (see Section 7.11).

7.26 Figure Images

The image part of the figure (e.g., graph, chart, diagram) should be saved in a resolution sufficient to allow for clear printing or viewing (see Section 7.4). Attend to the following considerations when creating images.

Each element in a figure must be large enough and sharp enough to be legible. Use a simple sans serif font (e.g., Arial, Calibri, Lucida Sans Unicode; see Section 2.19) within the image portion of the figure with enough space between letters to avoid crowding. Letters should be clear, sharp, and uniformly dark and should be sized consistently throughout the figure; the font size should be no smaller than 8 points and no larger than 14 points. As a general guideline, plot symbols should be about the size of lowercase letters that appear in a label within the figure. Also consider the weight (i.e., size, density) of each element in a figure in relation to that of every other element, and make the most important elements the most prominent. For example, curves on line graphs and outlines of bars on bar graphs should be bolder than axis labels, which should be bolder than the axes and tick marks.

Use title

case for axis labels. Abbreviate the words "number" to "no." and "percentage" to "%." Words within figure images other than those on the axis labels or in the figure legend may be written in either title case or sentence

case (see Section 6.17), depending on the contents of the figure. In general, labels, phrases, or words that serve as headings would be better set in title case, whereas other descriptive phrases, sentences, or paragraphs within a figure would be better set in sentence case. Numbers that appear in the image portion of a figure should be written as words or numerals according to the guidelines in Sections 6.32 to 6.39; however, it is permissible to use numerals for all numbers in a figure if this would be clearer or save space. Statistics, Greek letters, and units of measurement do not need to be defined in a figure note (see Section 7.15).

Limit the number of different shadings used in a single graphic. If different shadings are used to distinguish bars or segments of a graph, choose shadings that are distinct; for example, the best option to distinguish two sets of bars is no shading ("open") and black or gray ("solid"). If more than two shadings are needed, use patterns, again making sure that the patterns are distinct—for example, use no (open) shading, solid black or gray, and stripes for three shadings. If error bars or other information overlaps with shaded areas (e.g., double-sided error bars in a bar graph), ensure that the overlapping information can be clearly distinguished from the shading.

Color can serve both communicative and decorative purposes in figures. Authors seeking publication should avoid the use of color except when it is necessary for understanding the material because of the relatively high cost of color reproduction for printed materials (authors may bear some of this cost; for APA journals guidelines, see http://on.apa.org/WDtxdW). For example, photographs, fMRI images, and gene staining results often use color. If color representation is not crucial for understanding and the article is to be published both in print and online, convert the figure to grayscale or consider placing the figure online as supplemental material. Some journals offer the option to publish a figure in color online and in grayscale in print at no cost; when using this option, ensure that the figure can still be understood even when it is printed in grayscale. It is the author's responsibility to ensure that the final representation is accurate. However, authors submitting a manuscript to an online-only journal may use color more liberally (e.g., colored bars rather than gray and white bars in a bar graph). Likewise,

students preparing a figure for a course assignment may use color provided that the assignment will be delivered in a format that supports it.

When selecting colors for a figure, ensure that there is plenty of contrast so that people living with a color-vision deficiency (often referred to as "color blindness") or people who do not see color in a typical way can understand the information and tell the colors apart. Best practice is to use a contrast checker such the free Colour as Contrast (https://developer.paciellogroup.com/resources/contrastanalyser) to evaluate the contrast ratio and confirm that your content passes the standards for WCAG 2.0 AA or later.² Adequate contrast ratios ensure that the figure is not only accessible to readers with color-deficient vision but also understandable by all readers if the figure is printed or photocopied in grayscale. Another strategy to achieve adequate contrast is to use a pattern in combination with color so that the differentiation of elements does not rely on color alone (e.g., in a line graph, different lines may be in different colors and also of different styles, such as solid, dashed, and dotted). When many colors must be used and it is not possible to achieve high contrast among all of them, label colored areas directly in the image or use lines to connect the object to its label rather than placing the label in a legend, if possible, so that readers do not have to match colors in the figure to colors in the legend. See the APA Style website (https://apastyle.apa.org) for an example of how people with certain color-vision deficiencies see color and how the colors used in figures can be adjusted to accommodate them.

Avoid the use of gridlines in figures unless the gridlines will substantially aid readers in understanding the content, such as when many data points need to be compared across the x-axis. Likewise, avoid including 3-D effects for mere decoration (e.g., 3-D bar graphs) because they may make the figure more difficult to read. However, 3-D effects can be used to convey essential information (e.g., 3-D representations of stimuli).

The decision of whether to divide a figure into panels or create a separate figure for each panel will depend on the nature of the information being presented. Although panels help readers directly compare information, they also increase the density of the information being presented on the page;

as always, prioritize clear communication when constructing any figure. If the figure includes multiple panels, it is optional to label them. If panels are unlabeled, refer to panels by their position (e.g., the top panel, the left panel, the middle panel). To label panels, assign each one a capital letter (e.g., A, B) and place the label at the top left of the panel. Refer to the panels as "Panel A," "Panel B," and so forth. In the main text, refer to a panel as "Figure 5A" or "Panel A of Figure 5." In the figure general note, explain each panel. See Figures 7.18 and 7.19 in Section 7.36 for examples of figures with labeled panels.

If a figure contains citations to other works, follow the formats described in Section 8.11. Use an ampersand (&) for the word "and" in all citations in figures to conserve space.

7.27 Figure Legends

A legend (also called a key) explains any symbols, line styles, or shading or pattern variants used in the image portion of the figure (see Figures 7.2–7.3 in Section 7.36 for examples). The legend is an integral part of the figure; therefore, its lettering should be of the same kind and proportion as that appearing in the rest of the figure. Capitalize words in the legend using title case (see Section 6.17). Only figures that have symbols, line styles, or shadings needing definition should include legends. When possible, place legends within or below the image instead of to the side to avoid having empty space around the legend.

7.28 Figure Notes

Figure notes contain information needed to clarify the contents of the figure for readers. As with tables, figures may have three kinds of notes: general, specific, and probability.

A general note should explain units of measurement, symbols, and abbreviations that are not included in the legend or defined elsewhere in the figure (see Section 7.15 for information on abbreviations and symbols that do not require definitions). Make certain that the symbols, abbreviations, and terminology in the note and legend match the symbols, abbreviations, and terminology in the figure, in other figures in the paper, and in the text.

Explain the use of shading, color, and any other design element that carries meaning. Provide individual descriptions of panels for multipanel figures. If a graph includes error bars, explain in the image or general note whether they represent standard deviations, standard errors, confidence limits, or ranges; it is also helpful to provide sample sizes. Also include within the general note any acknowledgment that a figure is reprinted or adapted from another source (see Section 7.7). Place explanations of abbreviations and copyright attributions for reproduced figures last in the general note.

Position any superscripts for specific notes near the element being identified. It is preferable to report exact p values; however, if statistically significant values are marked with asterisks or daggers in the figure, explain them in a probability note (see Section 7.14). For guidelines on formatting figure notes, see Section 7.14.

7.29 Relation Between Figures

Similar figures or figures of equal importance should be of equal size and scale. Combine figures that are alike to facilitate comparisons between their content. For example, two line graphs with identical axes might be combined horizontally into a single figure, or multiple figures might be combined into one figure with multiple panels (see Section 7.26).

7.30 Photographs

Photographs are a type of figure with special considerations. Authors seeking publication must check publisher guidelines to ensure the photograph is submitted in the correct file type. Photographs may be printed in grayscale or in color, depending on the contents of the photograph and the venue of publication. Color photographs should include enough contrast to ensure that contents will be understandable if reproduced in grayscale. Photographs in most student papers can be in color and saved in any widely available photo format (see Section 7.26 for more information on the use of color in figures).

It is essential that photographic images be submitted at appropriate levels of resolution (as specified by the publisher). Because reproduction softens contrast and detail in photographs, starting with rich contrast and sharp detail will improve the final version of the image. The camera view and the lighting

should highlight the subject and provide high contrast; a light or dark background can provide even more contrast. Photographs usually benefit from cropping to, for example, eliminate extraneous detail or center the image. However, when a photographic image has been altered in a manner beyond simple cropping and/or adjustment for light levels, clearly indicate in a general note how the image has been altered. Ethical principles of publication forbid any intentional misrepresentation of images, just as fraudulent data manipulation is forbidden. See Figure 7.17 in Section 7.36 for an example of a photograph as a figure.

If you photograph an identifiable person, obtain a signed release from that person to use the photograph in your paper (see Section 12.17); if the person is not identifiable, a release is not needed. If you took a photograph yourself, no citation or copyright attribution is required in the figure note. If you want to reprint or adapt a photograph from another source, you may need to obtain permission to use it in your paper because professional photographs are usually the property of the photographer. See Sections 12.14 to 12.18 for further information on reprinting or adapting photographs from other sources.

7.31 Considerations for Electrophysiological, Radiological, Genetic, and Other Biological Data

The presentation of electrophysiological, radiological, genetic, and other biological data presents special challenges because of the complexity of the data. Focus first on making sure your image accurately represents the data. It is essential that you identify in the general note how images were processed or enhanced and that you clearly label the images. Next, consider principles of clarity of representation, necessity for inclusion, and consistency among representations. If your figure contains more than one panel or your paper contains more than one figure, keep style and formatting elements as consistent as possible throughout (although specific features such as axis labels and scale units may vary). Biological and genetic data often must be presented in color for the information to be interpretable (see Section 7.26).

Carefully consider whether to include complex graphs and images in the main text or as supplemental materials. Use supplemental materials to present content that is better displayed online than in print or that can only be viewed online. For example, the dynamic spread of brain activation may be able to be displayed only through color video clips.

7.32 Electrophysiological Data

When presenting electrophysiological data, clear labeling of the image is essential; for example, in the presentation of event-related brain potential data, it is essential that the direction of negativity (i.e., negative up or down) be indicated as well as the scale of the response. Information that is necessary for proper interpretation of the image, such as number or placement of electrodes, should accompany the figure. See Figure 7.19 in Section 7.36 for an example of a figure presenting event-related brain potential data.

7.33 Radiological (Imaging) Data

When presenting brain images, clearly label each image and provide details needed to interpret the image in the figure note. When axial or coronal sections are being displayed, clearly label which hemisphere is the left and which is the right. When sagittal slices are displayed, clearly indicate whether each slice is of the right or the left hemisphere. When slices are shown, also present an image that indicates where in the brain the slices were taken to help orient readers. Specify the coordinate space in which the images have been normalized (e.g., Talairach, MNI).

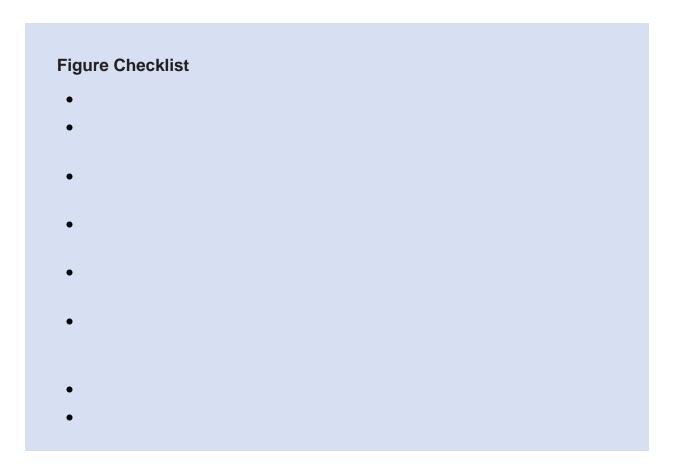
Cutaway views of the brain that show activations interior to it can be useful if the cutaways clearly depict the tissue that has been excised. When activations are superimposed on a surface-rendered image of a brain, clear explanation of what activations are being shown should accompany the figure, particularly with regard to the depth of the activation that has been brought to the surface; the use of flattened surface images may help make the data clearer. When using color, use it consistently in all representations within the paper and clearly specify the color–scale mapping. Neuroimaging data almost always require extensive postacquisition processing, and details processing of methods should the accompany Photomicrographs are often used in cell-staining and other types of imaging studies. When preparing photomicrographs, include a scale bar and staining materials information. See Figure 7.20 in Section 7.36 for an example of fMRI data in a figure.

7.34 Genetic Data

As with other displays of biological material, clear labeling of images enhances displays of genetic information (e.g., deletion patterns), be they of the physical map variety or the photographic stain variety. Present information concerning locations, distances, markers, and identification methods with the figure. Genetic data displays often contain much information; careful and circumscribed editing of the image and its legend can improve the communicative value of the figure. See Figure 7.21 in Section 7.36 for an example of a physical map of genetic material in a figure.

7.35 Figure Checklist

The figure checklist may be helpful to ensure that your figure communicates effectively and conforms to the style guidelines presented in this chapter.



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- graphs (Figure 7.3) are two examples of graphs.
- (Figures 7.4–7.11): Charts generally display nonquantitative information with the use of enclosed boxes, squares, or circles connected with straight or curved lines or arrows. They are used to
 - show the flow of participants or subjects, such as through a study process (Figure 7.4) or in a randomized clinical trial (Figure 7.5; this is referred to as a CONSORT flow diagram; for a downloadable template, see the CONSORT website at http://www.consort-statement.org/consort-statement/flow-diagram);
 - illustrate models—for example, conceptual or theoretical models (Figure 7.6), structural equation models (Figure 7.7), confirmatory factor analysis models (Figure 7.8), and path models (Figure 7.9); and
 - illustrate qualitative (Figure 7.10) and mixed methods (Figure 7.11) research designs or frameworks.
- (Figures 7.12–7.13): Drawings show information pictorially and can be used to illustrate, for example,
 - experimental setups (Figure 7.12) and
 - experimental stimuli (Figure 7.13).
- (Figure 7.14): Maps generally display spatial information—for example, geographic census information. This information often comes from government sources (e.g., the U.S. Census Bureau or the Centers for Disease Control and Prevention); to reprint or adapt tables or figures from these sources, see Section 12.16.
- (Figures 7.15–7.16): Plots present individual data points as a function of axis variables. Common types of plots include
 - the scatterplot (Figure 7.15), which is used to explore the relationship between two variables (e.g., a linear relationship may be indicated if the data points are clustered along the diagonal), and
 - multidimensional scaling (Figure 7.16), in which similar points or stimuli are presented close together in a multidimensional space and those that are dissimilar appear farther apart.
- Figure 7.17): Photographs (see Section 7.30) contain direct visual representations of information. They are often used to present information that would be difficult to portray effectively with drawings,

such as facial expressions or precise placement of stimuli in an environment.

A multipanel figure may combine bar graphs, line graphs, histograms, and other figure types into one figure (see Figure 7.18 for an example; see also Section 7.26). Whether it is advisable to combine panels into one figure or to present panels as separate figures will depend on the size of the figures and the nature of the information being presented.

A variety of figures are used to present biological data. These data include

- event-related potentials (Figure 7.19),
- fMRI data (Figure 7.20), and
- genetic maps (Figure 7.21).

Sample Figures

Figure 7.2 Sample Bar Graph

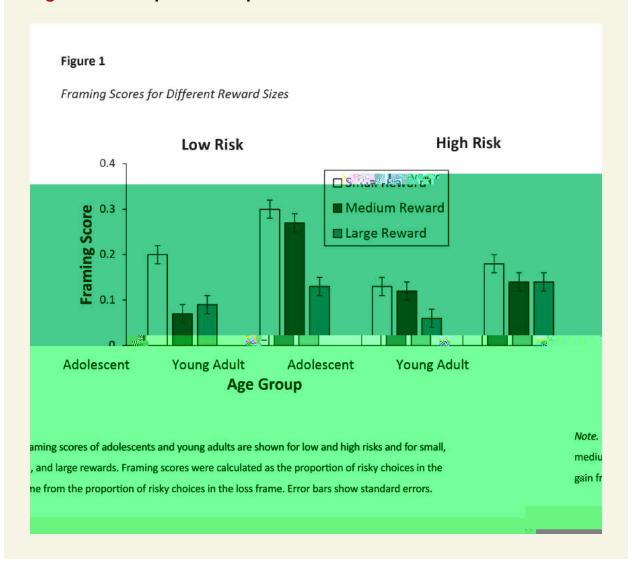


Figure 7.3 Sample Line Graph

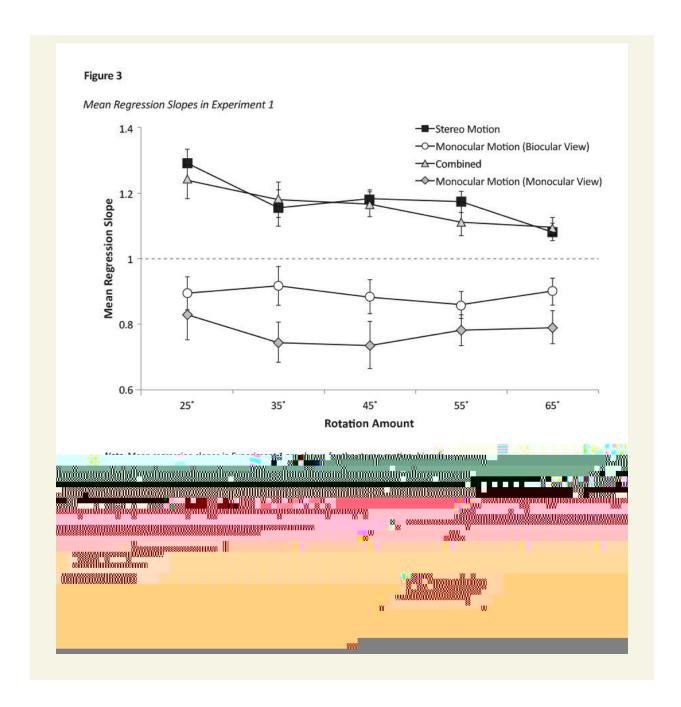


Figure 7.4 Sample Figure Showing the Flow of Participants Through a Study Process

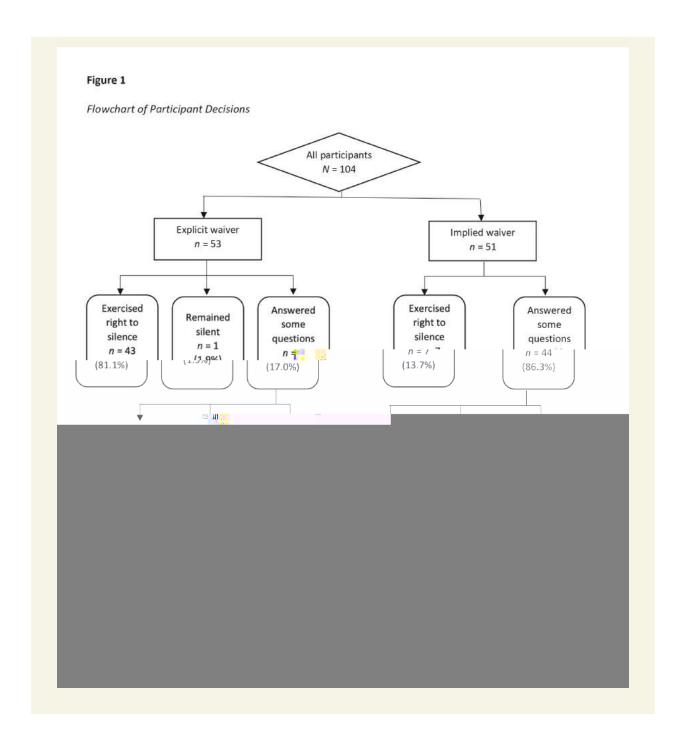


Figure 7.5 Sample CONSORT Flow Diagram

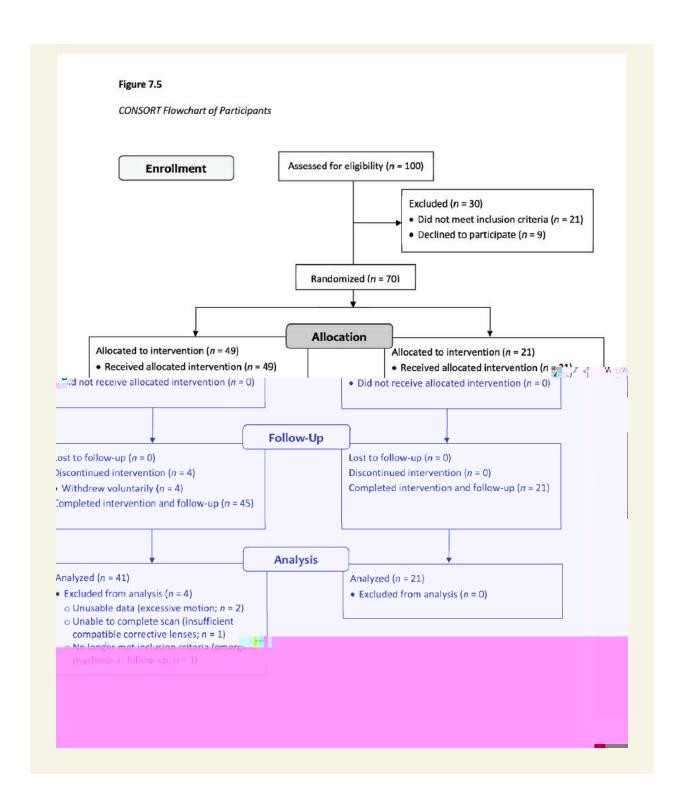


Figure 7.6 Sample Conceptual Model

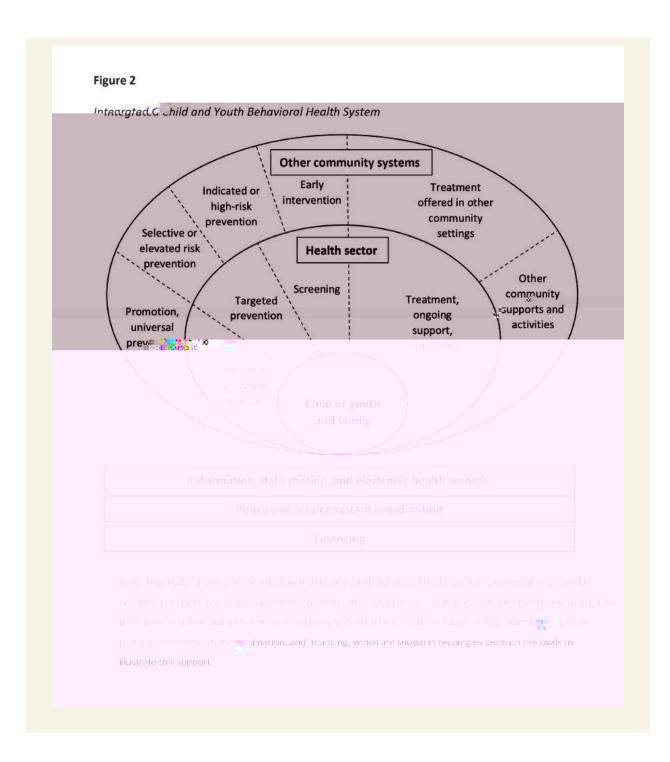
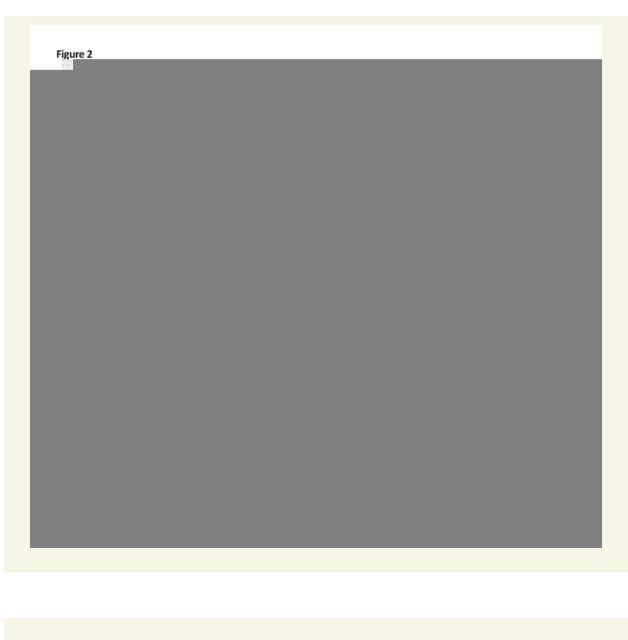
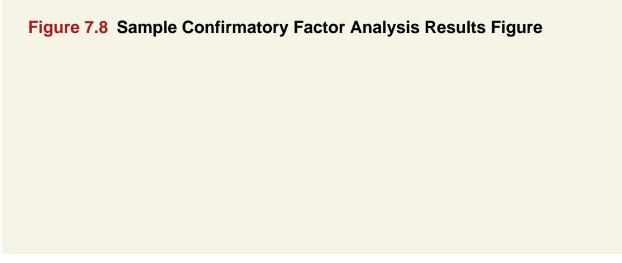


Figure 7.7 Sample Structural Equation Model





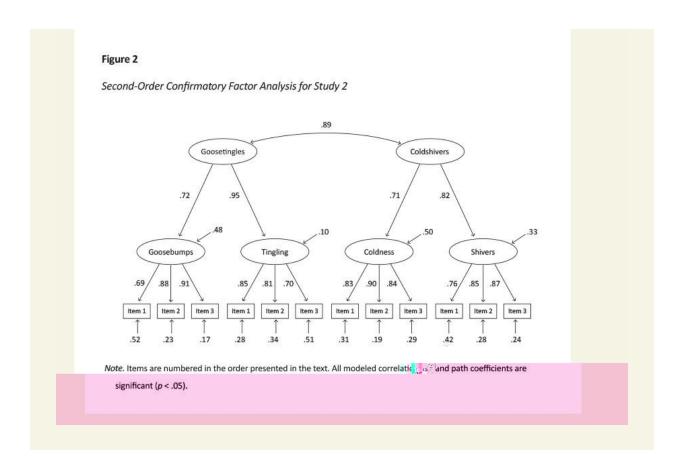
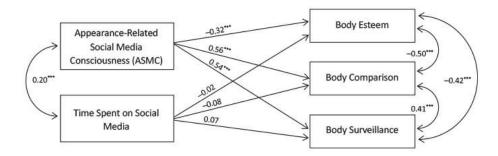




Figure 1

Path Analysis Model of Associations Between ASMC and Body-Related Constructs



Note. The path analysis shows associations between ASMC and endogenous body-related variables (body esteem, body comparison, and body surveillance), controlling for time spent on social media. Coefficients presented are standardized linear regression coefficients.

•••*p < .001.

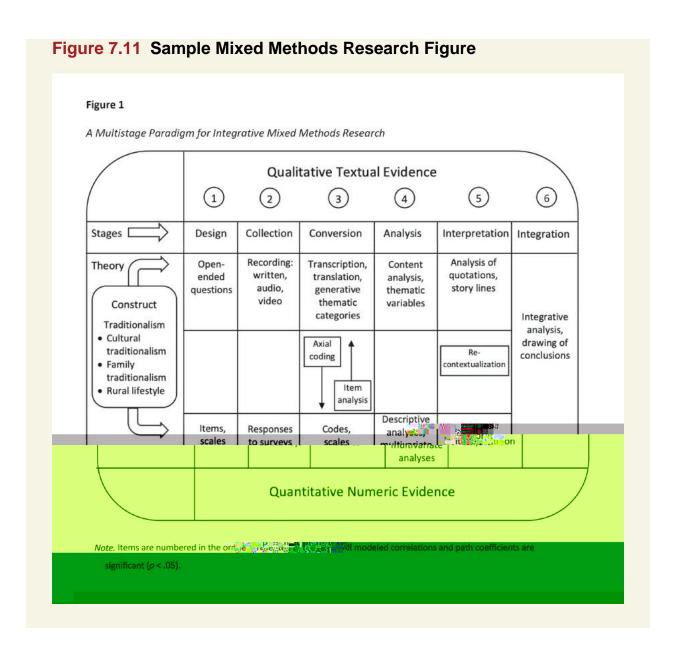


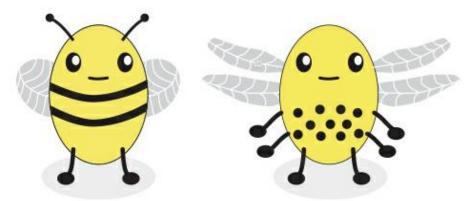
Figure 7.12 Sample Illustration of Experimental Setup



Figure 7.13 Sample Illustration of Experimental Stimuli

Figure 4

Examples of Stimuli Used in Experiment 1



Note. Stimuli were computer-generated cartoon bees that varied on four binary dimensions, for a total of 16 unique stimuli. They had two or six legs, a striped or spotted body, single or double wings, and antennae or no antennae. The two stimuli shown here demonstrate the use of opposite values on all four binary dimensions.

Figure 7.14 Sample Map

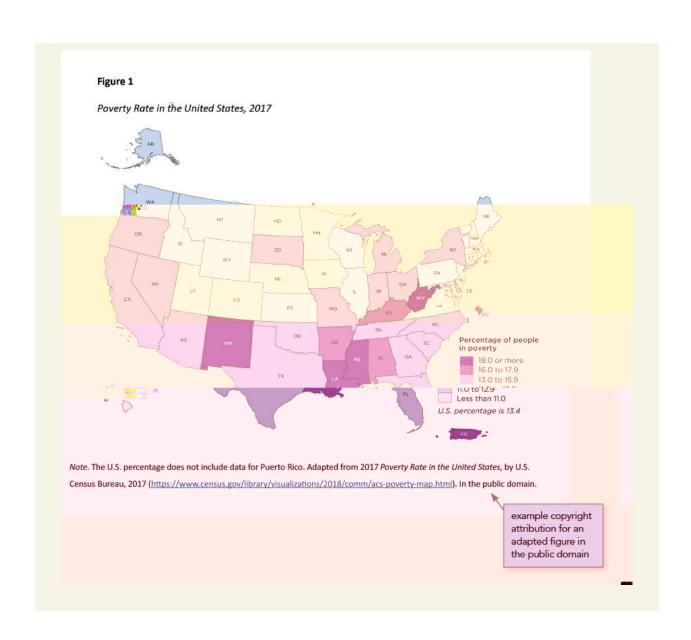
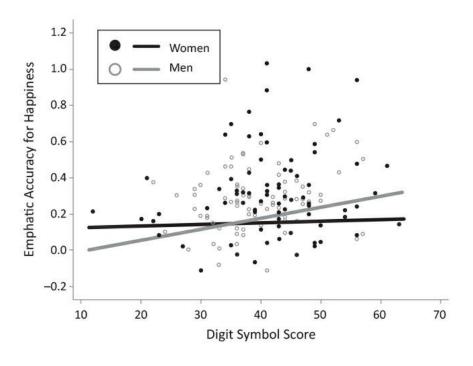




Figure 2

Association Between Perceptual Speed and Empathic Pattern Accuracy for Happiness

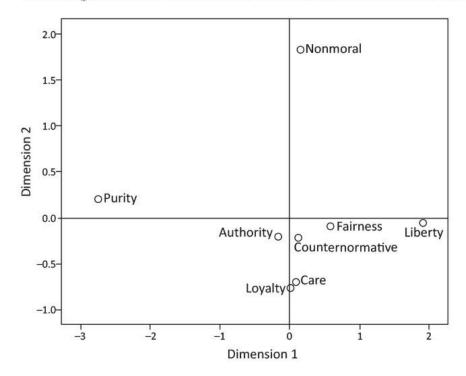


Note. Each dot represents an individual participant. Scores for empathic pattern accuracy for happiness were obtained in a zero-order multilevel model in which a target's self-reported happiness was the only predictor of a rater's perceptions (the estimate plotted on the y-axis is equivalent to β_{11} in Equation 4). Among men, higher levels of digit symbol performance were associated with fligher empathic pattern accuracy for happiness is daily life (gray line). Among women, the association was not significant (black line).

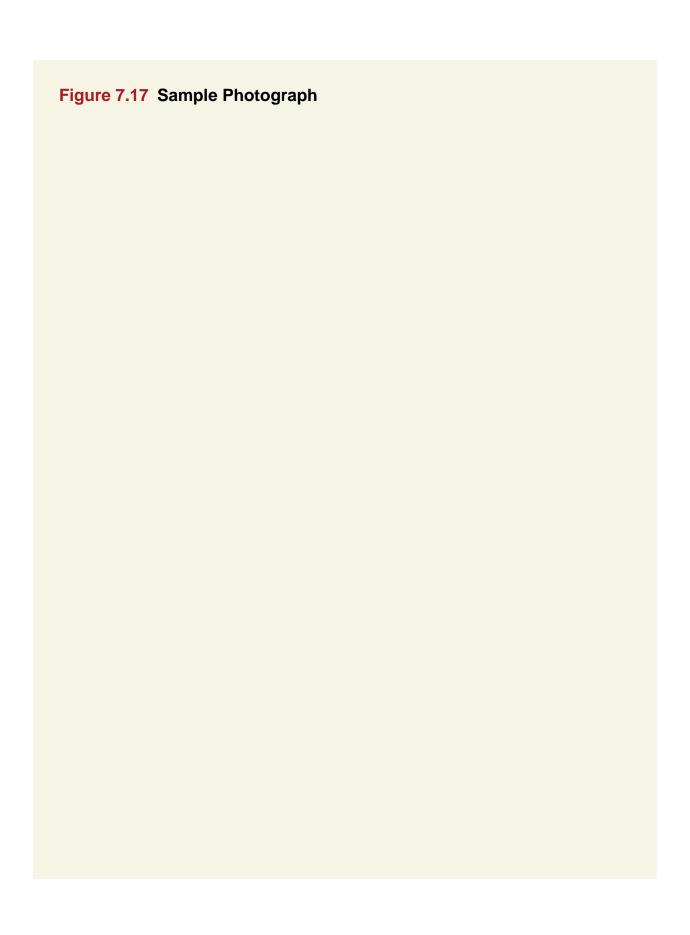
Figure 7.16 Sample Multidimensional Scaling Figure

Figure 3

Two-Dimensional Solution Derived From Multidimensional Scaling of Relatedness Scores



Note. Relatedness scores were defined as the mean likelihood judgment within category pairs. Violations of care, authority, fairness, and loyalty and counternormative actions are quite close to one another in the resultant two-dimensional space, whereas liberty violations, and especially purity violations and nonmoral actions, are represented at the counternormative actions, are represented at the counternormative actions. And other than the counternormative actions are quite close to one another in the resultant two-dimensional space, whereas liberty violations, and especially purity violations and nonmoral actions. A proposed at the counternormative actions are quite close to one another in the resultant two-dimensional space, whereas liberty violations, and especially purity violations and nonmoral actions.



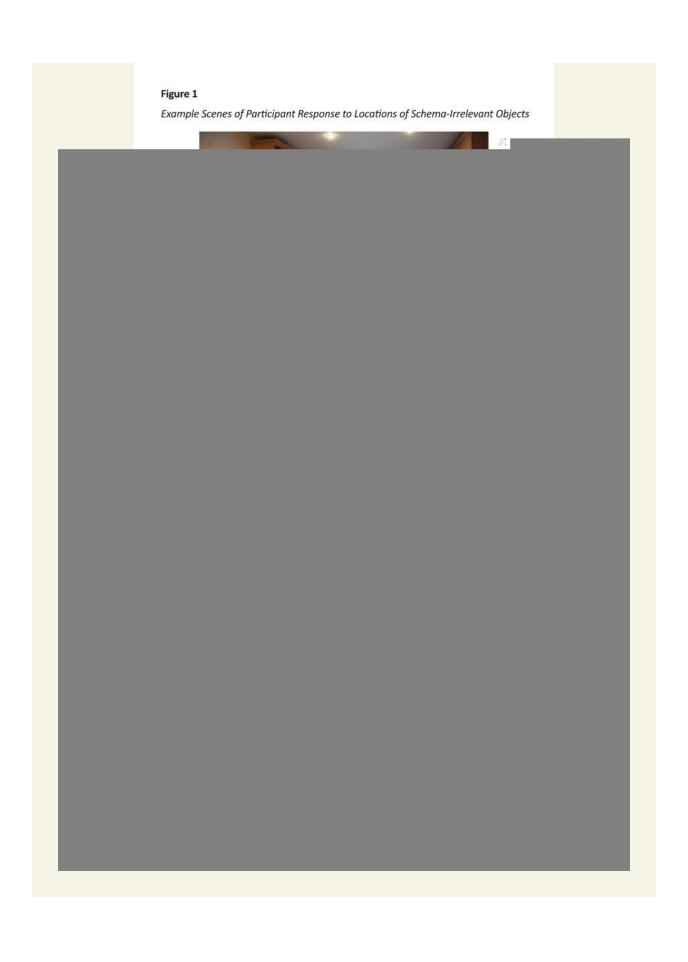
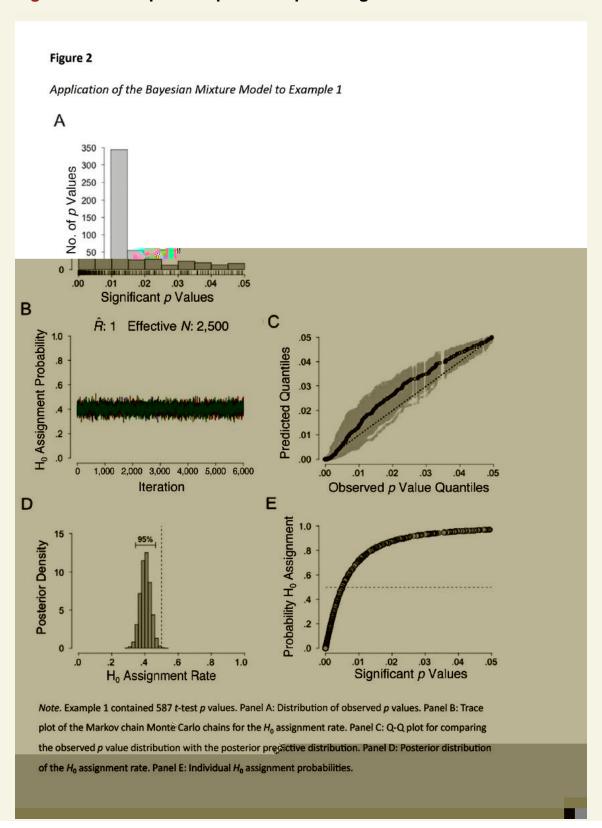
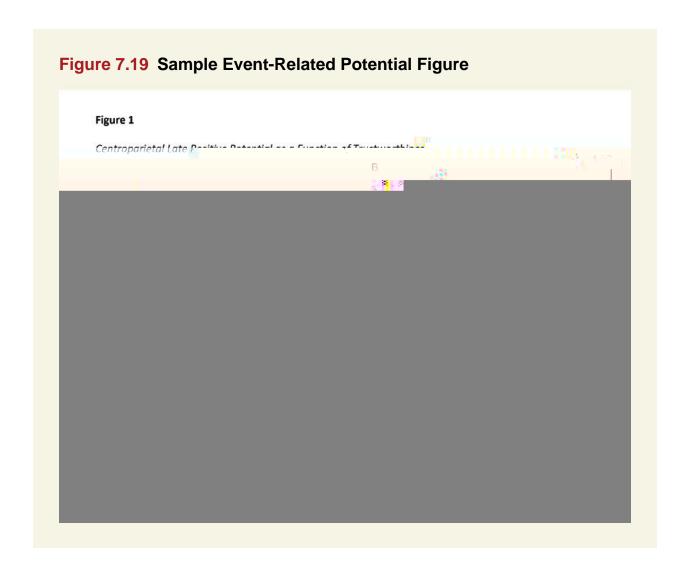
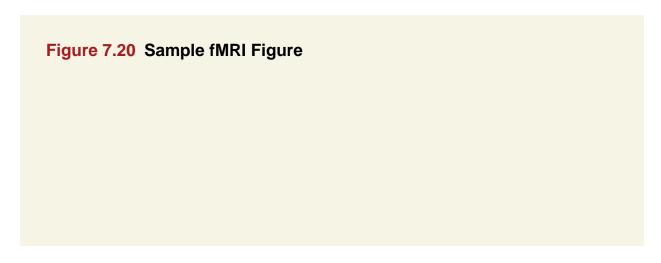
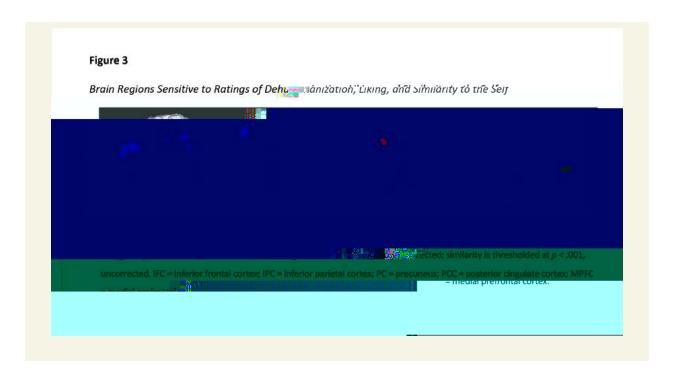


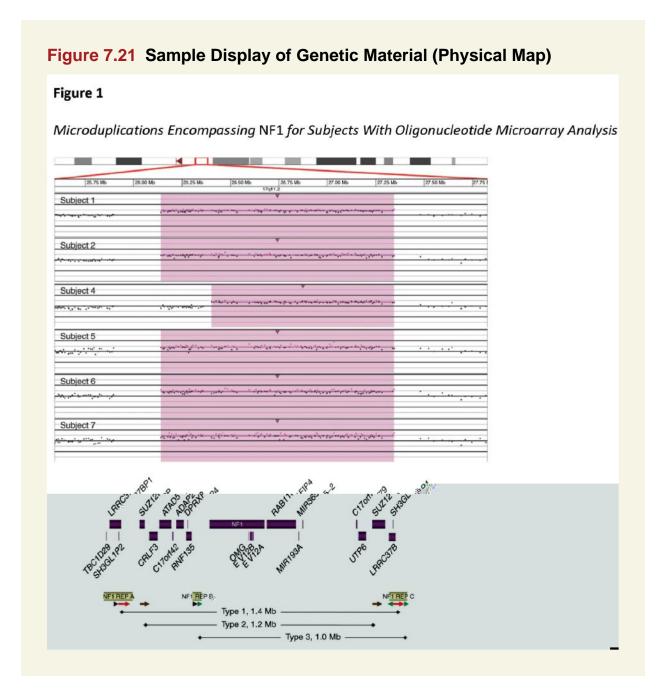
Figure 7.18 Sample Complex Multipanel Figure











WORKS CREDITED IN THE TEXT

Scientific knowledge represents the accomplishments of many researchers over time. A critical part of writing in APA Style is helping readers place your contribution in context by citing the researchers who influenced you.

In this chapter, we provide the ground rules for acknowledging how others contributed to your work. General guidance for in-text citation is presented first, including how to provide an appropriate level of citation and avoid plagiarism and self-plagiarism in your writing. Specific guidance for in-text citation follows, including formats for interviews, classroom and intranet sources, and personal communications; in-text citations in general; and paraphrases and direct quotations.

General Guidelines for Citation

8.1 Appropriate Level of Citation

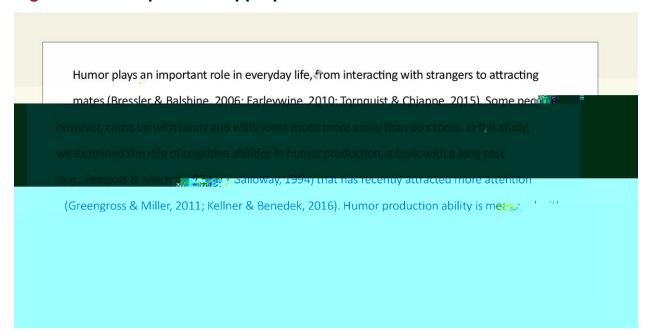
Cite the work of those individuals whose ideas, theories, or research have directly influenced your work. The works you cite provide key background information, support or dispute your thesis, or offer critical definitions and data. Cite only works that you have read and ideas that you have incorporated into your writing. Cite primary sources when possible and secondary sources sparingly (see Section 8.6). In addition to crediting the ideas of others that you used to develop your thesis, provide documentation for all facts and figures that are not common knowledge. Both paraphrases (see Sections 8.23–8.24) and direct quotations (see Sections 8.25–8.35) require citations. If you reprint or adapt a table or figure (e.g., if you reproduce an image from the internet, even if it was free or in the Creative Commons) or reprint a long quotation or commercially copyrighted test item, you may also need to seek permission from the copyright holder and provide a copyright attribution (see Sections 12.14–12.18).

The number of sources you cite in your paper depends on the purpose of your work. For most papers, cite one or two of the most representative sources for each key point. Literature review papers, however, typically include a more exhaustive list of references, given that the purpose of the paper is to acquaint readers with everything that has been written on the topic.

Avoid both undercitation and overcitation. Undercitation can lead to plagiarism (see Section 8.2) and/or self-plagiarism (see Section 8.3). Even when sources cannot be retrieved (e.g., because they are personal communications; see Section 8.9), you still need to credit them in the text (however, avoid using online sources that are no longer recoverable; see Section 9.37). Overcitation can be distracting and is unnecessary. For example, it is considered overcitation to repeat the same citation in every sentence when the source and topic have not changed. Instead, when paraphrasing a key point in more than one sentence within a paragraph, cite the source in the first sentence in which it is relevant and do not repeat the

citation in subsequent sentences as long as the source remains clear and unchanged (see Section 8.24). When the author's name appears in the narrative, the year can be omitted in repeated citations under certain circumstances (see Section 8.16). Figure 8.1 provides an example of an appropriate level of citation.

Figure 8.1 Example of an Appropriate Level of Citation



8.2 Plagiarism

Plagiarism is the act of presenting the words, ideas, or images of another as your own; it denies authors or creators of content the credit they are due. Whether deliberate or unintentional, plagiarism violates ethical standards in scholarship (see APA Ethics Code Standard 8.11, Plagiarism). Writers who plagiarize disrespect the efforts of original authors by failing to acknowledge their contributions, stifle further research by preventing readers from tracing ideas back to their original sources, and unfairly disregard those who exerted the effort to complete their own work. Writers who try to publish plagiarized work face rejection from publication and possible censure in their place of

employment. Students who plagiarize may fail the assignment or course, be placed on academic probation, or be expelled from their institution (see also Section 1.17).

To avoid plagiarism, provide appropriate credit to the source whenever you do the following:

•

or citing a source in the text that does not have a corresponding reference list entry) is not considered plagiarism if the error is minor and attributable to an editorial oversight rather than an intentional attempt to steal someone's ideas or obfuscate the origin of the information (Cooper, 2016). However, such errors may still result in deductions on an academic assignment or a request for revision of a manuscript submitted for publication.

Publishers and educators may use plagiarism-checking software (e.g., iThenticate, Turnitin) to identify cases in which entire papers have been copied, passages of specified lengths match, or a few words have been changed but content is largely the same (the latter is known as patchwriting; see Merriam-Webster, n.d.-a). However, human review is often necessary to determine whether plagiarism has actually taken place. Take careful notes as you research and write to keep track of and accurately cite your sources. Check your work carefully to ensure that you acknowledge the words and ideas of others with citations in the text that have corresponding reference list entries.

Unethical writing practices other than plagiarism are also prohibited. For example, it is unethical to fabricate citations and/or reference list entries. This practice gives the appearance of properly credited sources, but the sources are fictitious or untraceable; the author may have made up the information as well as the sources, or the information may come from real works that have not been credited. Likewise, contract cheating, in which students hire another person to write a paper for them, is unethical. Even when the resulting work is original (i.e., not plagiarized), these students still take credit for work that they did not do themselves, which violates academic integrity policies, honor codes, and ethics codes.

8.3 Self-Plagiarism

Self-plagiarism is the presentation of your own previously published work as original; like plagiarism, self-plagiarism is unethical. Self-plagiarism deceives readers by making it appear that more information is available on a topic than really exists. It gives the impression that findings are more replicable than is the case or that particular conclusions are more strongly supported than is warranted by the evidence. It may lead to copyright

violations if you publish the same work with multiple publishers (sometimes called duplicate publication; see Section 1.16).

Some institutions may consider it self-plagiarism if a student submits a paper written for one class to complete an assignment for another class without permission from the current instructor; using the same paper in multiple classes may violate the academic integrity policy, honor code, or ethics code of the university. However, incorporating previous classwork into one's thesis or dissertation and building on one's own existing writing may be permissible; students who wish to do this should discuss their ideas with their instructor or advisor and follow their university's honor code, ethics code, or academic policies when reusing their previous work.

In specific circumstances, authors may wish to duplicate their previously used words without quotation marks or citation (e.g., in describing the details of an instrument or an analytic approach), feeling that extensive self-referencing is undesirable or awkward and that rewording may lead to inaccuracies. When the duplicated material is limited in scope, this approach is permissible.

When the duplication is more extensive, authors should cite the source of the duplicated material. What constitutes the maximum acceptable length of duplicated material is difficult to define but must conform to legal notions of fair use (see Section 12.17). General guidelines for using an acceptable amount of duplicated material are as follows:

- Ensure that the core of the new document constitutes an original contribution to knowledge in that
 - only the amount of previously published material necessary to understand that contribution is included and
 - the material appears primarily in the discussion of theory and methodology.
- Place all duplicated material in a single paragraph or a few paragraphs, when feasible, with a citation at the beginning or end of each paragraph. Introduce the duplicated material with a phrase such as "as I have previously discussed." Do not use quotation marks or block quotation formatting around your own duplicated material.
- When you reanalyze your own previously published data, such as in a

large-scale, longitudinal, or multidisciplinary project, provide sufficient information about the project so that readers can evaluate the current report but do not repeat every detail of the design and method. Find a balance that involves referring readers to the earlier work using citations.

If a manuscript will receive masked review (see Section 12.7), you may need to conceal references to your previous work until the manuscript is ready for publication. To conceal your previous work, omit the relevant entries from the reference list and indicate in the text where citations will be reinstated after the review process by including "citation omitted," or similar, in parentheses.

An exception to the prohibition against self-plagiarism is publishing a work of limited circulation in a venue of wider circulation. For example, authors may publish their doctoral dissertation or master's thesis in whole or in part in one or more journal articles. In such cases, authors would not cite their dissertation or thesis in the article text but rather acknowledge in the author note that the work was based on their dissertation or thesis (see Section 2.7). Similarly, an article based on research the authors described in an abstract published in a conference program or proceeding does not usually constitute duplicate publication; the author should acknowledge previous presentation of the research in the article's author note (see the author note of the sample professional paper in Chapter 2 as an example). Seek clarification from the journal editor or course instructor if you are concerned about duplicate publication or self-plagiarism.

8.4 Correspondence Between Reference List and Text

APA Style uses the author—date citation system (see Section 8.10), in which a brief in-text citation directs readers to a full reference list entry. Each work cited in the text must appear in the reference list, and each work in the reference list must be cited in the text. Ensure that the spelling of author names and the publication dates in the reference list entries match those in the in-text citations. The date element of a reference list entry may include the month, season, and/or day in addition to the year; however, the corresponding in-text citation includes only the year (see, e.g., Example 15 in Chapter 10).

There are a few exceptions to these guidelines:

- Personal communications, which are unrecoverable sources, are cited in the text only (see Section 8.9).
- General mentions of whole websites or periodicals (see Section 8.22) and common software and apps (see Section 10.10) in the text do not require a citation or reference list entry.
- The source of an epigraph does not usually appear in the reference list (see Section 8.35).
- Quotations from your research participants can be presented and discussed in the text but do not need citations or reference list entries (see Section 8.36).
- References included in a meta-analysis, which are marked with an asterisk in the reference list, may be cited in the text (or not) at the author's discretion (see Section 9.52).

8.5 Use of the Published Version or Archival Version

Multiple versions of the same work might coexist on the internet, and you should cite the version of the work you used. Ideally, use and cite the final, published version of a work (see Chapter 10, Examples 1–3). However, if you used the advance online version (see Chapter 10, Example 7), the inpress version (see Chapter 10, Example 8), or the final peer-reviewed manuscript accepted for publication (but before it was typeset or copyedited; see Chapter 10, Example 73), cite that version. The final peer-reviewed manuscript as accepted for publication might be available from a variety of places, including a personal website, an employer's server, an institutional repository, a reference manager, or an author social network.

Informally published works, such as those in a preprint archive (e.g., PsyArXiv) or an institutional repository or database (e.g., ERIC), can also be cited (see Chapter 10, Examples 73–74) when these are the version used. Draft manuscripts (unpublished, in preparation, or submitted) can be cited when the draft is the most current version of the work (see Chapter 10, Examples 70–72). When you cite a draft manuscript, in-press article, advance online publication, or informally published work in your paper, ensure you have the most up-to-date publication information for these works and update the reference list entry if necessary before you submit your paper. Publishers

label advance online publications in various ways (e.g., "online first publication," "advance online publication," "epub ahead of print"); standardize this label to "advance online publication" for an APA Style reference list entry (see Chapter 10, Example 7).

8.6 Primary and Secondary Sources

In scholarly work, a primary source reports original content; a secondary source refers to content first reported in another source. Cite secondary sources sparingly—for instance, when the original work is out of print, unavailable, or available only in a language that you do not understand. If possible, as a matter of good scholarly practice, find the primary source, read it, and cite it directly rather than citing a secondary source. For example, rather than citing an instructor's lecture or a textbook or encyclopedia that in turn cites original research, find, read, and cite the original research directly (unless an instructor has directed you to do otherwise).

When citing a secondary source, provide a reference list entry for the secondary source that you used. In the text, identify the primary source and then write "as cited in" the secondary source that you used. If the year of publication of the primary source is known, also include it in the text. For example, if you read a work by Lyon et al. (2014) in which Rabbitt (1982) was cited, and you were unable to read Rabbitt's work yourself, cite Rabbitt's work as the original source, followed by Lyon et al.'s work as the secondary source. Only Lyon et al.'s work appears in the reference list.

If the year of the primary source is unknown, omit it from the in-text citation.

Works Requiring Special Approaches to Citation

8.7 Interviews

An interview is a dialogue or an exchange of information between people. Interviews used as sources can be classified into three categories: published interviews, personal interviews, and research participant interviews.

- appear in a variety of places—for example, in a magazine, newspaper, recorded radio broadcast, podcast episode, YouTube video, TV show, or transcript of a video or audio recording. To cite a published interview, follow the format for the reference type (e.g., magazine article, podcast episode, radio broadcast; see Chapter 10, Examples 15 and 95, for interviews published in a magazine article and a digital archive, respectively). The person being interviewed will not necessarily appear in the author element of the reference; when this is case, integrate the person's name into the narrative of the sentence if desired (see Chapter 10, Example 88).
- are those you conduct as a means of obtaining information to support a key point in your paper (e.g., an email to an author inquiring about their published work). Because readers cannot recover this type of interview, cite it as a personal communication (see Section 8.9).
- are those you conducted as part of your methodology. They do not require a citation in APA Style because you do not cite your own work in the paper in which it is being first reported. However, information gathered from research participant interviews can be presented and discussed in a paper according to the guidelines in Section 8.36.

8.8 Classroom or Intranet Resources

Some works are recoverable only by certain audiences, which determines how they are cited. For example, a student writing a paper for a course assignment might cite works from the classroom website or learning management system (LMS; e.g., Canvas, Blackboard, Brightspace, Moodle, Sakai), or an employee might cite resources from the company intranet when writing an internal company report. These sources are recoverable by the instructor and fellow students or by other employees of the company but not the general public.

When the audience you are writing for can retrieve the works you used, cite the works using the formats shown in Chapter 10, which are organized according to reference group and category. For example, to cite a recorded lecture or PowerPoint presentation available from a classroom website or LMS for a student assignment, follow the format shown in Chapter 10, Example 102. The source element of these references includes the name of the classroom website or LMS and the URL (which for sites requiring users to log in should be the homepage or login page URL). Likewise, for a report on a company intranet, follow the report formats shown in Section 10.4. However, if the work is for professional publication or intended for a wider audience who will not have access to these sources, cite the sources as personal communications (see Section 8.9).

8.9 Personal Communications

Works that cannot be recovered by readers (i.e., works without a source element; see Section 9.4) are cited in the text as personal communications. Personal communications include emails, text messages, online chats or direct messages, personal interviews, telephone conversations, live speeches, unrecorded classroom lectures, memos, letters, messages from nonarchived discussion groups or online bulletin boards, and so on.

Use a personal communication citation only when a recoverable source is not available. For example, if you learned about a topic via a classroom lecture, it would be preferable to cite the research on which the instructor based the lecture. However, if the lecture contained original content not published elsewhere, cite the lecture as a personal communication. When communications are recoverable only in an archive (e.g., a presidential library), cite them as archival materials (see the APA Style website at https://apastyle.apa.org for more). Do not use a personal communication citation for quotes or information from participants whom you interviewed as part of your own original research (see Section 8.36).

Because readers cannot

retrieve the information in personal communications, personal communications are not included in the reference list; they are cited in the text only. Give the initial(s) and surname of the communicator, and provide as exact a date as possible, using the following formats:

Narrative citation: Parenthetical citation:

The manner of citing Traditional Knowledge or Oral Traditions (other terms are "Traditional Stories" and "Oral Histories") of Indigenous Peoples varies depending on whether and how the information has been recorded—only certain cases use a variation of the personal communication citation. If the information has been recorded and is recoverable by readers (e.g., video, audio, interview transcript, book, article), cite it in the text and include a reference list entry in the correct format for that type of source (see Section 10.12, Example 90, for a recording on YouTube; see Section 10.13, Example 95, for a recorded interview).

Examine published works carefully (especially older works) to ensure that the information about Indigenous Peoples is accurate and appropriate to share before citing those works. Likewise, work closely with Indigenous people to ensure that material is appropriate to publish (e.g., some stories are told only at certain times of year or by certain people and may not be appropriate to publish in a journal article) and that your wording accurately mirrors and maintains the integrity of their perspectives (see Younging, 2018, for more on the nature of collaboration with Indigenous people). Likewise, because Indigenous cultural heritage belongs to Indigenous Peoples in perpetuity, matters concerning copyright and authorship may arise depending on the scope and nature of the material being presented (see Younging, 2018, for more).

Capitalize most terms related to Indigenous Peoples.

To describe Traditional Knowledge or Oral Traditions that are not recorded (and therefore are not recoverable by readers), provide as much detail in the in-text citation as is necessary to describe the content and to contextualize the origin of the information. Because there is no recoverable source, a reference list entry is not used.

If the purpose of your paper is to present the Oral History of one or more of your research participants, follow the guidelines in Section 8.36 for including quotations from research participants. If the paper is published, this Oral History then becomes part of the recorded scholarly literature and can thus be cited by others using standard formats.

If you spoke with an Indigenous person directly to learn information (but they were not a research participant), use a variation of the personal communication citation: Provide the person's full name and the nation or specific Indigenous group to which they belong, as well as their location or other details about them as relevant, followed by the words "personal communication," and the date of the communication. Provide an exact date of correspondence if available; if correspondence took place over a period of time, provide a more general date or a range of dates. (The date refers to when you consulted with the person, not to when the information originated.) Ensure that the person agrees to have their name included in your paper and confirms the accuracy and appropriateness of the information you present.

If you are an Indigenous person and are sharing your own experiences or the previously unrecorded Traditional Knowledge or Oral Tradition of your people, describe yourself in the text (e.g., what nation you belong to, where you live) to contextualize the origin of the information you are sharing. Do not use a personal communication citation or provide a reference list entry

because you do not need to cite personal information. It is often useful to collaborate with other Indigenous people to address any questions that may arise. For more on the terms to use when describing Indigenous Peoples, see Section 5.7.

In-Text Citations

8.10 Author-Date Citation System

Use the author-date citation system to cite references in the text in APA Style. In this system, each work used in a paper has two parts: an in-text citation and a corresponding reference list entry (see Figure 8.2). The in-text citation appears within the body of the paper (or in a table, figure, footnote, or appendix) and briefly identifies the cited work by its author and date of publication. This in-text citation enables readers to locate the corresponding entry in the alphabetical reference list at the end of the paper. Each reference list entry provides the author, date, title, and source of the work cited in the paper and enables readers to identify and retrieve the work (see Chapter 9 for how to create and order reference list entries).

Figure 8.2 Correspondence Between a Reference List Entry and an In-Text Citation



In an in-text citation, provide the surname(s) of the author(s) or the name(s) of the group author(s). Do not include suffixes such as "Jr." in the in-text citation. (For authors with only one name or only a username, see Section 9.8.) The list of authors in an in-text citation may be shortened in certain cases (for individual authors, see Section 8.17; for group authors, see Section 8.21). To create an in-text citation for a work with an unknown or anonymous author, see Section 8.14.

The date in the in-text citation should match the date in the reference list entry. Use only the year in the in-text citation, even if the reference list entry contains a more specific date (e.g., year, month, and day). For works with no date, use "n.d." in the in-text citation (see also Section 9.17); for works that have been accepted for publication but have not yet been published, use "in press." Do not use phrases like "in progress" for draft manuscripts; instead, use the year the draft was written (see Section 10.8).

Each in-text citation must correspond to only one reference list entry. Avoid ambiguity when abbreviating the list of authors (see Sections 8.17 and 8.21), when multiple works have the same author(s) and date (see Section 8.19), and when multiple first authors share the same surname (see Section 8.20).

8.11 Parenthetical and Narrative Citations

In-text citations have two formats: parenthetical and narrative. In parenthetical citations, the author name and publication date (or equivalent information; see Section 9.12) appear in parentheses. In narrative citations, this information is incorporated into the text as part of the sentence.

Both the author and the date, separated by a comma, appear in parentheses for a parenthetical citation. A parenthetical citation can appear within or at the end of a sentence. When a parenthetical citation is at the end of a sentence, put the period or other end punctuation after the closing parenthesis.

• If other text appears with the parenthetical citation, use commas around

the year.

• When text and a citation appear together in parentheses, use a semicolon to separate the citation from the text; do not use parentheses within parentheses.

The author appears in running text and the date appears in parentheses immediately after the author name for a narrative citation.

• In rare cases, the author and date might both appear in the narrative. In this case, do not use parentheses.

8.12 Citing Multiple Works

When citing multiple works parenthetically, place the citations in alphabetical order, separating them with semicolons. Listing both parenthetical in-text citations and reference list entries in alphabetical order helps readers locate and retrieve works because they are listed in the same order in both places.

- Arrange two or more works by the same authors by year of publication. Place citations with no date first, followed by works with dates in chronological order; in-press citations appear last. Give the authors' surnames once; for each subsequent work, give only the date.
- In the case of multiple works in which some author names have been abbreviated to "et al." (see Section 8.17), place the citations in chronological order (regardless of the order in which they appear in the reference list).

- To highlight the work(s) most directly relevant to your point in a given sentence, place those citations first within parentheses in alphabetical order and then insert a semicolon and a phrase, such as "see also," before the first of the remaining citations, which should also be in alphabetical order. This strategy allows authors to emphasize, for example, the most recent or most important research on a topic, which would not be reflected by alphabetical order alone.
- Readers may find a long string of citations difficult to parse, especially if they are using assistive technology such as a screen reader; therefore, include only those citations needed to support your immediate point (for more on appropriate level of citation, see Section 8.1).
- If multiple sources are cited within the narrative of a sentence, they can appear in any order.

8.13 Citing Specific Parts of a Source

To cite a specific part of a source, provide an author—date citation for the work plus information about the specific part. There are many possible parts to cite, including

- pages, paragraphs, sections, tables, figures, supplemental materials, or footnotes from an article, book, report, webpage, or other work;
- chapters, forewords, or other sections of authored books;
- time stamps of videos or audiobooks; and
- slide numbers in PowerPoint presentations.

For religious and classical works with canonically numbered parts common across editions (e.g., books, chapters, verses, lines, cantos), cite the part instead of a page number (see Section 9.42).

In the reference list, provide an entry for the entire work (not only the part that you used).

It is possible to cite a specific part of a source whether you are paraphrasing (see Sections 8.23–8.24) or directly quoting (see Sections 8.25–8.27). For further guidance on quoting works without page numbers (e.g., webpages, websites, audiovisual works) and religious and classical works with canonically numbered sections, see Section 8.28.

8.14 Unknown or Anonymous Author

When the author of a work is not named, the author may be unknown (i.e., no author is listed on the work, as with a religious work) or identified specifically as "Anonymous." For works with an unknown author (see Section 9.12), include the title and year of publication in the in-text citation (note that the title moves to the author position in the reference list entry as well). If the title of the work is italicized in the reference, also italicize the title in the in-text citation. If the title of the work is not italicized in the reference, use double quotation marks around the title in the in-text citation. Capitalize these titles in the text using title case (see Section 6.17), even though sentence case is used in the reference list entry. If the title is long, shorten it for the in-text citation.

Book with no author: Magazine article with no author:

When the author of a work is overtly designated as "Anonymous" (see Section 9.12), "Anonymous" takes the place of the author name in the in-text citation.

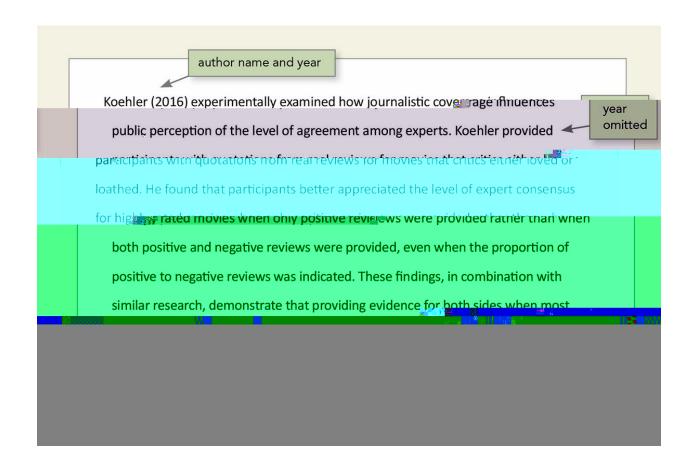
8.15 Translated, Reprinted, Republished, and Reissued Dates

References to translated, reprinted, republished, or reissued works (see Sections 9.39–9.41) contain two dates in the in-text citation: the year of publication of the original work and the year of publication of the translation, reprint, republication, or reissue. Separate the years with a slash, with the earlier year first (see Chapter 10, Example 29).

8.16 Omitting the Year in Repeated Narrative Citations

In general, include the author and date in every in-text citation. If you need to repeat a citation (see Section 8.1), repeat the entire citation; do not, for example, include only a page number (the abbreviation "ibid." is not used in APA Style). The year can be omitted from a citation only when multiple narrative citations to a work appear within a single paragraph (see Figure 8.3 for an example).

Figure 8.3 Example of Repeated Narrative Citations With the Year Omitted



Once you have provided a narrative citation to a work in a paragraph, do not repeat the year in subsequent narrative citations in that same paragraph. Follow this guideline with each paragraph (i.e., include the year in the first narrative citation in a new paragraph). Include the year in every parenthetical citation.

However, if you cite multiple works by the same author or authors, regardless of the publication years, include the date in every in-text citation to prevent ambiguity. For example, if you cite Mohammed and Mahfouz (2017) and Mohammed and Mahfouz (2019), include the year with every citation, even when one of the references is cited multiple times in a single paragraph.

8.17 Number of Authors to Include in In-Text Citations

The format of the author element of the in-text citation changes depending on the number of authors and is abbreviated in some cases. See Table 8.1 for examples of the basic in-text citation styles.

- For a work with one or two authors, include the author name(s) in every citation.
- For a work with three or more authors, include the name of only the first author plus "et al." in every citation, including the first citation, unless doing so would create ambiguity (see Section 8.18).

Table 8.1 Basic In-Text Citation Styles

Author type	Parenthetical citation	Narrative citation

In parenthetical citations, use an ampersand (&) between names for a work with two authors or before the last author when all names must be included to avoid ambiguity (see Section 8.18). In narrative citations, spell out the word "and."

In tables and figures, use an ampersand between names in both parenthetical and narrative citations.

The same guidelines apply when any of the authors are groups. For example, if a work is authored by three groups, the in-text citation would include the name of the first group plus "et al."

8.18 Avoiding Ambiguity in In-Text Citations

Sometimes multiple works with three or more authors and the same publication year shorten to the same in-text citation form when the guidelines described in Section 8.17 are applied, which creates ambiguity. To avoid ambiguity, when the in-text citations of multiple works with three or more authors shorten to the same form, write out as many names as needed to distinguish the references, and abbreviate the rest of the names to "et al." in every citation. For example, two works have the following authors:

Both these citations shorten to Kapoor et al. (2017). To avoid ambiguity when citing them both in your paper, cite them as follows:

Because "et al." is plural (meaning "and others"), it cannot stand for only one name. When only the final author is different, spell out all names in every citation.

8.19 Works With the Same Author and Same Date e.e es mult publicat oSecrMons lo blicam rhe

If the first authors of multiple references share the same surname but have different initials, include the first authors' initials in all in-text citations, even if the year of publication differs. Initials help avoid confusion within the text and help readers locate the correct entry in the reference list (see Section 9.48).

If the first authors of multiple references share the same surname and the same initials, cite the works in the standard author—date format.

Sometimes people publish under multiple names because of a name change (e.g., transgender authors, authors with a change in marital status). It is seldom relevant to note that two names refer to the same person. When a given name has changed, include initials with in-text citations only when the initials are different. If it is necessary to clarify that two names refer to the same person (e.g., to avoid confusion when reviewing an author's body of work), consult the person and respect their preferences in whether and how to address the name change. If it is necessary to clarify that two names refer to different people to avoid confusion, include the first name of the first author in the in-text citation: "Sarah Williams (2019) stated X, whereas Shonda Williams (2020) stated Y."

If multiple authors within a single reference share the same surname, the initials are not needed in the in-text citation; cite the work in the standard author—date format.

8.21 Abbreviating Group Authors

If a reference has a group author, the name of the group can sometimes be abbreviated—for example, "American Psychological Association" can be abbreviated to "APA." You are not obligated to abbreviate the name of a group author, but you can if the abbreviation is well-known, will help avoid cumbersome repetition, or will appear at least three times in the paper.

- As with other abbreviations (see Section 6.25), provide the full name of the group on first mention in the text, followed by the abbreviation.
- If the group name first appears in a narrative citation, include the

abbreviation before the year in parentheses, separated with a comma.

- If the group name first appears in a parenthetical citation, include the abbreviation in square brackets, followed by a comma and the year.
- In the reference list entry, do not abbreviate the group author name. Instead, spell out the full name of the group as presented in the source.
- If several references have the same group author, introduce the abbreviation only once in the text.
- In the rare case that two different groups abbreviate to the same form (e.g., both the American Psychological Association and the American Psychiatric Association abbreviate to "APA") and you cite both groups in your paper, spell out each name every time to avoid confusion.
- If a work has three or more group authors, the in-text citation is also shortened as described in Section 8.17.

8.22 General Mentions of Websites, Periodicals, and Common Software and Apps

For a general mention of a website with no indication of particular information or a specific page from that site, no reference list entry or in-text citation is needed. Provide the name of the website in the text and include the URL in parentheses. For example, if you used a website to create a survey, mention the website in the text.

A variation of this technique is also used for general mentions of periodicals. For example, if you want to include the name of a journal you searched during a meta-analysis, provide the journal title (in italic) using title case.

Common software and mobile apps are treated in a similar manner; in most cases, it is sufficient to mention the name of the program or app and the version used (if known) in the text, without providing an in-text citation or reference list entry (see Section 10.10). Likewise, for apparatuses, provide a reference for specialized products only (see Section 10.10).

Paraphrases and Quotations

8.23 Principles of Paraphrasing

A paraphrase restates another's idea (or your own previously published idea) in your own words. Paraphrasing is an effective writing strategy because it allows authors to summarize and synthesize information from one or more sources, focus on significant information, and compare and contrast relevant details. Published authors paraphrase their sources most of the time, rather than directly quoting the sources; student authors should emulate this practice by paraphrasing more than directly quoting. Use a professional tone when describing a concept, idea, or finding in your own words (see Section 4.7).

Cite the work you paraphrase in the text using either the narrative or parenthetical format (see Section 8.11).

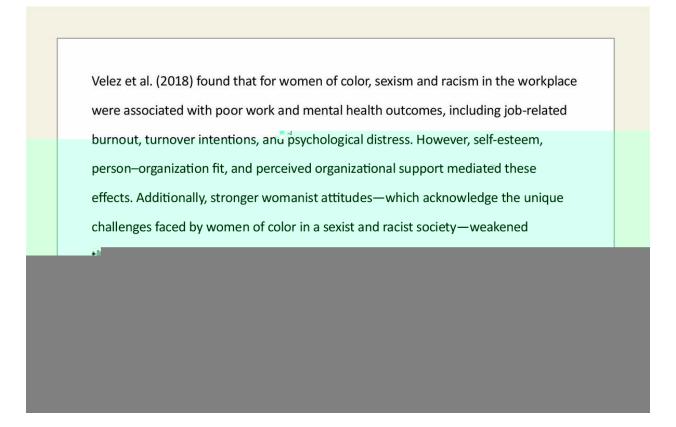
Although it is not required to provide a page or paragraph number in the citation for a paraphrase, you may include one in addition to the author and year when it would help interested readers locate the relevant passage within a long or complex work (e.g., a book).

The guidelines in this section pertain to when authors read a primary source and paraphrase it themselves. If you read a paraphrase of a primary source in a published work and want to cite that source, it is best to read and cite the primary source directly if possible; if not, use a secondary source citation (see Section 8.6).

8.24 Long Paraphrases

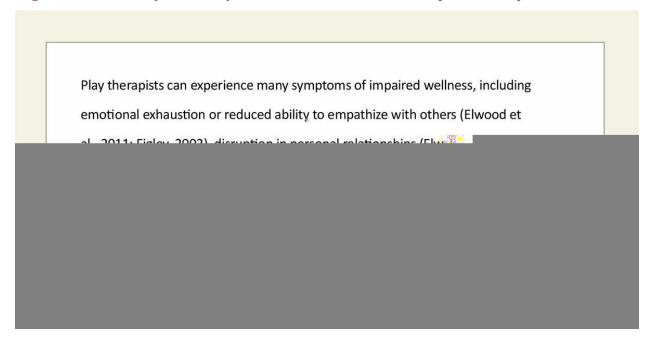
A paraphrase may continue for several sentences. In such cases, cite the work being paraphrased on first mention. Once the work has been cited, it is not necessary to repeat the citation as long as the context of the writing makes it clear that the same work continues to be paraphrased (see Figure 8.4 for an example). The citation may be either parenthetical or narrative; if you select the narrative approach and repeat the author names in the narrative of subsequent sentences, the year of the work can often be omitted (see Section 8.16).

Figure 8.4 Example of a Long Paraphrase With a Single In-Text Citation



If the paraphrase continues into a new paragraph, reintroduce the citation. If the paraphrase incorporates multiple sources or switches among sources, repeat the citation so the source is clear (see Figure 8.5 for an example). Read your sentences carefully to ensure you have cited sources appropriately.

Figure 8.5 Example of Repeated Citations Necessary to Clarify Sources



8.25 Principles of Direct Quotation

A direct quotation reproduces words verbatim from another work or from your own previously published work. It is best to paraphrase sources (see Sections 8.23–8.24) rather than directly quoting them because paraphrasing allows you to fit material to the context of your paper and writing style. Use direct quotations rather than paraphrasing when reproducing an exact definition (see example in Section 6.22), when an author has said something memorably or succinctly, or when you want to respond to exact wording (e.g., something someone said). Instructors, programs, editors, and publishers may establish limits on the use of direct quotations. Consult with your instructor or editor if you are concerned that you may have too much quoted material in your paper.

When quoting directly, always provide the author, year, and page number of the quotation in the in-text citation in either parenthetical or narrative format (see Section 8.11). To indicate a single page, use the abbreviation "p." (e.g., p. 25, p. S41, p. e221); for multiple pages, use the abbreviation "pp."

and separate the page range with an en dash (e.g., pp. 34–36). If pages are discontinuous, use a comma between the page numbers (e.g., pp. 67, 72). If the work does not have page numbers, provide another way for the reader to locate the quotation (see Section 8.28).

The format of a direct quotation depends on its length (fewer than 40 words vs. 40 words or more; see Sections 8.26–8.27). Regardless of quotation length, do not insert an ellipsis at the beginning and/or end of a quotation unless the original source includes an ellipsis. If you need to make changes to a direct quotation, see Sections 8.30 and 8.31. For other uses of quotation marks, such as when presenting verbatim instructions to participants or quotations from research participants, see Sections 6.7 and 8.36, respectively. To reproduce material that is already a direct quotation in the work you are citing, see Section 8.33.

8.26 Short Quotations (Fewer Than 40 Words)

If a quotation consists of fewer than 40 words, treat it as a short quotation: Incorporate it into the text and enclose it within double quotation marks. For a direct quotation, always include a full citation (parenthetical or narrative) in the same sentence as the quotation. Place a parenthetical citation either immediately after the quotation or at the end of the sentence. For a narrative citation, include the author and year in the sentence and then place the page number or other location information in parentheses after the quotation; if the quotation precedes the narrative citation, put the page number or location information after the year and a comma.

If the citation appears at the end of a sentence, put the end punctuation after the closing parenthesis for the citation. If the quotation includes citations, see Section 8.32; if the quotation includes material already in quotation marks, see Section 8.33. Place periods and commas within closing single or double quotation marks. Place other punctuation marks inside quotation marks only when they are part of the quoted material.

Short quotations can be presented in a variety of ways, as shown in Table 8.2.

year in the narrative before the quotation and place only the page number in parentheses after the quotation's final punctuation. Do not add a period after the closing parenthesis in either case. **Block quotation with parenthetical citation:** Block quotation with narrative citation: Block quotation consisting of two paragraphs: If the block quotation includes citations, see Section 8.32; if the block quotation includes material already in quotation marks, see Section 8.33. 8.28 Direct Quotation of Material Without Page Numbers

To directly quote from written material that does not contain page numbers (e.g., webpages and websites, some ebooks), provide readers with another way of locating the quoted passage. Any of the following approaches is acceptable; use the approach that will best help readers find the quotation:

- Provide a heading or section name.
- Provide an abbreviated heading or section name in quotation marks to indicate the abbreviation if the full heading or section name is too long or unwieldy to cite in full. In the next example, the original heading was "What Can You Do to Prevent Kidney Failure?" and the items are quoted separately because they originally appeared as part of a bulleted list.
- Provide a paragraph number (count the paragraphs manually if they are not numbered).
- Provide a heading or section name in combination with a paragraph number.

Do not include Kindle location numbers with in-text citations. Instead, provide the page number (which is available in many Kindle books, especially those based on print editions) or use the methods described in this section to create a page number alternative.

Note that the name of the section or other part of the work will not necessarily appear in the reference list entry for the work. For example, if you

cite a particular section of a webpage or website in the text, the reference list entry should be for the page you used, not for only that section of the page.

To directly quote from an audiovisual work (e.g., audiobook, YouTube video, TED Talk, TV show), provide a time stamp for the beginning of the quotation in place of a page number.

To directly quote from material with canonically numbered sections (e.g., religious or classical Secutions 2421and Chapter 10, Examples 35–37), use the name pter, verse, line, and/or canto instead of a page number.

he act, scene, and line(s). In the following example, "1.3.36—t 1, Scene 3, Lines 36 and 37.

y of Quotations

is must be accurate. Except as noted here and in ation must match the wording, spelling, and interior original source, even if the source is incorrect. If any nunctuation, or grammar in the source might confuse ord "[sic]," italicized and in brackets, immediately after that includes an error When quoting, always are no discrepancies.

planation

Some changes can be made to direct quotations without alerting readers:

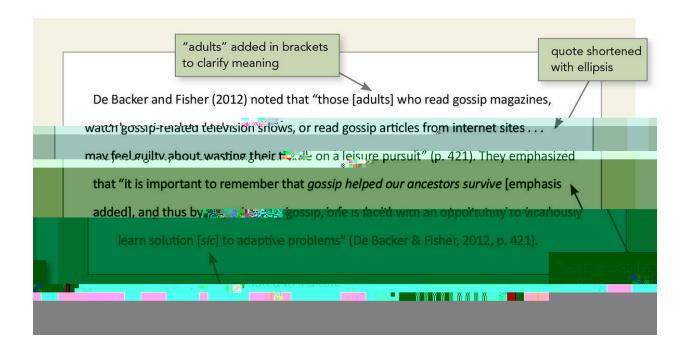
- The first letter of the first word in a quotation may be changed to an uppercase or a lowercase letter to fit the context of the sentence in which the quotation appears.
- Some punctuation marks at the end of a quotation may be changed to fit the syntax of the sentence in which the quotation appears, as long as meaning is not changed (e.g., it might alter meaning to change a period to a question mark, depending on how the sentence is written).
- Single quotation marks may be changed to double quotation marks and vice versa.
- Footnote or endnote number callouts can be omitted (see also Section 8.32).

Any other changes (e.g., italicizing words for emphasis or omitting words; see Section 8.31) must be explicitly indicated. For more on quoting from a bulleted list without reproducing the bullets, see the second example in Section 8.28.

8.31 Changes to a Quotation Requiring Explanation

Some changes to direct quotations require explanation, as shown in the example in Figure 8.6.

Figure 8.6 Example of Changes Made to a Direct Quotation



Use an ellipsis to indicate that you have omitted words within a quotation (e.g., to shorten a sentence or tie two sentences together). Either type three periods with spaces around each (. . .) or use the ellipsis character created by your word-processing program when you type three periods in a row (...), with a space before and after. Do not use an ellipsis at the beginning or end of any quotation unless the original source includes an ellipsis; start or end the quotation at the point where the source's text begins or ends. Use four periods—that is, a period plus an ellipsis (. . . .)—to show a sentence break within omitted material, such as when a quotation includes the end of one sentence and the beginning of another sentence.

Use square brackets, not parentheses, to enclose material such as an addition or explanation you have inserted in a quotation.

If you want to emphasize a word or words in a quotation, use italics. Immediately after the italicized words, insert "emphasis added" within square brackets as follows: [emphasis added].

8.32 Quotations That Contain Citations to Other Works

When quoting material that contains embedded citations, include the citations within the quotation. Do not include these works in the reference list unless you cite them as primary sources elsewhere in your paper. In the following example, Panero et al. (2016) would appear in the reference list, but the Stanislavski citations would not:

Footnote or endnote number callouts in the quoted material can be omitted with no explanation (see Section 8.30).

If citations appear at the end of material you want to quote, it is common practice to end the quotation before the citations and to cite only the work you read (see Figure 8.7 for an example). It is appropriate to omit the citations at the end of a quotation when the material you quote represents a new approach to or conceptualization of the ideas presented in the cited works—for example, when authors have summarized a body of work and you want to quote and cite that summary. If you want to quote the same material that was quoted in the work you are citing, see Section 8.33.

Figure 8.7 Example of Citations Omitted at the End of a Quotation



8.33 Quotations That Contain Material Already in Quotation Marks

If your source includes a direct quotation from another work, and you would like to use the same direct quotation in your paper, it is best to read and cite the original source directly. If the original source is unavailable, cite the quotation using the secondary source (see Section 8.6).

To quote material that already uses quotation marks for some other purpose (e.g., to enclose a phrase such as a coined expression or linguistic example; see Section 6.7), it may be necessary to change double quotation marks to single or vice versa in your paper depending on the number of words you are quoting.

For quotations of fewer than 40 words, use single quotation marks within double quotation marks to set off material that was enclosed in double quotation marks in the original source.



Use double quotation marks around quoted material that appears within a block quotation. (If the original quotation marks were single quotation marks, as in British-style publications, change them to double quotation marks in your paper.)

Correct:

8.35 Epigraphs

An epigraph is a quotation that is used to introduce an article, book, chapter, dissertation, or other work. Authors may use an epigraph to set the stage for what follows or to serve as a summary or counterpoint. The epigraph should appear before the first line of text and should be indented 0.5 in. from the left margin, like a block quotation, without quotation marks.

The source of an epigraph is not usually listed in the reference list unless the work is cited elsewhere in the text of the paper or is important within the context of the topic. If the source of the epigraph is not included in the reference list, on the line below the quotation, provide the credit line—consisting of an em dash and then the author's full name, a comma, and the

When quoting research participants, abide by the ethical agreements regarding confidentiality and/or anonymity between you and your participants. Take extra care to obtain and respect participants' consent to have their information included in your report. You may need to assign participants a pseudonym, obscure identifying information, or present information in the aggregate (strategies for adequately disguising materials are further described in Sections 1.14 and 1.19; see also Section 1.15 regarding confidentiality in qualitative studies).

Agreements regarding confidentiality and/or anonymity may also extend to other sources related to your methodology (e.g., quoting a school policy document when conducting a case study at a school). These sources would not be cited in text or listed in the reference list because doing so would compromise the school's confidentiality and/or anonymity. However, it may be possible to discuss information from these sources in the text if the material is suitably disguised.

REFERENCE LIST

The reference list at the end of a paper provides the information necessary to identify and retrieve each work cited in the text. Choose references judiciously, and include only the works that you used in the research for and preparation of your paper. APA publications and other publishers and institutions using APA Style generally require reference lists, not bibliographies. A reference list cites works that specifically support the ideas, claims, and concepts in a paper; in contrast, a bibliography cites works for background or further reading and may include descriptive notes (e.g., an annotated bibliography; see Section 9.51).

In this chapter, we provide guidelines for creating reference list entries, with specific sections focusing on each reference element (author, date, title, source) and the format and order of an APA Style reference list. For information on crediting works in the text and formatting in-text citations, see Chapter 8; for examples of specific reference types, see Chapter 10 (these examples are cross-referenced within this chapter).

Reference Categories

9.1 Determining the Reference Category

References in the Publication Manual are organized by group, category, and type. Reference groups are textual works; data sets, software, and tests; audiovisual media; and online media. Each group contains numbered reference categories. For example, the textual works group contains the categories of periodicals, books and reference works, edited book chapters and reference work entries, and dissertations and theses. The online media group contains the categories of social media and webpages and websites. Within each category are different reference types. For example, the periodical reference category includes journal articles, magazine articles, newspaper articles, and blog posts. The social media reference category includes tweets, Facebook posts, and Instagram photos.

To create a reference list entry, first determine the reference group and category and then choose the appropriate reference type within the category and follow that example. If the work you want to cite does not match any example, choose the group, category, and type that are most similar and adapt the format using the elements shown in the relevant template. How a work was accessed or obtained (e.g., online, in print, via interlibrary loan) and how it is formatted (e.g., print, PDF, DVD, online streaming video) have little, if any, impact on the reference list entry. See Chapter 10 for reference templates and examples.

9.2 Using the Webpages and Websites Reference Category

The term "website" can cause confusion because people use it to refer to both a reference category (see Section 10.16) and a method of retrieval (i.e., online). Many types of works can be retrieved online, including articles, books, reports, and data sets, but only some works fall into the webpages and websites reference category. Use that category only when the work does not better fit within another category. First ask yourself, "What type of work is on this website?" Then choose the reference category in Chapter 10 that is most similar to the work you want to cite and follow the most relevant

example. For example, to cite a report from a government website, use the reports category (Section 10.4) and follow the format for a government report (see Chapter 10, Examples 50–52). Likewise, to cite a webpage from a government website, use the webpages and websites category (Section 10.16) and follow the format for a work on a website (see Chapter 10, Examples 110–114). Note that the author of a webpage or website may be difficult to determine or may be identified through context (see Section 9.7), and webpages and websites often have unknown dates of publication (see Section 9.17).

9.3 Online and Print References

APA Style references for online and print works are largely the same. All references generally include the author, date, title, and source; differences between online and print versions are evident within the source element. The source element includes information about where the work came from (e.g., a periodical's title, a book's or report's publisher, a website's name). References for works with DOIs also include the DOI in the source element, and references for most online works without DOIs include the work's URL (see Section 9.34 for more on when to include DOIs and URLs). However, database information and/or database URLs are not usually included in references (see Section 9.30 for an explanation and a few exceptions). Thus, the same template can be used to create a reference for both the print and online versions of a work. Use only one template (not multiple templates) to create your reference entry.

Principles of Reference List Entries

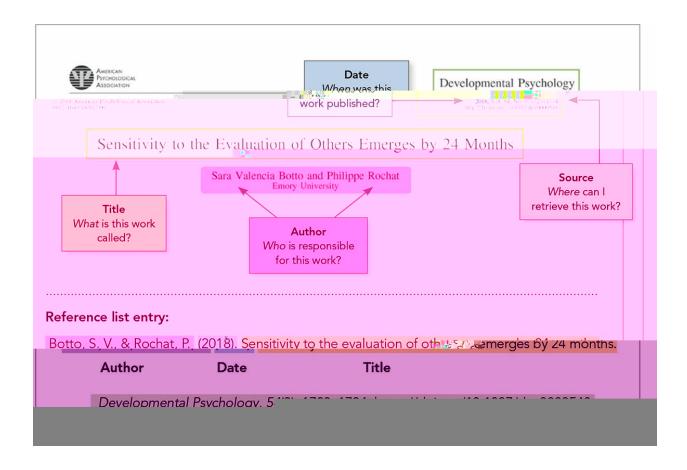
9.4 Four Elements of a Reference

A reference generally has four elements: author, date, title, and source. Each element answers a question:

- Who is responsible for this work?
- When was this work published?
- What is this work called?
- Where can I retrieve this work?

Considering these four elements and answering these four questions will help you create a reference for any type of work, even if you do not see a specific example that matches it. See the sections on the author (Sections 9.7–9.12), date (Sections 9.13–9.17), title (Sections 9.18–9.22), and source (Sections 9.23–9.37) for more information on each element. Figure 9.1 shows an example of an article title page highlighting the locations of the reference elements and showing their placement in a reference list entry.

Figure 9.1 Example of Where to Find Reference Information for a Journal Article



Sometimes reference elements are unknown or missing and the reference list entry must be adapted. See Table 9.1 for a summary of how reference elements are assembled and adjusted when information is missing.

Table 9.1 How to Create a Reference When Information Is Missing

		Template	
Missing element	Solution	Reference list entry	In-text citation

9.5 Punctuation Within Reference List Entries

Use punctuation marks within reference list entries to group information.

- Ensure that a period appears after each reference element—that is, after the author, date, title, and source. However, do not put a period after a DOI or URL because it may interfere with link functionality.
- Use punctuation marks (usually commas or parentheses) between parts of the same reference element. For example, in a reference for a journal article, use a comma between each author's last name and initials and between different authors' names, between the journal name and the volume number, and between the journal issue number and the page numbers. Do not use a comma between the journal volume and issue

- numbers; place the issue number in parentheses instead (see Section 9.25 and Chapter 10, Example 1).
- Italicize punctuation marks that appear within an italic reference element (e.g., a comma or colon within a book title). Do not italicize punctuation between reference elements (e.g., the period after an italic book title).

9.6 Accuracy and Consistency in References

Because one purpose of listing references is to enable readers to retrieve and use the cited works, reference data must be accurate and complete. The best way to ensure that information is accurate and complete is to check each reference carefully against the original publication. Authors are responsible for all information in their reference lists. Accurately prepared references help establish your credibility as a careful researcher and writer.

Consistency in reference formatting allows readers to focus on the content of your reference list, discerning both the types of works you consulted and the important reference elements (who, when, what, and where) with ease. When you present each reference in a consistent fashion, following APA Style reference guidelines, readers do not need to spend time determining how you organized the information. And when searching the literature yourself, you also save time and effort when reading reference lists in the works of others. Some works contain suggested citations; these citations often contain the information necessary to write an APA Style reference but need editing for style.

Accuracy and consistency of references are also important for ensuring that other researchers can find and access the works in your reference list. For example, in the online version of an article, publishers use computer algorithms to link in-text citations to reference list entries within the article, link the reference list entries to the works they cite, and compile lists of works that have cited each source. If reference elements are out of order or incomplete, the algorithm may not recognize them, lowering the likelihood that the reference will be captured for indexing. When in doubt, place reference elements in the order of author, date, title, and source.

Reference Elements

Author

The following sections describe the definition, format, and spelling of author names (Sections 9.7–9.9); the identification of specialized author roles, such as editor or director (Section 9.10); and how to handle group authors (Section 9.11) and works without an author (Section 9.12).

9.7 Definition of Author

In a reference, the author refers broadly to the person(s) or group responsible for a work. This element includes not only author(s) of articles, books, reports, and other works but also others who played primary roles in the creation of a work, such as the editor(s) of a book, the director of a film, the principal investigator of a grant, a podcast host, and so on.

An author may be

- an individual.
- multiple people,
- a group (institution, government agency, organization; see Section 9.11), or
- a combination of people and groups.

Sometimes the author of a work is not listed in a traditional byline but can be determined from context. For instance, the author of an annual report is usually the organization that produced it, unless otherwise specified in the report. Thus, in the reference list entry for that annual report, the organization would be listed as the author. Likewise, in the reference for a page from an organizational or government agency website, the organization or government agency itself is considered the author, unless otherwise specified. The author of a webpage or website may also be located on an "about us" or acknowledgments page. When you cannot determine who the author is, treat the work as having no author (see Section 9.12).

9.8 Format of the Author Element

Follow these guidelines to format the author element.

- Invert all individual authors' names, providing the surname first, followed by a comma and the initials: Author, A. A.
- Use a comma to separate an author's initials from additional author names, even when there are only two authors; use an ampersand (&) before the final author's name: Author, A. A., & Author, B. B.
- Do not use a comma to separate two group authors: American Psychological Association & National Institutes of Health.
- Use a serial comma before the ampersand (&) with three or more authors.
- Provide surnames and initials for up to and including 20 authors. When there are two to 20 authors, use an ampersand before the final author's name: Author, A. A., Author, B. B., & Author, C. C.
- When there are 21 or more authors, include the first 19 authors' names, insert an ellipsis (but no ampersand), and then add the final author's name (see Chapter 10, Example 4).
- Use one space between initials.
- When given names are hyphenated, retain the hyphen and include a period after each initial but no space (e.g., Xu, A.-J., for Ai-Jun Xu). When the second element of a hyphenated name is lowercase, treat it as a single name (e.g., Raboso, L., for Lee-ann Raboso).
- Use commas to separate initials and suffixes such as Jr. and III: Author, A. A., Jr., & Author, B. B.
- If nonprimary authors are credited using the word "with" (e.g., on a book cover), include them in the reference list entry in parentheses: Meyers, K. (with Long, W. T.). The in-text citation, however, refers to the primary author only: (Meyers, 2019).
- If an author has only one name (e.g., some celebrities, some authors from Indonesia, ancient Greek and Roman authors, some group or corporate authors); an inseparable multipart name (e.g., Malcolm X, Lady Gaga); an essential title, in rare cases (Queen Elizabeth II); or a username (or screen name) only, provide the full name or username without abbreviation in

both the reference list and the in-text citation. That is, cite Plato, Sukarno, or Lady Gaga; do not abbreviate these names to P.; S.; or Gaga, L. In the reference list entry, add a period after the author's name: Plato. (2017).

- Do not include titles, positions, ranks, or academic achievements with names in reference list entries (e.g., Reverend, President, General, PhD, LCSW). A few reference types include an author's role in parentheses, when needed (e.g., film director; see Chapter 10, Example 84).
- If both an author's username and real name are known, such as for some individual and group social media authors, provide the real name of the individual (in inverted format) or group, followed by the username in square brackets (see examples in Section 10.15). This approach allows the reference to be grouped with any other works by that author in the reference list and will aid readers in identifying and retrieving the cited work.
- When the @ symbol is part of a username, include that symbol with the username in brackets (see Chapter 10, Examples 103–108).

9.9 Spelling and Capitalization of Author Names

Follow these guidelines for proper spelling and capitalization of author names.

- Write the author's surname exactly as it appears in the published work, including hyphenated surnames (e.g., Santos-García) and two-part surnames (e.g., Velasco Rodríguez; see also Chapter 10, Example 25).
- If uncertain about the proper format for a name, consult other works that cite that author, bibliographic database records, or the author's website or curriculum vitae (CV) to determine the appropriate format. This will help avoid mistaking, for example, a two-part surname for a middle name and surname or vice versa. Follow the most common presentation if any ambiguity remains.
- Retain the author's preferred capitalization (e.g., hooks, b., for bell hooks) in both the reference list and the in-text citation.

9.10 Identification of Specialized Roles

People in roles other than author who contributed substantially to the creation of a work are recognized for a variety of reference types. See the examples in Chapter 10 for instances when a specialized role is credited in the reference. In these references, the role is placed in parentheses after the inverted surname and initials. Put a period at the end of the author element.

- Use the abbreviation "(Ed.)" for one editor and the abbreviation "(Eds.)" for multiple editors. In the case of multiple editors, include the role once.
- When a reference includes more than one type of specialized role (e.g., both writers and a director), and different individuals played different roles, identify each role separately. If an individual played multiple roles, combine the roles using an ampersand (&).

In some cases, a specialized role is identified later in the reference (e.g., an editor of a book for an edited book chapter, see Chapter 10, examples in Section 10.3; a symposium chair, see Chapter 10, Example 63; a TV series producer, see Chapter 10, Example 87).

9.11 Group Authors

Group authors may include government agencies, associations, nonprofit organizations, businesses, hospitals, task forces, and study groups (see Chapter 10, Examples 50, 53–55, 90, and 111). A group may author a publication on its own or in combination with individuals or other groups (see Chapter 10, Example 5).

- Spell out the full name of a group author in the reference list entry, followed by a period: National Institute of Mental Health.
- An abbreviation for the group author can be used in the text (see Section 8.21); however, do not include an abbreviation for a group author in a reference list entry.
- When numerous layers of government agencies are listed as the author of

a work, use the most specific agency as the author in the reference (e.g., use "National Institute of Nursing Research" rather than "U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Nursing Research"). The names of parent agencies not present in the group author name appear in the source element as the publisher. This presentation aids in identifying the agency responsible for the work and in creating concise in-text citations. However, if using only the most specific responsible agency as the author would cause confusion (e.g., if you are citing both U.S. and Canadian versions of an agency and they have the same name), then include the parent agencies in the author element to differentiate them. When there are multiple layers of agencies, the parent body precedes the subdivision (e.g., The White House, Office of the Press Secretary). Agencies listed in the author element are not repeated in the source element of the reference.

• Sometimes it can be difficult to know whether to credit a group author or the individuals who wrote on behalf of that group; for example, the individuals who wrote a government agency report may be credited in an bn] # minng mzini Se b a# o o onal agenc

he source# ai a S em·b m f a

If, and only if, the work is signed "Anonymous," use "Anonymous" as the author.

See Section 8.14 for how to format the in-text citation for a work with no author. See Section 9.49 for how to order works with no authors in the reference list.

Date

The following sections describe the definition and format of the date element (Sections 9.13–9.14) and how to handle online works that are updated or reviewed (Section 9.15) or that need a retrieval date (Section 9.16), as well as works with no date (Section 9.17).

9.13 Definition of Date

In a reference, the date refers to the date of publication. The date may take one of the following forms:

- year only;
- year, month, and day (i.e., an exact date);
- year and month;
- year and season; or
- range of dates (e.g., range of years, range of exact dates).

For books, use the copyright date shown on the work's copyright page as the date of publication in the reference, even if the copyright date is different than the release date (e.g., 2020 would be the date in the reference for a book released in December 2019 with a copyright date of 2020). For a journal article reference, use the year of the volume, even if it is different than the copyright year.

When citing webpages and websites (see Section 10.16), ensure that the copyright date applies to the content you are citing. Do not use a copyright date from a webpage or website footer because this date may not indicate when the content on the site was published. If a note indicates the "last updated" date of the page, use that date if it applies to the content you are citing (see Section 9.15). If no separate date of publication is indicated for the work on the webpage, treat the work as having no date (see Section 9.17).

9.14 Format of the Date Element

Follow the date format and examples shown in each reference category (see Chapter 10). Use more specific dates for works that are published more

frequently (e.g., year, month, and day for newspaper articles and blog posts). Most references include only the year of publication.

- Enclose the date of publication in parentheses, followed by a period: (2020).
- For works from a reference category that includes the month, day, and/or season along with the year, put the year first, followed by a comma, and then the month and date or season:
- For unpublished, informally published, or in-progress works, provide the year the work was produced (see Section 10.8). Do not use "in progress" or "submitted for publication" in the date element of a reference.
- If a work has been accepted for publication but is not yet published, use the term "in press" instead of a year (see Chapter 10, Example 8). Do not provide a date in the reference until the work has been published.
- If a work is an advance online publication, use the year of the advance online publication in the reference (see Chapter 10, Example 7).
- If a work includes both an advance online publication date and a final publication date, use the final publication date in the reference.
- When the date of original publication is approximate, use the abbreviation "ca." (which stands for "circa"; see Chapter 10, Example 36).

9.15 Updated or Reviewed Online Works

Some online works note when a work was last updated. If this date is available and is clearly attributable to the specific content you are citing rather than the overall website, use the updated date in the reference (see Chapter 10, Example 14, for a source retrieved from the UpToDate database).

Do not include a date of last review in a reference because content that has been reviewed has not necessarily been changed. If a date of last review is noted on a work, ignore it for the purposes of the reference.

9.16 Retrieval Dates

Although most online sources can be updated, some are inherently designed to change (e.g., dictionary entry, Twitter profile, Facebook page; see Chapter 10, Examples 33, 47, 104, and 106) or reflect information that changes over time (e.g., UpToDate article, map generated by Google Maps, work on a website that updates frequently; see Chapter 10, Examples 14, 100, and 113). Provide a retrieval date in the source element when citing an unarchived (i.e., not stable) work that is likely or meant to change. Including this date indicates to readers that the version of the work they retrieve may be different from the version you used.

For works that may change over time but have archived versions (e.g., Cochrane reviews or Wikipedia articles), a retrieval date is not needed because the archived version of the page is stable and can be retrieved (e.g., via a permalink; see Chapter 10, Examples 13 and 49). The majority of references do not include retrieval dates; the types that might are noted in the applicable reference examples in Chapter 10. The retrieval date, when needed, appears before the URL.

9.17 No Date

Sometimes the publication date of a work is unknown or cannot be determined. For works with no date, write "n.d." (which stands for "no date") in parentheses. Put a period after the "n" and after the "d" with no space between the letters.

The date also appears as "n.d." in the corresponding in-text citation.

Title

The following sections describe the definition and format of the title element (Sections 9.18–9.19) and how to handle series and multivolume works (Section 9.20), use bracketed descriptions (Section 9.21), and account for works without a title (Section 9.22).

9.18 Definition of Title

In a reference, the title refers to the title of the work being cited. Titles fall into two broad categories: works that stand alone (e.g., whole books, reports, gray literature, dissertations and theses, informally published works, data sets, videos, films, TV vi

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- For book and report references, enclose in parentheses after the title any additional information given in the publication for its identification and retrieval (e.g., edition, report number, volume number). Do not add a period between the title and the parenthetical information, and do not italicize the parenthetical information. If both edition and volume information are included, separate these elements with a comma, placing the edition number first.
- If a numbered volume has its own title, the volume number and title are included as part of the main title, rather than in parentheses (see Chapter 10, Examples 30 and 45).
- Finish the title element with a period. However, if the title ends with a question mark or exclamation point, that punctuation mark replaces the period.
- See Section 6.17 for how to format titles that appear in the text.

9.20 Series and Multivolume Works

For a book that is part of a multivolume work, such as a handbook comprising three volumes, include the series title in the reference list entry. For examples of titled and untitled volumes, see Chapter 10, Example 30.

When a book is part of a series of conceptually related but separate works (e.g., popular book series such as Harry Potter or the Chronicles of Narnia),

press releases), audiovisual works (e.g., films, YouTube videos, photographs), software and mobile apps, data sets, manuscripts in preparation, and dissertations and theses. Bracketed descriptions are also used in social media references to indicate attached links or images. Capitalize the first letter of the description, but do not italicize the description.

The examples in Chapter 10 include bracketed descriptions where they are needed. When in doubt, include a description. Back-to-back brackets (e.g., when a translated title is followed by a description) are acceptable in references. Consistency of wording is helpful (see Section 9.6), but you may alter the wording shown in the examples to best convey the information readers need. Use succinct descriptions, as shown in the examples in Chapter 10.

9.22 No Title

For works without a title, include a description of the work in square brackets instead.

- When possible, specify the medium in the description of the untitled work (e.g., a map) rather than including two bracketed descriptions.
- For untitled comments on periodical articles, include up to the first 20 words of the comment or post in addition to a description (see Chapter 10, Example 18).
- For untitled social media posts, include up to the first 20 words of the comment or post (in italic) in addition to a bracketed description (see Chapter 10, Examples 103, 105, 107, and 108).

Source

The following sections describe the definition and format of the source element (Sections 9.23–9.24). Then guidelines for handling specific kinds of sources are presented, including periodicals (Sections 9.25–9.27); edited book chapters and reference work entries (Section 9.28); publishers (Section 9.29); databases and archives (Section 9.30); works with specific locations, such as conferences (Section 9.31); social media (Section 9.32); and webpages and websites (Section 9.33). Works that have a DOI or URL (Sections 9.34–9.36) and works without a source (Section 9.37) are also addressed.

9.23 Definition of Source

In a reference, the source indicates where readers can retrieve the cited work. As with titles (see Section 9.18), sources fall into two broad categories: works that are part of a greater whole and works that stand alone.

- The source for a work that is part of a greater whole (e.g., journal article, edited book chapter) is that greater whole (i.e., the journal [see Section 9.25] or edited book [see Section 9.28]), plus any applicable DOI or URL (see Sections 9.34–9.36).
- The source for a work that stands alone (e.g., whole book, report, dissertation, thesis, film, TV series, podcast, data set, informally published work, social media, webpage) is the publisher of the work (see Section 9.29), database or archive (see Section 9.30), social media site (see Section 9.32), or website (see Section 9.33), plus any applicable DOI or URL (see Sections 9.34–9.36).
- Works associated with a specific location (e.g., conference presentations) include location information in the source (see Section 9.31) and, depending on the work, may also include a DOI or URL (see Sections 9.34–9.36).

General guidelines on the source element are provided in the following sections; see Chapter 10 for templates and examples of source components to

include for each reference category.

9.24 Format of the Source Element

The source element of a reference has one or two parts, depending on the

the issue number immediately after the volume number (with no space in between), and enclose the issue number in parentheses. Place a comma after the closing parenthesis. Do not italicize the issue number, the parentheses, or the comma after the issue number.

- Write the page range (or article number; see Section 9.27) after a comma and the issue number, without italics. Separate page numbers in a range by an en dash, followed by a period. Separate discontinuous page numbers by commas.
- Finish the periodical information part of the source element with a period, followed by a DOI or URL as applicable (see Sections 9.34–9.36).

9.26 Online Periodicals With Missing Information

Many online periodicals (e.g., newspapers, blogs) publish articles without volume, issue, and/or page numbers or article numbers. Omit these elements from the reference if they are not present in the cited work. For example, for an online newspaper article or blog post, only the title of the periodical (i.e., of the newspaper or blog) may be present (see Chapter 10, Examples 16, 17, and 68).

9.27 Article Numbers

For articles with article numbers (which may be called "eLocators" or another term), write the word "Article" (capitalized) and then provide the article number instead of the page range (see Chapter 10, Example 6).

If an article with an article number also has numbered pages (such as in a PDF), those page numbers may be used for in-text citations (see Sections 8.23 and 8.25) but do not appear in the reference list entry.

9.28 Edited Book Chapter and Reference Work Entry Sources

For edited book chapters and entries in reference works (e.g., dictionary definitions), the source is the edited book or the whole reference work (see Chapter 10, Examples 38–48).

- For works with editors, in the source element of the reference, write the word "In" followed by the initials and surnames (not inverted) of the editors. If there is one editor, follow that editor's name with "(Ed.)." If there are two or more editors, follow the final editor's name with "(Eds.)." Then add a comma, the title of the whole book or reference work in italic sentence case (see Section 6.17), the page (abbreviated "p.") or page range (abbreviated "pp.") of the chapter or entry in parentheses without italics, and a period. Then provide the name of the publisher (see Section 9.29).
- If the edited book or reference work has edition or volume information in addition to page numbers, include them in the same parentheses in the following order: edition, volume number, and page numbers (separated by commas).
- If a numbered book volume has its own title, include the volume number and title after the main title of the book. A colon follows the main title, "Volume" is abbreviated "Vol.," and a period follows the volume number, after which the volume title appears.
- For a reference work (e.g., Merriam-Webster's Dictionary, APA Dictionary of Psychology, mobile app reference work) with a group author, do not repeat the group author name in the source element when the publisher is the same as the author. Simply write "In" and the name of the reference work in italics (see Chapter 10, Examples 47 and 80).
- TV episodes, podcast episodes, and songs from albums follow the same pattern as edited book chapters and entries from reference works (see Chapter 10, Examples 87, 92, and 94).
- Finish the source element with a period, followed by a DOI or URL as

9.29 Publisher Sources

The name of the publisher is provided in the source element for a number of reference categories, including whole books, edited book chapters, reports, computer software and mobile apps, and data sets. Do not include the publisher location in the reference. Online search makes a work easily discoverable without it, and it may be unclear what location to provide for publishers with offices worldwide or online-only publishers that do not readily disclose their location.

• Write the publisher name as shown on the work, followed by a period. Do not abbreviate the publisher name unless it is shown in abbreviated form on the work.

- The format of publisher names may vary over time and across works (e.g., SAGE Publishing vs. Sage Publications); use the spelling and capitalization of the publisher name as shown on the work you used. It is not necessary to standardize the presentation of a publisher's name if it appears in multiple entries in a reference list.
- If the work is published by an imprint or division, use the imprint or division as the publisher (e.g., Magination Press, which is an imprint of the American Psychological Association, would be used as the publisher).
- Do not include designations of business structure (e.g., Inc., Ltd., LLC) in the publisher name.
- If two or more publishers are listed on the copyright page, include all of them in the order shown on the work, separated by semicolons (see

Chapter 10, Example 24).

- When the author is the same as the publisher (such as with an annual report written and published by the same company, a reference book published by a professional organization, or a work from an organizational website), omit the publisher from the reference to avoid repetition (see Chapter 10, Examples 32, 50, 54, and 55).
- Finish the publisher information component of the source element with a period, followed by a DOI or URL as applicable (see Sections 9.34–9.36).

9.30 Database and Archive Sources

Database and archive information is seldom needed in reference list entries. The purpose of a reference list entry is to provide readers with the details they will need to perform a search themselves if necessary, not to replicate the path the author of the work personally used. Most periodical and book content is available through a variety of databases or platforms, and different readers will have different methods or points of access. Additionally, URLs from databases or library-provided services usually require a login and/or are session specific, meaning they will not be accessible to most readers and are not suitable to include in a reference list.

- Provide database or other online archive information in a reference only when it is necessary for readers to retrieve the cited work from that exact database or archive.
 - Provide the name of the database or archive when it publishes original, proprietary works available only in that database or archive (e.g., Cochrane Database of Systematic Reviews or UpToDate; see Chapter 10, Examples 13–14). References for these works are similar to journal article references; the name of the database or archive is written in italic title case in the source element, the same as a periodical title.
 - Provide the name of the database or archive for works of limited circulation, such as
 - dissertations and theses published in ProQuest Dissertations and Theses Global,

- works in a university archive,
- manuscripts posted in a preprint archive like PsyArXiv (see Chapter 10, Example 73),
- works posted in an institutional or government repository, and
- monographs published in ERIC or primary sources published in JSTOR (see Chapter 10, Example 74).

These references are similar to report references; the name of the database or archive is provided in the source element (in title case without italics), the same as a publisher name.

- Do not include database information for works obtained from most academic research databases or platforms because works in these resources are widely available. Examples of academic research databases and platforms include APA PsycNET, PsycINFO, Academic Search Complete, CINAHL, Ebook Central, EBSCOhost, Google Scholar, JSTOR (excluding its primary sources collection because these are works of limited distribution), MEDLINE, Nexis Uni, Ovid, ProQuest (excluding its dissertations and theses databases, because dissertations and theses are works of limited circulation), PubMed Central (excluding authors' final peer-reviewed manuscripts because these are works of limited circulation), ScienceDirect, Scopus, and Web of Science. When citing a work from one of these databases or platforms, do not include the database or platform name in the reference list entry unless the work falls under one of the exceptions.
- If you are in doubt as to whether to include database information in a reference, refer to the template for the reference type in question (see Chapter 10).
- Finish the database or archive component of the source element with a period, followed by a DOI or URL as applicable (see Sections 9.34–9.36).

9.31 Works With Specific Locations

For works associated with a specific location, such as conference presentations (see Chapter 10, Examples 60–63; for more, see the Source

Variations list at the beginning of Chapter 10), include the location in the source element of the reference to help with retrieval. Provide the city; state, province, or territory as applicable; and country. Use the two-letter postal code abbreviations for U.S. states and the analogous abbreviations (if any) for states, provinces, or territories in other countries.

9.32 Social Media Sources

Use social media as a source only when the content was originally published there (e.g., an original Instagram post). If you found a link to content via social media (e.g., a pin on Pinterest), cite the content you used directly and do not mention that you originally discovered it through a link on social media, except as necessary in describing your research methodology.

- When social media is the source (e.g., Instagram photo, tweet, Facebook post), provide the social media site name (in title case without italics) in the source element (see Section 6.17): Twitter.
- Include a period after the social media site name, followed by the URL (see Sections 9.34–9.36).

9.33 Website Sources

When a website is the source for a webpage (see Section 9.2), follow these guidelines to format the website source.

- Provide the website name (in title case without italics) in the source element (see Section 6.17): BBC News.
- Include a period after the website name, followed by the URL (see Sections 9.34–9.36).
- When the author of the work is the same as the website name, omit the site name from the source element to avoid repetition (see Chapter 10, Examples 111). In this case, the source element will consist of only the URL of the work.

9.34 When to Include DOIs and URLs

The DOI or URL is the final component of the reference list entry. Because so much scholarship is available and/or retrieved online, most reference list entries end with either a DOI or a URL. A DOI, or digital object identifier, is a unique alphanumeric string that identifies content and provides a persistent link to its location on the internet. It is typically located on the first page of an article near the copyright notice, and it starts with "https://doi.org/" or "http://dx.doi.org" or "DOI:" and is followed by a string of letters and numbers. DOIs begin with the number 10 and contain a prefix and a suffix separated by a slash. The prefix is a unique number of four or more digits assigned to the organization by the International DOI Foundation (https://www.doi.org/); the suffix is assigned by the publisher and was designed to be flexible with publisher identification standards. The publisher assigns a DOI to a work when it is published, and many publishers have retroactively assigned DOIs to works published prior to the implementation of the DOI system in 2000. Registration agencies, such as Crossref, use DOIs to provide reference-linking services to the scientific publishing sector. DOIs can also be found in database records and the reference lists of published works. A URL, or uniform resource locator, specifies the location of digital information on the internet and can be found in the address bar of your internet browser.

URLs in references should link directly to the cited work when possible. For example, when citing a comment on an online newspaper article, the URL in the reference should link to the comment itself rather than to the article or the newspaper's home page (direct links to comments may be available if you click the comment's time stamp and copy the URL for the comment that appears in your browser).

Follow these guidelines for including DOIs and URLs in references:

- Include a DOI for all works that have a DOI, regardless of whether you used the online version or the print version.
- If a print work does not have a DOI, do not include any DOI or URL in the reference.
- If an online work has both a DOI and a URL, include only the DOI.
- If an online work has a URL but no DOI, include the URL in the

reference as follows:

- For works without DOIs from websites (not including databases), provide a URL in the reference (as long as the URL will work for readers).
- For works without DOIs from most academic research databases, do not include a URL or database information in the reference because these works are widely available (see Section 9.30). The reference should be the same as the reference for a print version of the work.
- For works from databases that publish works of limited circulation (such as the ERIC database) or original, proprietary material available only in that database (such as the UpToDate database), include the name of the database or archive and the URL of the work (see Section 9.30). If the URL requires a login or is session specific, meaning it will not resolve for readers, provide the URL of the database or archive home page or login page instead of the URL for the work.
- If the URL is no longer working or no longer provides readers access to the content you intend to cite, follow the guidance for works with no source (see Section 9.37).
- Other alphanumeric identifiers such as the International Standard Book Number (ISBN) and the International Standard Serial Number (ISSN) are not included in APA Style references.

9.35 Format of DOIs and URLs

- Follow these guidelines to format DOIs and URLs.
- Present both DOIs and URLs as hyperlinks (i.e., beginning with "http://" or "https://"). Because a hyperlink leads readers directly to the content, it is not necessary to include the words "Retrieved from" or "Accessed from" before a DOI or URL.
- It is acceptable to use either the default display settings for hyperlinks in your word-processing program (e.g., usually blue font, underlined) or plain text that is not underlined.
- Links should be live if the work is to be published or read online.
- Follow the current recommendations of the International DOI Foundation

to format DOIs in the reference list, which as of this publication is as follows:

Here, "https://doi.org/" is a way of presenting a DOI as a link, and "xxxxx" refers to the DOI number. The preferred format of the DOI has changed over time; although older works use previous formats (e.g., "http://dx.doi.org/" or "doi:" or "DOI:" before the DOI number), in your reference list, standardize DOIs into the current preferred format for all entries. For example, use https://doi.org/10.1037/a0040251 in your reference even though that article, published in 2016, presented the number in an older format.

Why use the new DOI format?

- See Chapter 10, Sections 10.1 to 10.3, 10.7, and 10.9, for examples of references that include DOIs.
- Copy and paste the DOI or URL from your web browser directly into your reference list to avoid transcription errors. Do not change the capitalization or punctuation of the DOI or URL. Do not add line breaks manually to the hyperlink; it is acceptable if your word-processing program automatically adds a break or moves the hyperlink to its own line. If your work is published, the typesetter may break hyperlinks after punctuation to improve page flow.
- Do not add a period after the DOI or URL because it may interfere with link functionality.

9.36 DOI or URL Shorteners

When a DOI or URL is long or complex, you may use shortDOIs or shortened URLs if desired. Use the shortDOI service provided by the International DOI Foundation (http://shortdoi.org/) to create shortDOIs. A

work can have only one DOI and only one shortDOI; the shortDOI service will either produce a new shortDOI for a work that has never had one or retrieve an existing shortDOI.

Some websites provide their own branded shortened URLs, and independent URL shortening services are available as well. Any shortened URL is acceptable in a reference as long as you check the link to ensure that it takes you to the correct location. See Examples 4 and 18 in Chapter 10 for a shortDOI and a shortened URL, respectively, used in a reference.

9.37 No Source

A reference without a recoverable source cannot be included in the reference list because readers cannot retrieve the work. In most cases, nonrecoverable sources such as personal emails, classroom lectures, and intranet sources should be cited only in the text as personal communications (see Section 8.9).

Online works that are no longer accessible are considered nonrecoverable sources. Before submitting a paper, test the URLs in your reference list to ensure that they work and update them as necessary. Do not include broken URLs in your paper. If the content you cited is no longer available online, search for an archived version of the page on the Internet Archive (https://archive.org/) and use the archived URL. If no archived version of the URL is available, delete the reference list entry and substitute another reference if possible.

Reference Variations

Some works may be in another language or translated, reprinted, reissued, or republished. For each of these reference variations, additional information about the work and/or its publication history is included in the reference list entry.

9.38 Works in Another Language

Multilingual authors may cite works published in a language other than the language in which they are writing. For example, an author who understands both English and Spanish may write a paper in English and cite both English and Spanish works. From the perspective of readers of that paper, the language in which the paper is written (in this example, English) is considered the main language and any other language in the paper (in this example, Spanish) is considered "another language."

To cite a work that is in another language, provide the author, date, title, and source of the work in the original language as well as a translation of the title in square brackets after the title and before the period (see Chapter 10, Examples 9, 27, and 85). In the case of a work that is part of a greater whole (e.g., an edited book chapter), translate only the title of the work being cited (e.g., the chapter title; see Chapter 10, Example 41); it is not necessary to translate the title of the greater whole (e.g., the book title). So, for example, if you are writing in English and cite a Spanish work, provide the author, date, title, and source in the original Spanish in the reference list, and also provide the title of the work translated into English in square brackets. The translation does not have to be literal; the purpose of including the translation is to give readers a sense of what the work is about. Use appropriate grammar and punctuation in the translated title. Authors writing in any language can implement these guidelines.

If the other language uses a different alphabet from the one you are writing in, transliterate the alphabet into the Roman alphabet. For example, Dutch, English, French, German, Spanish, and Swahili use the Roman alphabet, whereas Amharic, Arabic, Farsi, Hebrew, Hindi, Japanese, Korean, Mandarin, and Russian use other alphabets. If transliteration is not possible or advisable, it is acceptable to reproduce the original alphabet in the paper. In that case, use your judgment about where to alphabetize the reference list entry—let the order of reference list entries found in other published articles serve as a guide—or place the entry at the end of the list. In any case, provide a translation of the title of the work in square brackets after the title, before the period (see Chapter 10, Example 27).

9.39 Translated Works

Cite translated works in the language in which the translation was published. For example, if a French article was translated into English and you read the English translation, your reference list entry should be in English. Credit the translator in the reference for a translated work (see Chapter 10, Examples 10, 28, 29, 35, 36, and 42). For all translated works, also provide the year the work was originally published in its original language at the end of the reference in parentheses in the following format:

See Section 8.15 for how to write the in-text citation for a translated work.

9.40 Reprinted Works

A reprinted work is one that has been published in two places and is available in both (e.g., a journal article that was reprinted as an edited book chapter). The reference list entry includes information about both publications to avoid the appearance of duplicate publication (see Section 1.16). In the reference list entry for a reprinted work, first provide the information for the work that you read. Then, in parentheses, provide information about the original publication. In Chapter 10, see Example 11 for a journal article reprinted in another journal, Example 43 for a journal article reprinted as a chapter in an edited book, and Example 44 for a chapter in an edited book reprinted in another book. See Section 8.15 for how to write the in-text citation for a reprinted work.

9.41 Republished or Reissued Works

A republished work is one that went out of print (i.e., was no longer available) and then was published again; this is common for older works. The term "reissued" is used in the music industry to refer to the same concept. When an anthology consists of works that were published previously (as opposed to new works), the works in that anthology are treated as being republished rather than reprinted. To cite a republished or reissued work (e.g., a work republished in an anthology), provide the details of the new publication that you used, followed by the year the work was originally published in parentheses at the end of the reference in the following format:

In Chapter 10, see Example 10 for an example of a republished journal article; Examples 28, 29, and 42 for examples of republished books; and Example 46 for an example of a work republished in an anthology. See Section 8.15 for how to write the in-text citation for a republished work.

9.42 Religious and Classical Works

Religious works (e.g., Bible, Qur'an, Torah, Bhagavad Gita), classical works (e.g., ancient Greek and Roman works), and classical literature (e.g., by Shakespeare) are all cited like books (see Section 10.2).

- Religious works (see Chapter 10, Example 35) are usually treated as having no author (see Section 9.12). However, an annotated version of a religious work would be treated as having an editor.
- The year of original publication of a religious work may be unknown or in dispute and is not included in the reference in those cases. However, versions of religious works such as the Bible may be republished; these republished dates are included in the reference (see Section 9.41 and Chapter 10, Example 35).
- For translated religious and classical works, include the translator's name in the reference (see Section 9.39 and Chapter 10, Example 28).
- Classical works (e.g., ancient Greek and Roman works; see Chapter 10, Example 36) and works of classical literature (e.g., by Shakespeare; see Chapter 10, Example 37) are treated as republished works (see Section 9.41).

- When the date of original publication for a classical work is ancient, use the abbreviation "B.C.E." (which stands for "before the common era"), and if that date is approximate, use the abbreviation "ca." (which stands for "circa"; see Chapter 10, Example 36). Dates in the common era do not need to be noted as "C.E." ("common era") or "A.D." ("anno Domini").
- If a religious or classical work has canonically numbered parts common across editions (e.g., books, chapters, verses, lines, cantos), use these numbers instead of page numbers when referring to a specific part of the work (see Section 8.13) or directly quoting the work (see Section 8.28).

See Section 8.28 for how to format the in-text citation for these works.

Reference List Format and Order

9.43 Format of the Reference List

The following guidelines will help you properly format your reference list in APA Style:

- Begin the reference list on a new page after the text.
- Place the section label "References" in bold at the top of the page, centered.
- Order the reference list entries alphabetically by author, as described in Sections 9.44 to 9.48.
- Double-space the entire reference list (both within and between entries).
- Apply a hanging indent of 0.5 in. to each reference list entry, meaning that the first line of the reference is flush left and subsequent lines are indented 0.5 in. from the left margin. Use the paragraph-formatting function of your word-processing program to apply the hanging indent.

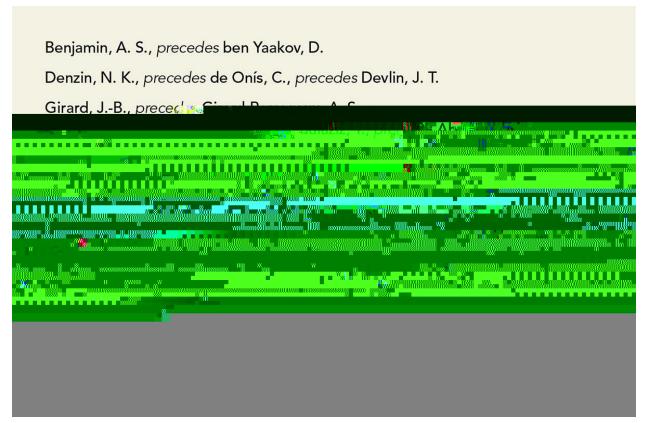
9.44 Order of Works in the Reference List

Works are listed in alphabetical order in the reference list by the first word of the reference list entry, according to the following principles:

- Arrange entries in alphabetical order by the surname of the first author followed by the initials of the author's given name(s). In APA Style for alphabetizing names, "nothing precedes something": Loft, V. H. precedes Loftus, E. F., even though "u" precedes "v" in the alphabet.
- When alphabetizing names, disregard any spaces or punctuation marks (e.g., apostrophes, hyphens) in two-word surnames. Also disregard anything in parentheses (e.g., roles like "Eds.") or square brackets (e.g., usernames).
- Alphabetize entries by authors who have the same given name and surname with suffixes indicating birth order chronologically, oldest first.

See Figure 9.2 for examples of how to order works in the reference list. For further examples, review the reference lists of published articles or the sample papers on the APA Style website (https://apastyle.apa.org).

Figure 9.2 Examples of the Order of Works in a Reference List



9.45 Order of Surname and Given Name

Naming practices for the order of given name and surname vary by culture; in some cultures, the given name appears before the surname, whereas in others, the surname appears first. If you are uncertain of which name order you are reading, check the author's preferred form (e.g., by visiting their website or their institution's website or by reading their bio or CV), or consult the author's previous publications to see how their name was presented there. For example, an author may publish as "Zhang Yi-Chen" in China but as "Yi-Chen Zhang" in the United States; in either case, according to APA Style,

this author would be listed as "Zhang, Y.-C.," in the reference list. See Section 9.9 for more.

9.46 Order of Multiple Works by the Same First Author

When ordering multiple works by the same first author in the reference list, include the author's name in every entry.

• One-author entries should be arranged by year of publication, the earliest first. References with no date precede references with dates, and in-press references are listed last.

- One-author entries should precede multiple-author entries beginning with the same first author, even if the multiple-author work was published earlier.
- Multiple-author entries in which all authors appear in the same order should be arranged by the year of publication (the same as one-author entries).
- Multiple-author entries with the same first author and different subsequent authors should be arranged alphabetically by the surname of the second author or, if the second author is the same, the surname of the third author, and so forth.

9.47 Order of Works With the Same Author and Same Date

Ambiguity can arise when multiple works cited in a paper have the same author and date (i.e., the same author[s] in the same order and the same year of publication) because the same in-text citation would then correspond to multiple reference list entries. To differentiate references with the same author and year, put a lowercase letter after the year in both the in-text citation and the reference list entry.

- The letter format for references with years is "2020a," "2020b."
- The letter format for references with no date is "n.d.-a," "n.d.-b."
- The letter format for in-press references is in "in press-a," "in press-b."

Assigning the letters is a two-step process. First, compare the dates. References with only a year precede those with more specific dates, and specific dates are placed in chronological order.

Second, if the references have identical dates, alphabetize the references by title (disregarding the words "A," "An," and "The" at the beginning of a reference title). The following are examples of references in the proper order.

However, if references with the same author and date are identified as articles in a series (e.g., Part 1 and Part 2), order the references in the series order, regardless of the titles' alphabetical order.

For citing works with the same author and date in text, see Section 8.19.

9.48 Order of Works by First Authors With the Same Surname

Arrange works by first authors with the same surname and different initials alphabetically by first initial(s).

The in-text citations for these references also include the initials of the first author (see Section 8.20). These guidelines apply to only the first author in each reference.

If multiple first authors share the same surname and the same initials, order the works as described in Sections 9.46 and 9.47. This guideline applies regardless of whether the authors are different people or the same person with a name change. For guidance on the corresponding in-text citations, see Section 8.20.

9.49 Order of Works With No Author or an Anonymous Author

Before treating a work as though it has no author, consider whether a group or organization is the author (see Section 9.11). If, and only if, the work is signed "Anonymous," begin the entry with the word "Anonymous," and alphabetize the entry as if Anonymous were a true name.

If there is no author and the work is not signed "Anonymous," the reference begins with the work's title (see Section 9.12); alphabetize the entry by the first significant word of the title (i.e., ignoring the words "A," "An," and "The" at the beginning of the title).

Alphabetize numerals as though they were spelled out (e.g., alphabetize 22 as though it were "twenty-two"). Thus, "Top 100 business schools" precedti and sc i

following examples. Many, but not all, reference abbreviations are capitalized.

Abbreviation	Book or publication part

in-text citations (see Chapter 8) if you refer to multiple works within an annotation to clarify the source.

Instructors generally set all other requirements for annotated bibliographies (e.g., number of references to include, length and focus of each annotation). In the absence of other guidance, format an annotated bibliography as follows:

- Format and order references in an annotated bibliography in alphabetical order, the same as you would order entries in a reference list (see Sections 9.43–9.44).
- Each annotation should be a new paragraph below its reference entry. Indent the entire annotation 0.5 in. from the left margin, the same as you would a block quotation (see Section 8.27). Do not indent the first line of the annotation.
- If the annotation spans multiple paragraphs, indent the first line of the second and any subsequent paragraphs an additional 0.5 in., the same as you would a block quotation with multiple paragraphs.

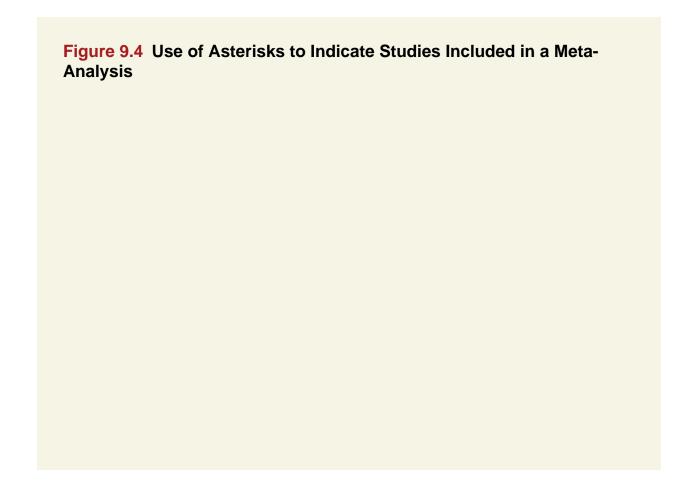
See Figure 9.3 for an example of an annotated bibliography.

Figure 9.3 Sample Annotated Bibliography Workplace Stress: Annotated Bibliography Barber, L. K., Grawitch, M. J., & Maloney, P. W. (2016). Work-life balance: Contemporary perspectives. In M. J. Grawitch & D. W. Ballard (Eds.), The psychologically healthy workplace: Building a winwin environment for organizations and employees (pp. 111–133). American Psychological Association. https://doi.org/10.1037/14731-006 This book chapter provides an overview of the psychosociological concept of work-life halon he authors dis idings from studies showing harmful effects 💕 Fwork-life conflict on

9.52 References Included in a Meta-Analysis

Studies included in a meta-analysis (see Sections 3.12 and 3.17) should be incorporated alphabetically into the reference list for the paper; the meta-analysis references should not be presented in a separate list. Place an asterisk at the beginning of each reference that was included in the meta-analysis. On the first page of the reference list, below the "References" section label, insert the following statement (indented as a new paragraph) describing the purpose of the asterisks: "References marked with an asterisk indicate studies included in the meta-analysis." See Figure 9.4 for an example.

References included in the meta-analysis do not have to be cited in the text. However, they can be cited at the author's discretion (e.g., in a table for comparison; see Chapter 7, Table 7.4). In-text citations do not include asterisks.



References

References marked with an asterisk indicate studies included in the meta-analysis.

*Angel, L., Bastin, C., Genon, S., Balteau, E., Phillips, C., Luxen, A., Maquet, P., Salmon, E., & Collette, F. (2013). Differential effects of aging on the neural correlates of recollection and familiarity. *Cortex*, 49(6), 1585–1597.

https://doi.org/10.1016/j.cortex.2012.10.002

Finley, J. R., Tullis, J. G., & Benjamin, A. S. (2010). Metacognitive control of learning and remembering. In M. S. Khine & I. M. Saleh (Eds.), New science of learning: Cognition, commutees and collaboration in education

https://doi.org/10.1007/978-1-4419-5716-0 6

*Hanaki, R., Abe, N., Fujii, T., Ueno, A., Nishio, Y., Hiraoka, K., Shimomura, T., Iizuka, O., Shinohara, M., Hirayama, K., & Mori, E. (2011). The effects of aging and Alzheimer's disease on associative recognition memory. *Neurological Sciences*, *32*(6), 1115–1122. https://doi.org/10.1007/s10072-011-0748-4

Hargis, M. B., & Castel, A. D. (2018). Younger and older adults' associative memory for medication interactions of varying severity. *Memory*, 26(8), 1151–1158.

https://doi.org/10.1080/09658211.2018.1441423

Insta ram and Tele ram: PDFEn lish

REFERENCE EXAMPLES

Appropriately crediting the contributions of scholars on which your research and writing are based is a hallmark of scholarly discourse. These contributions must be cited accurately and consistently so that future scholars can identify and retrieve the works cited in the text.

In this chapter, we provide examples of references in APA Style and their corresponding in-text citations. The reference examples are organized first by group, then by category, and then by type, as follows:

• The (Sections 10.1–10.8) contains the categories of periodicals, books and reference works, edited book chapters and reference work entries, reports

Within those categories are examples by type (e.g., journal article, edited book chapter, government report, dissertation).

- The (Sections 10.9–10.11) contains the categories of data sets; computer software, mobile apps, apparatuses, and equipment; and tests, scales, and inventories. Within those categories are examples by type (e.g., unpublished raw data, entry in a mobile reference work, test scoring manual).
- The (Sections 10.12–10.14) contains the categories of audiovisual works, audio works, and visual works. Within those categories are examples by type (e.g., YouTube video, speech audio recording, podcast episode, PowerPoint slides).
- The (Sections 10.15–10.16) contains the categories of social media and webpages and websites. Within those categories are examples by type (e.g., Instagram photo, tweet, webpage on a news website).

As described in Chapter 9, the key elements of a reference are the author (who), date (when), title (what), and source (where; see also Figure 9.1). For each reference category, a corresponding template illustrates the order and format in which these elements should appear, and examples of the most common reference types follow. If

you do not see an example that matches the work you want to cite, use the template for the applicable reference category as a starting point for writing the reference list entry. Then select the appropriate option from each column of the template to write the reference. Mix and match elements within a template; it is not necessary to use multiple templates. When in doubt, provide more information rather than less. For every reference, the in-text citation contains the first two parts of the reference—usually the "who" (author) and the "when" (date; see Section 8.11), although this can change if reference information is missing (see Table 9.1).

Most legal references (e.g., court cases and laws) are formatted in a legal reference style, which is different in several ways from the author—date—title—source pattern of other APA Style references. Legal references are presented in Chapter 11. Additional reference examples, including references to archival documents, are available on the APA Style website (https://apastyle.apa.org/ and on the APA Style blog (https://apastyle.apa.org/blog).

The following index of reference examples is organized by variations in each reference element. The numbers after each index entry refer to the numbered reference examples in this chapter.

Author Variations

```
Type of author
  artist (recording), 91, 92
  artist (visual), 97, 98, 99
  cartographer, 100
  composer, 91, 92
  director, 84, 85, 87
  editor
     in place of author, 12, 24, 25, 26, 30, 33, 34
     credited on authored book cover, 23
  executive producer, 86
  group author
     association, company, or organization, 32, 33, 47, 55,
       59, 75, 76, 78, 79, 80, 82, 88, 90, 100, 103, 104,
       105, 107, 108, 109, 111, 113
     government agency, 50, 54, 75, 103, 105, 106, 109,
       111. 114
     in combination with individuals, 5
     task force, working group, or other group, 5, 53
  guest expert, 84
  host, 84, 93, 94
  instructor
     of a course, 102
     of a webinar, 89
  interviewee, 95
```

```
narrator, 22, 29
  photographer, 101
  principal investigator, 56
  speaker, 88, 89, 96
  "with" author, see Section 9.8
  writer for TV show, 87
Name variations
  apostrophe in name, 71, 75
  beginning with a lowercase letter, 95
  hyphenated first name, 24, 74
  hyphenated surname, 9, 45, 73, 81, 83
  Jr. in name, 96
  one-word name, 36, 92, 98
  prefix included after initials rather than before surname,
     92
  transliterated name, 27
  two-part surname, 5, 25, 40, 41, 63, 86, 92, 112
  username or social media identity, 18, 90, 103, 104, 107,
     108, 109
Number of authors
  none, 35, 49
  21 or more, 4
```

Date Variations

```
advance online publication (online first publication, epub ahead of print), 7
ancient (B.C.E.), 36
approximate (ca.), 36
in press, 8
no date, 33, 47, 82, 100, 104, 106, 108, 113, 114
range
   of years, 56, 86, 93, 97
   with year, month, and day, 60, 61, 62, 63
reprinted, 11, 43, 44
republished, 29, 35, 36, 37, 46, 91, 92
republished in translation, 10, 28, 29, 42
retrieval date, 14, 33, 47, 100, 104, 106, 114
```

Title Variations

```
edition or version included, 20, 28, 30, 32, 33, 35, 39, 40,
  45, 48, 75, 79, 80
ends with
  exclamation point, 109
  parenthesis, 87
  question mark, 17, 90, 110
hashtags included, 103
identification number included, 50, 56, 57, 74, 75, 83
in another language, 9, 27, 41, 85
no title, 76, 100, 101, 102
proper noun included, 5, 15, 27, 33, 34, 35, 40, 50, 51, 52,
  53, 55, 59, 65, 67, 68, 69, 74, 75, 76, 78, 79, 81, 87, 88,
  91, 95, 97, 105, 107, 109, 113, 114
reverse italics, 69
title within a title, 67, 68, 69
translated, 10, 28, 29, 35, 36, 42
transliterated, 27
two subtitles, 50
volume number for a book, 27, 30, 45
```

Source Variations

```
article number or eLocator, 6
location included, 60, 61, 62, 63, 97
multiple publishers (or studios, etc.), 24, 86, 92, 95
multivolume work, 30, 45
publisher (or studio, etc.) same as author, 32, 54, 55
reprinted, 11, 43, 44
republished, 29, 35, 36, 37, 46, 91, 92
republished in translation, 10, 28, 29, 42
retrieval date, 14, 33, 47, 100, 104, 106, 114
shortDOI, 4, 43
shortened URL, 18, 22, 29, 62, 68, 90, 100, 105, 108
special section or special issue, 12
```

Textual Works

10.1 Periodicals

Periodicals are generally published on a continuous basis and include journals, magazines, newspapers, newsletters, and even blogs and other online platforms that publish articles. Sometimes the distinctions between periodical types are ambiguous—for example, a blog that is hosted on a newspaper website. Regardless of where the work appears, its reference list entry follows the same pattern. The date element is presented in different formats for journal, magazine, and newspaper articles and blog posts (see Examples 1, 15, 16, and 17, respectively). When periodical information (e.g., volume number, issue number, page range) is missing, omit it from the reference. For online news websites, see Section 10.16 and Example 110. Use the template shown next to construct references for periodical articles.

		Source		
Author	Date	Title	Periodical information	DOI or URL

1.	Journal article with a DOI
	Parenthetical citation: Narrative citation:
2.	Journal article without a DOI, with a nondatabase URL
	Parenthetical citation: Narrative citation:
3.	Journal, magazine, or newspaper article without a DOI, from most academic research databases or print version
	Parenthetical citations:
	 Narrative citations: Do not include the database name or URL. See Section 9.30 for

- more on excluding or including database information in references.
- 4. Journal article with a DOI, 21 or more authors

• Because the original DOI was long and complex, a shortDOI is used (see Section 9.36). Either the long or short form of the DOI is acceptable.

5. Journal article with a DOI, combination of individual and group authors

Parenthetical citation: Narrative citation:

- Write the name of the group author as shown on the source (see Section 9.11). This byline included the wording "the members of."
- 6. Journal article with an article number or eLocator

Parenthetical citation: Narrative citation:

• Capitalize the word "Article" before the article number or eLocator.

7. Journal article, advance online publication

Parenthetical citation: Narrative citation:

- See Section 8.5 for further information on which version of an article to cite.
- 8. Journal article, in press

Parenthetical citation: Narrative citation:

9. Journal article, published in another language

Parenthetical citation: Narrative citation:

- When an article is in a different language than your paper, include a translation of the article title in square brackets (see Section 9.38).
- 10. Journal article, republished in translation

• For more on translated works, see Section 9.39.

11. Journal article, reprinted from another source

Parenthetical citation: Narrative citation:

- Provide information for the reprinted version that you used; then provide in parentheses the original article title (even if the title did not change), year, and source information (see Section 9.40).
- Place the original issue number in square brackets rather than in parentheses to avoid nested parentheses.

12. Special section or special issue in a journal

- Articles in the UpToDate database are available only in that database (see Section 9.30) and have information that changes over time. In the reference list, format UpToDate articles like periodical articles. Do not italicize the database name if it appears in text.
- Use the year of last update in the date element (see Section 9.15).
- Include a retrieval date because the content is designed to change over time and versions of the page are not archived (see Section 9.16).

15. Magazine article

Parenthetical citations:

Narrative citations:

16. Newspaper article

- Link to the comment itself if possible (see Sections 9.33–9.34).
- Because the comment URL was long and complex, it has been shortened (see Section 9.36). Either the long or the short form of the URL is acceptable.

19. Editorial

Parenthetical citation: Narrative citation:

- Use the reference format for the publication in which the editorial was published. This example shows an editorial from a journal; editorials also appear in magazines, newspapers, and other publications.
- Include the notation "Editorial" in square brackets after the title (except when the word "Editorial" is included in the title).
- If the editorial is unsigned, follow the guidelines in Sections 8.14 and 9.12 for the in-text citation and reference list entry, respectively.

10.2 Books and Reference Works

The books category includes authored books, edited books, anthologies, religious works, and classical works. The reference works category includes dictionaries, encyclopedias (including Wikipedia), and diagnostic manuals. For ebooks, the format, platform, or device (e.g., Kindle) is not included in the reference. For audiobooks, include the narrator and audiobook notation only in specific cases (see Examples 22 and 29). For a chapter in an

authored book, create a reference for the whole book (see Examples 20–23) and provide the chapter number with the in-text citation only (see Section 8.13). Use the template shown next to construct references for books and reference works.

			Source		
Author or editor	Date	Title	Publisher information	DOI or URL	

20. A	uthore	d book	(with	a DOI
--------------	--------	--------	--------	-------

Parenthetical citation: Narrative citation:

21. Authored book without a DOI, from most academic research databases or print version

Parenthetical citation: Narrative citation:

• See Section 9.30

24. Edited book with a DOI, with multiple publishers

Parenthetical citation: Narrative citation:

• Separate multiple publisher names using semicolons.

25. Edited book without a DOI, from most academic research databases or print version

Parenthetical citation: Narrative citation:

• See Section 9.30 for more on including database information in references.

26. Edited ebook (e.g., Kindle book) or audiobook without a DOI, with a nondatabase URL

Parenthetical citation: Narrative citation:

• An ebook example is shown. See Example 22 for information about when a notation is needed after an audiobook title.

27. Book in another language

Parenthetical citations:

Narrative citations:

• When a book is in a different language than your paper, include a translation of the book title in square brackets (see Section 9.38).

28. Book republished in translation

Parenthetical citation: Narrative citation:

• For more on translated works, see Section 9.39.

29. Republished book, ebook, or audiobook

Parenthetical citations:

Narrative citations:

• If the new version has been edited and/or translated from the original, provide the name(s) of the editor(s) and/or translator(s)

- after the title in parentheses.
- If an audiobook was released in a different year than the text version of the book, treat the audiobook as republished (see also Example 22 and Section 9.41).

30. One volume of a multivolume work

Parenthetical citations:

Narrative citations:

- If the volume has both series editors (or editors-in-chief) and volume editors, only the volume editors appear in the author element.
- If the volume does not have its own title, include the volume number in parentheses without italics (as in the Fiske et al. example).
- If the volume has its own title, include the volume number and title after the main title in italics (as in the Travis & White example).

31. Book in a series

Parenthetical citation: Narrative citation:

• For a series of conceptually related titles, the series title is not

included in the reference (this book is part of the Theories of Psychotherapy Series; see Section 9.20).

32. Diagnostic manual (DSM, ICD)

Parenthetical citation with abbreviation included:

Narrative citation with abbreviation included:

Subsequent parenthetical citations:

Subsequent narrative citations:

- When the author and publisher are the same, omit the publisher from the source element.
- It is common, but not required, to identify the title (and edition) of a diagnostic manual in the text. Group authors and manual titles can be abbreviated in the text (with a few exceptions) but not the reference list (see Sections 6.25 and 8.21).

- Generally, include a citation for a manual the first time it is mentioned in the text. If the first mention appears in a heading, do not cite the manual in the heading; rather, cite it within the first paragraph of that section or soon thereafter.
- Do not repeat the citation for a subsequent general mention of a manual. Repeat a citation only when it directly supports a statement (e.g., quoting, paraphrasing).
- Additional examples and gn] for n athe Mdditioes
 W llW# Wo stWwr`R W llN W Wrl

- Provide the editor(s) of the anthology in the author position of the reference.
- The date refers to the year the anthology was published (for a work included in an anthology, see Example 46).

35. Religious work

Parenthetical citations:

Narrative citations:

- For more on citing religious works, see Section 9.42; to cite a specific book or verse, see Section 8.13; to quote a passage, see Section 8.28.
- Additional examples of religious texts are available on the APA Style website.

36. Ancient Greek or Roman work

- For ancient Greek or Roman works, include the copyright date of the version used in the date element and the date of the original (ancient) publication in parentheses at the end of the entry. When the date of original publication is approximate, use the abbreviation "ca." (which stands for "circa").
- For more on citing classical works, see Section 9.42; to cite a canonically numbered part of a classical work, see Section 8.13; to quote a passage, see Section 8.28.

37. Shakespeare

Parenthetical citation: Narrative citation:

• For more on citing Shakespeare and other works of classical literature, see Section 9.42; to cite a specific act, scene, or line, see Section 8.13; to quote a passage, see Section 8.28.

10.3 Edited Book Chapters and Entries in Reference Works

The edited book chapter category includes chapters of edited books and works in anthologies. The entries in reference works category includes dictionary, thesaurus, and encyclopedia entries. For ebook chapters or entries, the format, platform, or device (e.g., Kindle) is not included in the reference. For audiobook chapters or entries, include the narrator and audiobook notation only in specific cases

(see Example 22). For a chapter in an authored book, create a reference for the whole book (see Examples 20–23) and provide the chapter number with the in-text citation only (see Section 8.13). Use the template shown next to construct references for edited book chapters and entries in reference works.

Chapter		Chapter	Source		
author	Date	title	Edited book information	DOI or URL	

38. Chapter in an edited book with a DOI

Parenthetical citation: Narrative citation:

39. Chapter in an edited book without a DOI, from most academic research databases or print version

42. Chapter in an edited book, republished in translation

• Provide information for the reprinted version you used, then provide in parentheses the original book title, page range, author or editor name (including "Ed." for an editor), year, and publisher (see Section 9.40 for more).

45. Chapter in a volume of a multivolume work

Parenthetical citation: Narrative citation:

- If the volume has both series editors (or editors-in-chief) and volume editors, only the volume editors appear in the reference.
- The volume in this example has its own title. See Example 30 for how to include untitled volume information in parentheses after the book title.

46. Work in an anthology

Parenthetical citation: Narrative citation:

• Works that have been published elsewhere before appearing in an

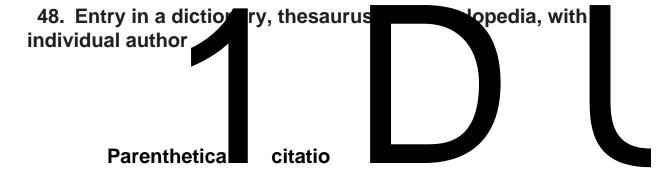
anthology are treated as being republished (see Section 9.41) rather than reprinted.

47. Entry in a dictionary, thesaurus, or encyclopedia, with group author

Parenthetical citations:

Narrative citations:

• When an online reference work is continuously updated (see Section 9.15) and the versions are not archived, use "n.d." as the year of publication and include a retrieval date (see Section 9.16).



needed.

49. Wikipedia entry

Parenthetical citation: Narrative citation:

• Cite the archived version of the page so that readers can retrieve the version you used. Access the archived version on Wikipedia by selecting "View history" and then the time and date of the version you used. If a wiki does not provide permanent links to archived versions of the page, include the URL for the entry and the retrieval date.

10.4 Reports and Gray Literature

There are many kinds of reports, including government reports, technical reports, and research reports. These reports, like journal articles, usually cover original research, but they may or may not be peer reviewed. They are part of a body of literature sometimes referred to as gray literature. The category of gray literature includes press releases, codes of ethics, grants, policy briefs, issue briefs, and so forth. It is optional—but often helpful—to describe these less common types of gray literature in square brackets after the title. Reports themselves sometimes include a suggested reference format; this reference usually contains the information necessary to write an APA Style reference (author, date, title, and

source), but you may need to adjust the order of the elements and other formatting to conform to APA Style. When the publisher is the same as the author, which is often the case for group authors (see Examples 50 and 54), omit the publisher from the source element. Use the template shown next to construct references for reports and gray literature.

			S	Source	
Author	Date	Title	Publisher information	DOI or URL	

50. Report by a government agency or other organization

D	41 44	1 - 14 - 41
Pare	nthetica	l citations:
ı aıcı		ı ollalıdığı

Narrative citations:

- See Section 9.11 for how to treat the names of group authors.
- The names of parent agencies not present in the group author name appear in the source element as the publisher (see Section 9.11).
- If multiple agencies authored a report together, join the names with an ampersand, using commas to separate the names of three or more agencies.

51. Report by individual authors at a government agency or other organization

Parenthetical citations:

Narrative citations:

52.	Report by individual authors at a government agency, published as part of a series
	Parenthetical citation: Narrative citation:
53.	Report by a task force, working group, or other group
	Parenthetical citation:
	Narrative citation:
	• Capitalize the name of the task force or working group wherever it appears in the reference because it is a proper noun.
54.	Annual report
	Parenthetical citation:
	Narrative citation:

55. Code of ethics

Parenthetical citations:

Narrative citations:

56. Grant

Parenthetical citation: Narrative citation:

- List the principal investigator as the author with their role in parentheses, the project start and end year(s) as the date, the project title as the title, and the funding agency as the source.
- The National Institutes of Health (NIH) refers to grant numbers as project numbers; use the appropriate terminology for the grant in your reference, and include the number in parentheses after the title.
- A grant application is not a recoverable source and should be

discussed as part of the methodology but not included in the reference list.

57. Issue brief

Parenthetical citation: Narrative citation:

- Issue briefs are typically numbered; identify the number of the issue brief in parentheses after the title.
- If a number is not provided, identify the work as an issue brief in square brackets following the title.

58. Policy brief

Parenthetical citation: Narrative citation:

59. Press release

Parenthetical citation:

Narrative citation:

10.5 Conference Sessions and Presentations

Conference sessions and presentations include paper presentations, poster sessions, keynote addresses, and symposium contributions. Include a label in square brackets after the title that matches how the presentation was described at the conference; include all authors listed as contributing to the presentation (even if they were not physically present). The date should match the date(s) of the full conference to help readers find the source, even though a session or presentation likely occurred on only one day. Include the location of the conference to help with retrieval (see Section 9.31 for the format of locations). Conference proceedings published in a journal or book follow the same format as for a journal article (see Example 1), edited book (see Examples 24–26 and 30), or edited book chapter (see Examples 38–42 and 45).

Use the template shown next to construct references for conference sessions and presentations.

			(Source
Author	Date	Title	Conference information	DOI or URL

Use the template shown next to construct references for symposium contributions.

			Source	
Author	Date	Contribution title	Conference information	DOI or URL

60. Conference session

Parenthetical citation: Narrative citation:

61. Paper presentation

Parenthetical citation: Narrative citation:

62. Poster presentation

Parenthetical citation: Narrative citation:

63. Symposium contribution

Parenthetical citation: Narrative citation:

10.6 Dissertations and Theses

References for doctoral dissertations and master's and undergraduate theses are divided by whether they are unpublished or published; unpublished works generally must be retrieved directly from the college or university in print form, whereas published works are available from a database (e.g., the ProQuest Dissertations and Theses

Global database), a university archive, or a personal website. Thus, for unpublished dissertations and theses, the university name appears in the source element of the reference, whereas for published dissertations and theses, the university name appears in square brackets after the title.

Use the template shown next to construct references for unpublished dissertations and theses.

Author	Date	Title	Source

Use the template shown next to construct references for published dissertations and theses.

			Source		
Author	Date	Title	Database or archive name	URL	

64. Unpublished dissertation or thesis

Parenthetical	citation
Narrative cita	tion:

65. Dissertation or thesis from a database

Parenthetical citation: Narrative citation:

66. Dissertation or thesis published online (not in a database)

Parenthetical citatio)

; citati e)

the type of work being reviewed (e.g., film, book, TV series episode, video game); its title (in sentence case, described in Section 6.17; see also Section 9.19 for whether to format the title in italics or quotation marks); and its author or editor, director, writer, and so forth, with a designation of role for all except regular authors of books. Use the template shown next to construct references for reviews.

		Title			Source
Author	Date	Review title	Details of reviewed work	Periodical information	DOI or URL
			[Review of the		
			TV series episode		
			"Episode title," by W.		
			W. Writer, Writer, & D. D.		
			Director, Dir.].		

67. Film review published in a journal

Parenthetical citation: Narrative citation:

68. Book review published in a newspaper

Parenthetical citation: Narrative citation:

69. TV series episode review published on a website

Parenthetical citation: Narrative citation:

• The title is italicized because this work is a webpage on a website (see Example 112). In the reference, the title of the show appears in reverse italics (see Section 6.23) and sentence case.

10.8 Unpublished Works and Informally Published Works

Unpublished works include work that is in progress, has been completed but not yet submitted for publication, and has been submitted but not yet accepted for publication. Informally published works include work that is available from a preprint archive or repository such as PsyArXiv, an electronic archive such as ER

elA	ERa	Âav,		Â	ERa		f pı
publi	O	-	M pub				
	or	r	r		P	#	C
Inf	pu		® \$]

Use the template shown next to construct references for informally published works.

			So	urce
Author	Date	Title	Database or archive information	DOI or URL

70. Unpublished manuscript

Parenthetical citation: Narrative citation:

- An unpublished manuscript is only in the authors' possession. Treat a manuscript available online as informally published (see Examples 73–74).
- Include the department and institution where the work was produced, if possible.

71. Manuscript in preparation

Parenthetical citation: Narrative citation:

- A manuscript in preparation is only in the authors' possession. Treat a manuscript available online as informally published (see Examples 73–74).
- Include the department and institution where the work was produced, if possible.

72. Manuscript submitted for publication

Parenthetical citation: Narrative citation:

- Do not list the name of the journal to which the work was submitted. Once the manuscript has been accepted for publication, cite it as an in-press article (see Example 8).
- A manuscript submitted for publication is not available to the public. If the manuscript is available online, treat it as informally published (see Examples 73–74).

73. Informally published work, from a preprint archive or an institutional repository

Parenthetical citations:

Narrative citations:

• The informally published work may not be peer reviewed (as with Leuker et al.'s preprint article from PsyArXiv), or it may be the author's final, peer-reviewed manuscript as accepted for publication (as with Stults-Kolehmainen & Sinha's manuscript from PubMed Central). See Section 8.5 for more on use of an archival version.

74. Informally published work, from ERIC database

Parenthetical citation: Narrative citation:

• ERIC assigns document numbers to the works in the database. Include this number in parentheses after the title of the work.

Data Sets, Software, and Tests 10.9 Data Sets

Citing data supports their discovery and reuse, leading to better science through the validation of results. It also recognizes data as an essential part of the scientific record and acknowledges data creators for their contributions. We recommend that authors include an in-text citation and a reference list entry for a data set when they have either (a) conducted secondary analyses of publicly archived data or (b) archived their own data being presented for the first time in the current work (see also Section 1.14 on data retention and sharing).

The date for published data is the year of publication and for unpublished data is the year(s) of collection. When a version number exists, include it in parentheses after the title. The bracketed description is flexible (e.g., data set, data set and code book). In the source element of the reference, for published data, provide the name of the organization that has published, archived, produced, or distributed the data set; for unpublished data, provide the source (e.g., a university), if known. Include a retrieval date only if the data set is designed to change over time (e.g., if data are still undergoing collection; see Section 9.16 for more on retrieval dates). Use the template shown next to construct references for data sets.

		Source	
Date	Title	Publisher	DOI or URL
	Date	Date Title	

75. Data set

Parenthetical citations:

Narrative citations:

76. Unpublished raw data

Parenthetical citations:

Narrative citations:

- For an untitled data set, provide a description in square brackets of the publication status and focus of the data.
- When the source of unpublished raw data is known (e.g., a university or a university department), include it at the end of the reference.

10.10 Computer Software, Mobile Apps, Apparatuses, and Equipment

Common software and mobile apps mentioned in text, but not paraphrased or quoted, do not need citations, nor do programming languages. "Common" is relative to your field and audience—examples of software or apps that do not require citations include Microsoft Office (e.g., Word, Excel, PowerPoint), social media apps (e.g., Facebook, Instagram, Twitter), survey software (e.g., Qualtrics, Survey Monkey), Adobe products (e.g., Adobe Reader, Photoshop, Adobe Acrobat), Java, and statistical programs (e.g., R, SPSS, SAS). If you used common software or mobile apps during your research, simply give the proper name of the software or app along the with version number in the text, if relevant.

However, include reference list entries and in-text citations if you have paraphrased or quoted from any software or app. Also provide reference list entries and in-text citations when mentioning software, apps, and apparatuses or equipment of limited distribution—meaning your audience is unlikely to be familiar with them. The date of a computer software or mobile app reference is the year of publication of the version used. The titles of software and apps should be italicized in the reference list entry but not italicized in the text. To cite content on a social media app, see Section 10.15. Use the template shown next to construct references for software and mobile apps of limited distribution and for apparatuses or equipment.

			Source	
Author	Date	Title	Publisher	URL

Use the template shown next to construct references for entries in mobile app reference works. The format for an entry in a mobile app reference work is similar to that for a chapter in an edited book. The most common case, in which the same author is responsible for the whole work and all entries, is shown here.

		Source			
RL	URL	Mobile app information	Entry title	Date	Author

77. Software

Parenthetical citation: Narrative citation:

78. Apparatus or equipment

Parenthetical citations:

Narrative citations:

- If the apparatus or equipment comes with software, list both in the description.
- If the apparatus or equipment has a model number that is not

included in the title, include the number after the title in parentheses.

• Because the author and publisher are the same, omit the publisher.

79. Mobile app

Parenthetical citation: Narrative citation:

80. Entry in a mobile app reference work

Parenthetical citation: Narrative citation:

10.11 Tests, Scales, and Inventories

To cite a test, scale, or inventory, provide a citation for its supporting literature (e.g., its manual, which may be an authored or an edited book, or the journal article in which it was published; see Example 81). If supporting literature is not available, it is also possible to cite the test itself (see Example 82) and/or a database record for a test (see Example 83). The title of a test, a scale, or an inventory should be capitalized using title case whenever it appears in

83. Database record for a test

Parenthetical citations:

Narrative citations:

• Test database records (e.g., records from PsycTESTS, the ETS TestLink collection, or the CINAHL database) typically provide unique descriptive and administrative information about tests; cite the database record if you use this unique information. Otherwise, cite the test's supporting literature, if available.

Audiovisual Media

Audiovisual media may have both visual and audio components (e.g., films, TV shows, YouTube videos; see Section 10.12), audio components only (e.g., music, speech recordings; see Section 10.13), or visual components only (e.g., artwork, PowerPoint slides, photographs; see Section 10.14). The reference examples that follow are divided into those categories as an aid to readers of this manual; however, they follow the same formats, so the guidance is presented together here.

The formats for audiovisual references follow a pattern based on whether the work stands alone (e.g., films, whole TV series, podcasts, webinars, music albums, artwork, YouTube videos) or is part of a greater whole (e.g., TV series episodes, podcast episodes, songs from a music album).

The author of an audiovisual work is determined by media type, as shown next.

Media type	Include as the author

Describe the audiovisual work in square brackets—for example, "[Film]," "[TV series]," "[Audio podcast episode]," "[Song]," "[Painting]," and so forth in the title element of the reference. In the source element of the reference, provide the name of the production company for films, TV series, or podcasts; the label for music albums; the museum name and location for artwork; or the name of the streaming video site that hosts a streaming video. To cite a direct quotation from an audiovisual work (e.g., from a film), see Section 8.28; for interviews, see Section 8.7. If you want to reproduce an audiovisual work (e.g., a photograph or clip art) rather than just cite it, you may need to seek permission from the copyright owner and/or provide a copyright attribution per the terms of the image license (see Section 12.15 for more).

Use the template shown next to construct references for audiovisual media that stand alone.

			Source	
Author	Date	Title	Publisher	URL

Use the template shown next to construct references for audiovisual media that are part of a greater whole.

			Source	
Author	Date	Title	Publisher	URL

10.12 Audiovisual Works

84. Film or video

Parenthetical citations:

Narrative citations:

- The director should be credited as the author of a film. However, if the director is unknown (as with the Fosha & Levenson example), someone in a similar role can be credited instead to aid readers in retrieving the work; the description of role in this case matches what is on the work and is flexible.
- It is not necessary to specify how you watched a film (e.g., in a theater, on DVD, streaming online). However, the format or other descriptive information may be included—within the square brackets, following the word "Film" and a semi-colon—when you need to specify the version used (e.g., when the film's DVD release includes a commentary or special feature that you used, or when the film is a limited-release educational video or DVD). Adjust this wording as needed.

85. Film or video in another language

Parenthetical citation: Narrative citation:

• When a film title is in a different language than your paper, include a translation of the title in square brackets (see Section 9.38).

86. TV series

Parenthetical citation:

Narrative citation:

• When the series spans multiple years, separate the years with an en dash. If the series is still airing, replace the second year with the word "present": (2015–present).

87. TV series episode or webisode

Parenthetical citations: Narrative citations:

- Include writer(s) and the director for the episode. Include the contributor roles in parentheses after each contributor's name. "Writer" and "Director" are shown here, but "Executive Director" or other role descriptions might also be used.
- Provide the season number and episode number after the title in parentheses.

88. TED Talk

Parenthetical citations: Narrative citations:

- When the TED Talk comes from TED's website (as with the Giertz example), use the name of the speaker as the author. When the TED Talk is on YouTube, list the owner of the YouTube account (here, TED) as the author to aid in retrieval.
- When the speaker is not listed as the author, integrate their name into the narrative if desired: "Brown discussed shame as a human experience (TED, 2012)."
- To cite a quotation from a TED Talk, see Section 8.28.

89. Webinar, recorded

Parenthetical citation: Narrative citation:

- Use this format only for recorded, retrievable webinars.
- Cite unrecorded webinars as personal communications (see Section 8.9).

90. YouTube video or other streaming video

Parenthetical citations:

- on CD). However, the format or other descriptive information may be included—in square brackets, following the word "Album" and a semicolon—when you need to specify the version you used (e.g., when a version of an album includes special tracks or features you accessed). Adjust this wording as needed.
- Include a URL in the reference if that location is the only means of retrieval (e.g., for artists who provide music in only one location, such as SoundCloud or their website).

92. Single song or track

Parenthetical citations:

Narrative citations:

- If the song has no associated album (as in the Childish Gambino example), omit that part of the reference.
- Include a URL in the reference if that location is the only means of retrieval (e.g., for artists who provide music in only one location, such as SoundCloud or on their website).

93. Podcast

Parenthetical citation: Narrative citation:

- List the host of the podcast as the author. Alternatively, provide the executive producers, if known. In either case, include their role in parentheses.
- Specify the type of podcast (audio or video) in square brackets.
- If the URL of the podcast is unknown (e.g., if accessed via an app), omit the URL.

94. Podcast episode

Parenthetical citation: Narrative citation:

- List the host of the podcast as the author and include their role in parentheses.
- Provide the episode number after the title in parentheses. If the podcast does not number episodes, omit the number from the reference.
- Specify the type of podcast (audio or video) in square brackets.
- If the URL of the podcast is unknown (e.g., if accessed via an app), omit the URL.

95. Radio interview recording in a digital archive

Parenthetical citation:

Narrative citation:

• For interviews that are housed in digital or physical archives (whether in audio or audiovisual form), credit the interviewee as the author. For more on interviews, see Section 8.7.

96. Speech audio recording

Parenthetical citation: Narrative citation:

10.14 Visual Works

See the introduction to the Audiovisual Media section for templates for visual works.

97. Artwork in a museum or on a museum website

Parenthetical citations:

Narrative citations:

• Use this format to cite all types of museum artwork, including paintings, sculptures, photographs, prints, drawings, and installations; always include a description of the medium or format in square brackets after the title.

• For untitled art, include a description in square brackets in place of a title.

98. Clip art or stock image

Parenthetical citations: Narrative citations:

• Because dynamically created maps (e.g., Google Maps) do not have a title, describe the map in square brackets, and include a retrieval date.

101. Photograph

Parenthetical citations: Narrative citations:

- Use this format to cite (but not reproduce) photographs or other artwork not connected to a museum (for museum artwork, see Example 97). To reproduce a photograph, permission and/or a copyright attribution may be necessary in addition to the reference (see Section 12.15).
- The source is the name of the site from which the photograph was retrieved.
- For an untitled photograph, include a description in square brackets in place of a title.

102. PowerPoint slides or lecture notes

Parenthetical citations:

Narrative citations:

• If the slides come from a classroom website, learning management system (e.g., Canvas, Blackboard), or company intranet and you are writing for an audience with access to that resource, provide the

Online Media

10.15 Social Media

Cite only original content from social media sites such as Twitter, Facebook, Reddit, Instagram, Tumblr, LinkedIn, and so forth. That is, if you used social media to discover content (e.g., you found a link to a blog post on Pinterest or Twitter) and you want to cite the content, cite it directly—it is not necessary to mention that you found it through a link on social media.

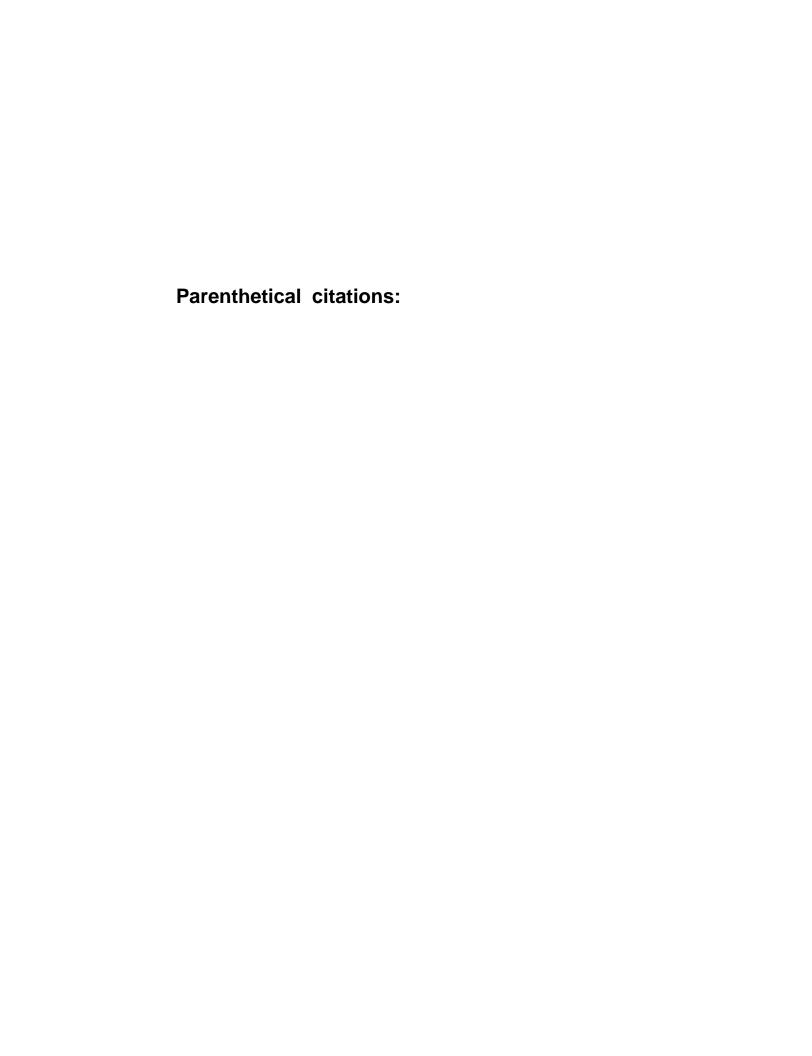
Social media posts may contain text only, text with audiovisuals (e.g., photos, videos), or audiovisuals alone. Include the text of a social media post up to the first 20 words. Note the presence of audiovisuals (in square brackets) after the text of the post (see Example 105).

Social media posts might also contain nonstandard spelling and capitalization, hashtags, links, and emojis. Do not alter the spelling and capitalization in a social media reference. Retain hashtags and links. Replicate emojis, if possible. If you are not able to create the emoji, provide the emoji's name in square brackets, for example, "[face with tears of joy emoji]" for . The full list of emoji names can be found on the Unicode Consortium's website (http://unicode.org/emoji/charts/index.html). When calculating the number of words in your paper, count an emoji as one word.

Use the template shown next to construct references to social media content.

			Source	
Author	Date	Title	Social media site name	URL
Twitter and Instagram:				
Facebook and others:				

103. Tweet



Parenthetical citations:

Narrative citations:

- Use the page title in the reference (e.g., "Timeline," "Home," "Photos," "About").
- Include the notation "Facebook page" in square brackets.
- This format can be used or adapted for references to other platform or profile pages, including YouTube, Instagram, Tumblr, LinkedIn, and so forth.

107. Instagram photo or video

Parenthetical citation: Narrative citation:

108. Instagram highlight

Parenthetical citation: Narrative citation:

- Use "n.d." for the date; although each story within a highlight is dated, the highlight itself is not dated and may include stories from multiple dates.
- Because a highlight can change at any time, include the retrieval date.
- Because the URL was long and complex, it has been shortened (see Section 9.36). Either the long or the short form of the URL is acceptable.

109. Online forum post

Parenthetical citation:

Narrative citation:

• For more on formatting usernames, see Section 9.8.

10.16 Webpages and Websites

Use the webpages and websites category if there is no other reference category that fits and the work has no parent or overarching publication (e.g., journal, blog, conference proceedings) other than the website itself (see Section 9.2). If you cite multiple webpages from a website, create a reference for each. To mention a website in general, do not create a reference list entry or an in-text citation. Instead, include the name of the website in the text and provide the URL in parentheses (see Section 8.22 for an example).

For help in determining the author of a webpage or website reference, including how the author can be inferred from context or found on an "about us" or acknowledgments page, see Example 113 as well as Section 9.7. Provide the most specific date possible (see Section 9.15 for information on how to handle updated dates or reviewed dates)—for example, a year, month, and

day; year and month; or year only. When the author name and the site name are the same, omit the site name from the source element. Include a retrieval date only when the content is designed to change over time and the page is not archived (see Section 9.16).

Use the template shown next to construct references for webpages or websites.

			Source	
Author	Date	Title	Website name	URL

110. Webpage on a news website

BBC News, Bloomberg, CNN, HuffPost, MSNBC, Reuters, Salon, Vox). To cite articles from online magazines or newspapers, see Examples 15 and 16.

111. Webpage on a website with a group author

Parenthetical citations:

Narrative citations:

• When the author and site name are the same, omit the site name from the source element.

112. Webpage on a website with an individual author

Parenthetical citation: Narrative citation:

113. Webpage on a website with no date

Parenthetical citations:

Narrative citations:

- In the Boddy et al. example, the authors are listed on the acknowledgments page of the site (see Section 9.7 for more on determining the author).
- When the author and site name are the same, omit the site name from the source element.

114. Webpage on a website with a retrieval date

Parenthetical citation: Narrative citation:

- When the author and site name are the same, omit the site name from the source element.
- Include a retrieval date because the contents of the page are designed to change over time and the page itself is not archived (see Section 9.16).

LEGAL REFERENCES

In APA Style, most legal materials are cited in the standard legal citation style used for legal references across all disciplines. However, legal style has notable differences from the APA Style references outlined in Chapter 10.

In this chapter, we provide information on how APA Style references differ from legal style references; general guidelines for creating APA Style legal references; in-text citation forms for legal materials; and examples of common legal references used in APA Style papers, including court decisions, statutes, legislative materials, administrative and executive materials, patents, constitutions and charters, and treaties and international conventions. For the sake of brevity, only United States and United Nations legal examples are provided in this chapter. For more information on preparing these and other kinds of legal references, consult The Bluebook: A Uniform System of Citation (Bluebook, 2015).

General Guidelines for Legal References

11.1 APA Style References Versus Legal References

Existing legal references are usually already written in legal style and require few, if any, changes for an APA Style reference list entry. Note that some court decisions are reported in multiple places, which is called parallel citation (see Example 6). When a work has parallel citations, include all the citations in your reference list entry. Existing legal citations generally include the parallel citations already, so you should not need to do additional research to find them. The in-text citation for a legal work is created from the reference list entry (see Section 11.3).

Ensure that your legal references are accurate and contain all of the information necessary to enable readers to locate the work being referenced. If you have questions beyond what is covered in this chapter, consult the Bluebook, a law librarian, or a law school website for help. For example, the Legal Information Institute at Cornell Law School provides free guidance on legal citations (https://www.law.cornell.edu). These resources will help you verify that your legal references (a) contain the information necessary for retrieval and (b) reflect the current status of the legal authority cited to avoid the possibility of relying on a case that has been overturned on

appeal or on legislation that has been significantly amended or repealed. Table 11.1 summarizes key differences between APA Style references and legal style references.

Table 11.1 Key Differences Between APA Style References and Legal References

Difference	APA Style	Legal style

11.2 General Forms

A general form is provided for each of the legal reference types in the sections that follow. Each reference form usually includes a popular or formal title or name of the legislation and the reference information, which is called the citation.



Refer to the published statutory compilation of legislative materials where the legislation is codified (e.g., a specific numbered section of a specific volume of the United States Code), including the compilation's publication date in parentheses, if the legislation has been codified. If the legislation has not yet been codified, provide the identifying label for the legislation assigned by the enacting body during the particular legislative session (e.g., a specific section of an act identified by its public law number).

For both legislation and court decisions, the reference may be followed by certain additional descriptive information that pertains to the content of the legislation or court decision, the history of the legislation or court decision (e.g., later appeals of court decisions or later amendments to legislation), or other sources from which the legislation or court citation may be retrieved. Consult the Bluebook for the proper format for such additional information.

Because legal references may include a great deal of information (e.g., a citation to a case may include information about appeals), legal reference style uses abbreviations to make references shorter. See Table 11.2

for some examples of the more common legal abbreviations that appear in APA Style papers.

Table 11.2 Common Legal Reference Abbreviations

Word or phrase	Abbreviation
Part of government	
Type of legal material	
Section of legal material	
Section of legal material	§ §§
	et seq.
Reporter (source) of federal legal material	

11.3 In-Text Citations of Legal Materials

Although the reference formats for legal materials differ from those of other kinds of works cited in APA publications, in-text citations are formed in approximately the same way and serve the same purpose. Most legal reference entries begin with the title of the work; as a result, most in-text citations consist of the title and year (e.g., Americans With Disabilities Act, 1990; Brown v. Board of Education, 1954). If the title is long (e.g., for federal testimony), shorten it for the in-text citation (see Example 14), but give enough information in the in-text citation to enable readers to locate the entry in the reference list. Examples of in-text citations and reference entries for legal materials are given in the sections that follow.

Legal Reference Examples

11.4 Cases or Court Decisions

A reference for a case or court decision includes the following information:

- , usually one party versus another (e.g., Brown v. Board of Education);
- , usually to a volume and page of one of the various sets of books where published cases can be found called reporters, which typically contain decisions of courts in particular political divisions, which are called jurisdictions (e.g., Federal Reporter, Second Series);
- (e.g., U.S. district court, New York Court of Appeals), in parentheses;
- , in parentheses (in the same set of parentheses as the jurisdiction if both are present); and
- from which you retrieved the case information (optional; this is not strictly required for legal citations but may aid readers in retrieval).

To create a reference list entry for the case you want to cite, first identify the court that decided the case and then follow the relevant example. Often, the document about the case

will have the relevant citation included, or it can easily be retrieved by searching the internet for the name of the court decision and the word "citation." When a reference list entry for a case or court decision includes a page range, provide only the first page number. Do not provide the page range for the whole case or decision.

The United States has both federal and state court systems. Within federal courts there are multiple levels of authority, and decisions from these courts are published in different publications.

• Decisions from the U.S. Supreme Court, the highest federal court, are published in the United States Reports (other reporters may also publish Supreme Court decisions). The template for Supreme Court decisions is as follows:

Reference list:

Parenthetical citation: Narrative citation:

• U.S. Circuit Court: Decisions from the U.S. Circuit Court are published in the Federal Reporter. The

template for U.S. Circuit Court decisions is as follows:

Reference list:

Parenthetical citation: Narrative citation:

• U.S. District Court: Decisions from the U.S. District Court are published in the Federal Supplements. The template for U.S. District Court decisions is as follows:

Reference list:

Parenthetical citation: Narrative citation:

At the state level, courts also operate at different levels of authority, although different states have different names for the levels. These levels are as follows:

- The state supreme court is generally the highest state court (the state of New York is one exception; the court of appeals is the highest court in that state).
- The state court of appeals, also called appellate court, is the intermediate court wherein precedent begins to be established.
- The state trial court is the lowest court of the state. State trial court decisions are seldom cited because they do not establish precedent, and they are not

reported in the prominent legal databases Nexis Uni (formerly LexisNexis Academic) or WestLaw.

The template for state court decisions is as follows:

Reference list:

Parenthetical citation: Narrative citation:

1. U.S. Supreme Court case, with a page number

Parenthetical citation: Narrative citation:

• U.S. Supreme Court decisions are published in the United States Reports (abbreviated "U.S." in the reference). For example, the decision to eliminate racial segregation in public schools, Brown v. Board of Education, was published in Volume 347 of the United States Reports, on page 483, in the year 1954. Cite Supreme Court decisions as published in the United States Reports whenever possible; cite the Supreme Court Reporter for cases that have not yet been published in United States Reports.

2. U.S. Supreme Court case, without a page number

Parenthetical citation: Narrative citation:

• The court decision to legalize same-sex marriage in the United States, Obergefell v. Hodges, occurred in 2015 and was published in Volume 576 of the United States Reports. However, as of the printing

of this Publication Manual, the paginated volumes of the United States Reports have been published only for decisions through the 2012 Supreme Court term. For cases that have not been assigned a page number (like Obergefell v. Hodges), include three underscores instead of the page number in the reference list entry.

3. U.S. circuit court case

Parenthetical citation:

Narrative citation:

• This court decision regarding birth defects resulting from medication use during pregnancy appeared in Volume 951 of the Federal Reporter, Second Series, on page 1128, and was decided by the 9th Circuit Court in the year 1991.

4. U.S. district court case

Parenthetical citation:

Narrative citation:

• This court decision stating that children with special needs should receive accommodations for services at public after-school-care providers under the Americans With Disabilities Act of 1990 appeared in Volume 133 of the Federal Supplement, Second Series, on page 1034. It was decided by the U.S. District Court for the Northern District of Ohio in the year 2001.

5. U.S. district court case with appeal

Parenthetical citation: Narrative citation:

- patient. It was decided by the Supreme Court of the State of California in the year 1976.
- The court decision was reported in three places, which are all included in the parallel citation (see Section 11.1), shown here separated with commas. These three sources are Volume 17 of the California Reports, Third Series (Cal.3d), page 425; Volume 131 of the California Reporter (Cal. Rptr.), page 14; and Volume 551 of the Pacific Reporter, Second Series (P.2d), page 334. All three report locations are generally reported together, so no additional research is needed to find them.

7. State appellate court case

Parenthetical citation: Narrative citation:

• This court decision found that the equal protection and due process components of the Texas Constitution prohibit the criminalization of consensual same-sex activity among adults in private. It was published in Volume 826 of the South Western Reporter, Second Series, page 201, decided by the Texas State Court of Appeals in the year 1992.

11.5 Statutes (Laws and Acts)

A statute is a law or act passed by a legislative body. As with court decisions, statutes exist on both the federal and state levels, such as an act passed by Congress or by a state government.

Federal statutes are published in the United States Code (U.S.C.). The U.S.C. is divided into sections called titles—for example, Title 42 refers to public health and welfare.

New laws are then added to the appropriate title as a way of keeping the law organized. State statutes are published in state-specific compilations; for example, statutes pertaining to the state of Florida are published in the Florida Statutes. State statutes are also typically organized into titles.

In the reference list entry for a federal or state statute, include the name of the act; the title, source (abbreviated as specified in the Bluebook), and section number of the statute; and, in parentheses, the publication date of the statutory compilation you used (e.g., the U.S.C. or a state-specific compilation). You may include the URL from which you retrieved the statute after the year. This is not strictly required for legal citations but may aid readers in retrieval.

In the in-text citation, give the popular or official name of the act (if any) and the year of the act. Determining the year for the statute can be confusing because there is often a year when the statute was first passed, a year when it was amended, and a year when it was supplemented. The year in the reference list entry and in-text citation should refer to the year in which the statute was published in the source being cited. This date may be different from the year in the name of the act.

The template for federal or state statutes is as follows:

Reference list:

Parenthetical citation: Narrative citation:

The format for state statutes may differ depending on the state but generally follows the same format as for federal statutes. Consult the Bluebook or another legal resource for further information on your particular state. For example, a few states use chapter or article numbers instead of section numbers; for a reference to a statute from one of these states, use the chapter or article number in the reference in place of the section number. Use abbreviations or symbols as shown in the Bluebook.

To cite a federal statute (i.e., a law or act), cite the statute as it was codified in the United States Code. You may see a public law number on the act as well; this number is used in the reference list entry when the act is codified in scattered sections (see Example 9) or to refer to an act before it is codified (see Example 11). However, if a statute has been codified in the United States Code in a single section or range of sections (see Example 8), it is not necessary to include the public law number in the reference.

Next are several examples of acts commonly cited in APA Style papers. Citations to other federal statutes follow the same format.

8. Federal statute, Americans With Disabilities Act of 1990

Parenthetical citation:

Narrative citation:

• This act can be located beginning at Section 12101 of Title 42 of the United States Code and was codified in the year 1990. The phrase "et seq." is Latin for "and what follows" and is a shorthand way of showing that the act covers not only the initial section cited but also others that follow.

9. Federal statute, Civil Rights Act of 1964

Parenthetical citation: Narrative citation:

• The Civil Rights Act of 1964 is codified in the United States Code in three scattered sections: 2 U.S.C., 28 U.S.C., and 42 U.S.C. To cite the entire act, use the public law number as shown in the example.

10. Federal statute, Every Student Succeeds Act

Parenthetical citation: Narrative citation:

• The Every Student Succeeds Act pertains to educational policy for students in public primary and secondary schools. It was codified in Title 20 of the United States Code in Section 6301 in the year 2015.

11. Federal statute, Lilly Ledbetter Fair Pay Act of 2009

Parenthetical citation: Narrative citation:

• The Lilly Ledbetter Fair Pay Act of 2009 amended Title VII of the Civil Rights Act (1964) and other acts and pertains to fair wage compensation. Because it was not codified in the United States Code, cite the public law number. It was published in Volume 123 of the United States Statutes at Large (abbreviated "Stat.") beginning on page 5 in the year 2009.

12. Federal statute, Title IX (Patsy Mink Equal Opportunity in Education Act)

Parenthetical citation:

Narrative citation:

• The Patsy Mink Equal Opportunity in Education Act, commonly known as Title IX, prohibits discrimination on the basis of sex in federally funded educational programs such as sports. It was published in Volume 20 of the United States Code, beginning at Section 1681, in the year 1972. Note that "Title IX" refers to part of the Education Amendments of 1972, not Title 9 of the United States Code.

13. State statute in state code

Parenthetical citation:

Narrative citation:

• This Florida act can be found in the Florida Statutes, Section 394. It was first codified in the year 1971 and then revised in 2009. Both

years appear in the in-text citation, separated by a slash.

• Consult the Bluebook for formats for other states.

11.6 Legislative Materials

Legislative materials include federal testimony, hearings, bills, resolutions, reports, and related documents. Bills and resolutions that have been passed by both houses of Congress and signed by the president become law and should be cited as statutes (see Section 11.5). To cite an unenacted bill or resolution (i.e., one that was not passed by both houses of Congress) or an enacted bill or resolution that was not signed into law, follow the forms in this section. When a URL for the material is available, it is optional to include it at the end of the reference list entry.

14. Federal testimony Template:

Example:

Parenthetical citation: Narrative citation:

• For the title of federal testimony, include the title as it appears on the work

and the subcommittee and/or committee name (if any), separated by a comma. Then provide the number of the Congress, the year in parentheses, and "testimony of" followed by the name of the person who gave the testimony in separate parentheses. When the testimony is available online, also include a URL.

a	available online, also include a URL.
15.	Full federal hearing
	Template:
	Example:
	Parenthetical citation:
	Narrative citation:
	• For the title of a full federal hearing, include the name of the hearing and the subcommittee name. Provide the number of the Congress and year. When a video or other information about the hearing is available online, include its URL.
16.	Unenacted federal bill or resolution
	Template:
	Example:

Parenthetical citation:

Narrative citation:

• The number should be preceded by "H.R." (House of Representatives) or "S." (Senate), depending on the source of the unenacted bill or resolution.

17. Enacted simple or concurrent federal resolution

Template for Senate:

Template for House of Representatives:

Example:

Parenthetical citation: Narrative citation:

- Use this format to cite enacted simple or concurrent resolutions from Congress. These resolutions are reported in the Congressional Record (abbreviated "Cong. Rec.").
- Enacted bills and joint resolutions are laws and should be cited as statutes (see Section 11.5).
- In the example, the Senate designated September 2016 as National Brain Aneurysm Awareness Month. The resolution is numbered 438 and is reported in Volume 162 of the Congressional Record on page 2394.

18. Federal report

Template for Senate:

Template for House of Representatives:

Example:

Parenthetical citation: Narrative citation:

- This report was submitted to the House of Representatives by the Committee on Veterans' Affairs concerning the Veterans Employment, Education, and Healthcare Improvement Act.
- For reports submitted to the Senate, use the abbreviation "S. Rep. No." in the reference list entry and "Senate Report No." in the in-text citation.

11.7 Administrative and Executive Materials

Administrative and executive materials include rules and regulations, advisory opinions, and executive orders.

Federal regulation, codifie). F	Federal	regulation,	codified
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Template:

Example:

Parenthetical citation: Narrative citation:

• Official federal regulations are published in the Code of Federal Regulations. In the reference, provide the title or number of the regulation, the volume number in which the regulation appears in the Code of Federal Regulations, the abbreviation "C.F.R.," the section number, and the year in which the regulation was codified. If the regulation is available online, provide the URL.

20. Federal regulation, not yet codified

Template:

Example:

Parenthetical citation: Narrative citation:

• If the regulation has not yet been codified in the Code of Federal Regulations, it will appear in the Federal Register first. Indicate this by the abbreviation "F.R." instead of "C.F.R." Instead of the year codified, provide the date of proposal. Also include the section of the Code of Federal

Regulations where the proposed rule will be codified.

21. Executive order

Template:

Example:

Parenthetical citation: Narrative citation:

- Executive orders are reported in Title 3 of the Code of Federal Regulations, so "3 C.F.R." is always included in the reference list entry for an executive order.
- The executive order in the example addressed how to combat antibiotic-resistant bacteria. It was published in the Code of Federal Regulations, on page 294, in the year 2014.

11.8 Patents

Patent references look more like typical APA Style references because the elements of author (inventor), year, title and patent number, and source are included in that order.

Reference list:

Parenthetical citation: Narrative citation:

The URL of the patent is optional but may be included in the reference list entry if available.

22. Patent

Parenthetical citation: Narrative citation:

• This patent was issued in 2016 to the inventors Hiremath et al., who worked for the computer company IBM. The patent number is a unique identifying code given to every patent. The year refers to the year the patent was issued, not the year the patent was applied for.

11.9 Constitutions and Charters

To cite a whole federal or state constitution, a citation is not necessary. Simply refer to the constitution in text.

Create reference list entries and in-text citations for citations to articles and amendments of constitutions. In the reference list and in parenthetical citations, abbreviate U.S. Constitution to "U.S. Const." and use the legal state

abbreviation for a state constitution (e.g. "Md. Const." for the Maryland Constitution; see a list of state abbreviations for legal references at the Legal Information Institute at https://www.law.cornell.edu/citation/4-500). In the narrative, use either "U.S." or "United States" for the U.S. Constitution, and spell out the name of the state for a state constitution—for example, "the Wisconsin Constitution." U.S. Constitution article and amendment numbers are Roman numerals. State constitution article numbers are also Roman numerals, but state constitution amendment numbers are Arabic numerals. URLs are not necessary for the reference. Additional information about the cited source can be included in the narrative, if desired.

Template: Example: Parenthetical citation: Narrative citation: 24. Article of a state constitution Template: Example:

Parenthetical citation:

23. Article of the U.S. Constitution

Narrative citation: 25. Amendment to the U.S. Constitution **Template: Example:** Parenthetical citation: Narrative citation: • Amendments to state constitutions are cited in the same way as amendments to the U.S. Constitution. • No date is needed in the reference unless the amendment has been repealed (see Example 26). 26. Repealed amendment to the U.S. Constitution **Template: Example:** Parenthetical citation: Narrative citation:

- Because the amendment was repealed, a year is included in the reference.
- Repealed amendments to state constitutions are cited in the same way as repealed amendments to the U.S.

Constitution.

27. U.S. Bill of Rights

Parenthetical citation: Narrative citation:

• The first 10 amendments to the U.S. Constitution are collectively referred to as the Bill of Rights. The citation is the same as that for an amendment to the constitution, except that the range of amendments is included in the citation.

28. Charter of the United Nations

Template:

Example:

Parenthetical citation: Narrative citation:

• A citation to the charter of the United Nations should include the name of the agreement, the article number, and the paragraph number. To cite an entire article, omit the paragraph number.

11.10 Treaties and International Conventions

References for treaties or international conventions should include the name of the treaty, convention, or other agreement; the signing or approval date; and a URL if available. In text, provide the name of the treaty or convention and the year.

Reference list:

Parenthetical citation: Narrative citation:

29. United Nations convention

Parenthetical citation:

Narrative citation:

PUBLICATION PROCESS

Authors, editors, reviewers, and publishers share responsibility for the ethical and efficient handling of a manuscript, beginning when the editor receives the manuscript and extending through the life of the published article.

In this chapter, we provide authors with guidance on preparing for publication, including how to adapt a dissertation or thesis into a journal article, prepare a manuscript for submission, select an appropriate and reputable journal for publication, and navigate the editorial publication process. Following are sections on copyright and permission guidelines for reprinting or adapting certain kinds of copyrighted works, the format for writing copyright attributions, and the steps to take during and after publication.

Preparing for Publication

12.1 Adapting a Dissertation or Thesis Into a Journal Article

A dissertation or thesis often provides the foundation for a new researcher's first published work. This original research can be reformatted for journal submission following one of two general strategies.

The quickest strategy for "flipping" a dissertation or thesis into a published article or articles is to structure the work using a multiple-paper format, wherein the final product submitted to fulfill the requirements for a degree consists of a paper or a series of papers that are formatted for journal submission (or close to it). These papers are usually conceptually similar (and often come from the same overarching project) but can stand alone as independent research reports. Benefits of this strategy include having your paper already formatted for and at a length consistent with journal guidelines, thereby saving time and effort in preparing for publication. In fact, you may even include manuscripts that are coauthored and under review, in press, or published elsewhere in your dissertation or thesis, provided that all policies regarding article copyright are met (see Section 12.20). Talk to your university's editorial office beforehand to confirm that this is an acceptable format and to obtain the specific guidelines for writing and structuring the dissertation or thesis.

A second strategy to convert a dissertation or thesis into a journal article after completing your defense is to reformat the work to fit the scope and style of a journal article. This often requires adjustments to the following elements (see the APA Style website at https://apastyle.apa.org for more):

- Shorten the overall paper length by eliminating text within sections, eliminating entire sections, or separating distinct research questions into individual papers (but see Section 1.16). If the work examined several distinct research questions, narrow the focus to a specific topic for each paper. Consult the journal article reporting standards in Chapter 3 to learn more about essential information to report in quantitative, qualitative, and mixed methods research.
- Include only the most pertinent references (i.e., theoretically

important or recent), especially in the introduction and literature review, rather than providing an exhaustive list. Ensure that the works you cite contribute to readers' knowledge of the specific topic and to the understanding and contextualization of your current research.

- Eliminate extraneous content or sections that do not directly contribute to readers' knowledge or understanding of the specific research question(s) under investigation. End with a clear description of the questions, aims, or hypotheses that informed your research.
- Provide enough information to allow readers to understand how the data were collected and evaluated (following the journal article reporting standards in Chapter 3); full details about every step or the rationale behind it are unnecessary. Instead, refer readers to previous works that informed the current study's methods or to supplemental materials.
- Report the most relevant results and adjust the discussion accordingly. Ensure that the results directly contribute to answering your original research questions or hypotheses; check that your interpretation and application of the findings are appropriate.
- Make sure that tables or figures are essential (see Chapter 7) and do not reproduce content provided in the text.

Students seeking to prepare their dissertation or thesis for publication are advised to look at articles in the field and in relevant journals to see what structure and focus are appropriate for their work. To gain insight into how journal articles look and what they have and do not have, students might also consider reviewing an article submitted to a journal alongside their advisor (with permission from the journal editor) or serving as a reviewer for a student competition. Doing so offers firsthand insight into how authors are evaluated when undergoing peer review (see Section 12.7). Additionally, advisors or other colleagues may be coauthors on manuscripts that are based on a dissertation or thesis; students should request and consider the input of these coauthors during the conversion process (see Section 1.22 on the order of authors).

12.2 Selecting a Journal for Publication

Selecting a journal for publication should be an integral and early step of the writing process because the choice of journal can shape the form of the manuscript. For example, journals vary in their length requirements; some journals publish brief reports in addition to articles, whereas others publish only longer articles. Likewise, some journals reach a wide array of readers, whereas others are more specialized. Additional considerations are the journal's topical areas, open access policy, impact factor, time to publication, and citation style. The characteristics of a journal and its intended audience should inform your journal selection process.

If you are unsure about how to select a journal for publication, take a look at your reference list as you write: What journals do you cite repeatedly? What themes do you see reflected in the articles published in that journal? You can also look at the reference lists of published articles that are similar to yours to get an idea of where researchers in your field are publishing. Also ask coauthors or colleagues for recommendations. Follow up on possible leads by contacting the journal editor to make sure that your topic is within the scope of the journal and would be of interest to its audience. Editors may be able to immediately tell you that the article topic is outside the purview of their journal and even suggest a more suitable journal. Through this process, you will begin to form a list of potential journals for publication.

The next step is to narrow this list down to one or two possible journals by assessing two factors: appropriateness and prestige.

Because all journals specialize in certain kinds of research, it is important that your research be appropriate for the venue you choose. One of the most common reasons editors reject a manuscript is because the research is not appropriate for the journal. To learn about a journal's scope, peruse past issues and read the journal's description on its website. Also consult the journal's manuscript submission guidelines and author instructions to identify the journal's disciplinary and methodological boundaries. Look for similarities with your paper in the following areas:

- Consider factors such as demographic characteristics, diagnosis, and setting (e.g., naturalistic vs. laboratory).
- Consider the use of quantitative, qualitative, review, meta-

analytic, mixed methods, and other approaches (see Sections 1.1–1.9).

- Consider the themes that unite the articles published in the journal.
- Consider features such as length (e.g., brief reports vs. long reviews), complexity, citation style, and so forth.

Publication in a prestigious journal will be a boon to your career and your work. When it comes to selecting a journal for publication, it is important to keep in mind that more than one high-quality journal may be an appropriate fit for your article. The prestige of a journal can be assessed in many ways; one way is by consulting indices such as the impact factor, rejection rate, and number of citations to articles in the journal. Prestigious journals are peer reviewed, have an editorial board composed of distinguished researchers in the field, and are included in trusted abstracting and indexing research databases in your field as an indication of the journals' reach to their key audiences.

12.3 Prioritizing Potential Journals

Publication is not a matter simply of submitting to the most prestigious journal possible but rather of identifying a set of the most appropriate journals for your research and then selecting one that is well regarded. We suggest that you choose two journals to which to submit your research: your preferred choice and a backup. Remember that in the social sciences, you can submit a manuscript to only one journal at a time, so prioritize the journals accordingly. Preselecting two potential journals will help alleviate the burden of reviewing journals again should your manuscript be rejected by the first.

If you are unable to decide between options, prioritize appropriateness over prestige. The goal of publication is to share your research with your academic community; thus, if you publish in a prestigious journal but not an appropriate one, it will be harder for interested readers to find your work. Researchers typically subscribe to certain journals to keep apprised of new and relevant research and to receive alerts when new material is published. Therefore, choosing an appropriate and well-regarded journal for publication allows your work to be noticed by researchers well acquainted with your discipline and to better contribute to the growth of knowledge in the field.

Other considerations that may inform your decision are the time to first response or to publication (which may be relevant to graduate students looking to publish articles from their dissertation or thesis before graduation), publishing costs (which may be relevant to researchers without grant funding), whether it is a journal for which you or your colleagues have been a reviewer, international scope or readership, and open access status.

12.4 Avoiding Predatory Journals

This section provides cautionary guidance for editors and authors. In the same way that authors are obligated to abide by ethical and professional standards when conducting research, journal editorial offices and publishers are expected to be rigorous in evaluating the articles they publish. Unfortunately, there are journals and publishers that engage in predatory or deceptive practices, involving any number of unethical or negligent means of soliciting, evaluating, and/or publishing articles.

Predatory journals (also called deceptive journals) are those whose publishers aggressively solicit manuscripts to be published and charge fees to do so without providing services to justify those fees. This practice is also called deceptive publishing. Open access journals that charge author fees for publication are not inherently predatory, but predatory journals commonly use this model. These journals often have the following characteristics:

- The journal may solicit publication via an email that is informal (e.g., containing many exclamation points), poorly written, and signed by an editorial assistant as opposed to the editor. If the editor is identified in the email or journal website, check the editor's website or CV to confirm that the journal editorship is listed.
- The journal's website or publisher may be purposefully excluded from communications to avoid scrutiny, particularly if the journal's name might be mistaken for the name of a leading journal in the field. If the only links in the email are to the online peer review system and a generic editor email (e.g., JournalEditor@[publisher].com), search for the journal online and review its website.
 - The journal may not use rigorous evaluation

standards; for example, it may omit peer review or use only a cursory peer review process and may lack editing, archiving, and/or indexing services (Bowman, 2014), resulting in low-quality papers.

- The journal's website may make it difficult to locate information about the editorial process or publishing operations (e.g., publishing fees, editorial staff; Masten & Ashcraft, 2017).
- The journal's publisher may not have a good (or any) reputation. Its website, if one exists, may look unprofessional and lack contact information (e.g., email, postal address, working telephone number). Impact factor or other journal evaluation criteria may come with an asterisk indicating that they are "informal estimates" rather than real data.
- The journal may use a generic (e.g., not labeled with a journal or organization's name) online peer review system or allow manuscript submission via email.
- The journal and other journals by the same publisher may not be indexed in PsycINFO or other trusted research databases. Although inclusion in major research databases is not an ironclad guarantee of journal or publisher good practice, database publishers usually have processes in place to evaluate and monitor the journals they cover. Be sure to search for the title of the journal exactly as it is provided in the email; some predatory journals have titles deceptively similar to those of reputable journals.

Reputable journals are usually indexed in research databases.

Despite sharing one or more of these general characteristics, predatory journals are not identical in their practices. Just as charging publishing fees or having an open access model are not universal markers of a predatory journal, the absence of these practices does not guarantee that the journal abides by high standards of rigor and evaluation. Ultimately, it is the author's

responsibility to be diligent and to critically evaluate the standards used by potential journals.

High-quality periodicals typically have digital object identifiers (DOIs) for their articles and an ISSN for the periodical (Beaubien & Eckard, 2014). Such journals usually have a well-defined scope that is aligned with the content of the articles they publish; clearly described processes for peer review, correction, and retraction; and an identified publisher and editorial board composed of individuals who are competent in their fields (Shamseer et al., 2017). If article processing or publishing fees are levied, these fees are clearly posted on the journal's website and are appropriate to cover the services rendered.

Resources are available to help authors vet journals and discern potentially predatory ones. For instance, the World Association of Medical Editors (Laine & Winker, 2017) has published guidance to help editors, researchers, funders, academics, and other stakeholders distinguish predatory journals from legitimate ones. Shamseer et al. (2017) used empirical data to develop a set of evidence-based standards for identifying potentially predatory journals; these indicators provide a starting point for evaluating journal quality. Both the Directory of Open Access Journals (DOAJ; https://doaj.org) and the Quality Open Access Market (QOAM; https://www.qoam.eu) maintain white lists of reputable open access, peer-reviewed journals. Authors can visit the Think. Check. Submit. website (https://thinkchecksubmit.org), which provides a checklist and additional free resources to assist in identifying trusted journals. The Open Scholarship Initiative (OSI, 2019) also provides valuable information about predatory or deceptive publishing.

If you have questions or concerns, contact your university librarian, who can help ensure that the journal you choose is a legitimate one. The most important step you can take to protect the integrity of your research is to be diligent in evaluating a potential journal before deciding whether to submit your article for publication.

Understanding the Editorial Publication Process

12.5 Editorial Publication Process

The editorial publication process begins when an author submits a manuscript to a journal for consideration. The flowchart in Figure 12.1 describes the potential paths that the manuscript can take from submission to publication. It is important to understand this process in context: Scholarly journal articles are original, primary publications, which means that they have not been previously published, contribute to the body of scientific knowledge, and have been reviewed by a panel of peers. Work that has been peer reviewed and appears in a journal with an ISSN or as a standalone work with an ISBN is considered published (see Section 1.16 for more on duplicate publication). Although it is possible to informally publish by posting versions of a paper online (e.g., on a preprint server), this alone does not constitute publication (see Section 12.23 for more on sharing your article).

quality of each contribution—that the work is original, rigorous, and significant—scholars in the subspecialties of a field carefully review submitted manuscripts. By submitting a manuscript to a journal that is peer reviewed, an author implicitly consents to the circulation and discussion of the manuscript among the reviewers. During the review process, the manuscript is considered a confidential and privileged document; however, publisher policies differ, so check the journal's manuscript submission guidelines and instructions to authors (see Sections 1.20 and 1.23 for more on ethical standards for manuscript reviewers).

12.6 Role of the Editors

Publication decisions for a journal rest in the hands of editors who are responsible for the quality and content of the journal. Journal editors look for manuscripts that (a) contribute significantly to the content area covered by the journal, (b) communicate with clarity and conciseness, and (c) follow the journal's style guidelines. Understanding the hierarchy of editors can help you know what to expect as an author and how to correspond during the submission and publication process.

The journal lead editor, or editor-in-chief, has final editorial authority on decisions regarding manuscripts. They are often assisted by associate editors, who assume responsibility for a specific content area of the journal or for a portion of the manuscripts submitted to the journal. For some journals, an associate editor may act as the editor at all stages of consideration of a manuscript (i.e., as an action editor) and may communicate with authors regarding acceptance, invited revision, or rejection of a manuscript. Consulting and advisory editors and ad hoc reviewers review manuscripts and make recommendations to editors or to associate editors concerning the disposition of manuscripts. Editors often seek associate, consulting, or advisory editors to advise them on manuscripts describing methods that are less familiar to them (e.g., qualitative, mixed methods) and to assist them in evaluating conflicting reviews in light of the logic of the approaches of inquiry in use (see Section 3.4). As an author, you should address interim correspondence to the editor with whom you have been in communication. However, the lead editor or editor-in-chief may make a decision other than that recommended by the reviewers or associate editor.

12.7 Peer Review Process

Just as understanding the role of editors helps you know what to expect during the submission process, so will understanding the peer review process.

An action editor usually seeks the assistance of several reviewers who are scholars in the content area of the submitted manuscript in arriving at an editorial decision. An action editor may solicit reviews from particular reviewers for any number of reasons, including familiarity with the research topic or the methodological approach, familiarity with a particular controversy, and a desire for a balance of perspectives. If reviewers do not have the knowledge to competently review a given manuscript, they are expected to identify these limitations within their review or in communication with the editor.

Reviewers provide scholarly input into the editorial decision, but the decision of whether to accept a manuscript for publication ultimately rests with the action editor or editor-in-chief. Readers interested in learning more about the peer review process or serving as a reviewer should consult APA's online peer review resources (https://on.apa.org/2KCTE6O) and the APA Reviewer Resource Center (https://on.apa.org/2F6MNn0).

When you submit a manuscript, you may be prompted to provide a list of potential reviewers along with their contact information (see Section 12.10 for more about online submission to a journal). Consider your choice of reviewers carefully and with an eye to researchers whose own research is consistent with the topic of your paper, whose area of study is similar to yours, and whose work has been cited in your manuscript. You may also consider potential reviewers' establishment in the field (e.g., recent graduates may not have much of a scholarly record, whereas renowned scholars field many requests to review and may not be available). Editors may not pick all (or any) of the reviewers you recommend. It is generally considered inappropriate to suggest reviewers who are colleagues with whom you directly work because their familiarity with you and your work may bias the review process, particularly if the journal does not participate in masked review.

Journal editors, either routinely or at the authors' request, may use masked review in which the identities of the authors of a manuscript

are concealed from reviewers during the review process. Authors' names are not revealed to reviewers without the consent of the authors until the review process is complete. The names of reviewers can also be masked, although a reviewer may choose to reveal their identity by including their name in the review itself. Thus, journals can mask review in both directions (both authors' and reviewers' names masked), mask review in one direction (either authors' or reviewers' names masked), or unmask the review (all names revealed).

Consult the author guidelines to determine whether the journal to which you are submitting routinely uses masked review or offers masked review to authors who request it. Authors are responsible for concealing their identities in manuscripts that will receive masked review; for example, they should format their manuscripts so their identities as document creators are not easily revealed and describe the locations of their studies and participants in general terms (e.g., "students at a small, Midwestern U.S. liberal arts college").

The time required to complete a peer review varies depending on the length and complexity of the manuscript and the number of reviewers asked to evaluate it. If the journal editor determines that the manuscript is within the purview of the journal and has no major flaws or limitations (e.g., an article that exceeds prescribed page limits often is not considered for publication until revised), they will send it either directly to reviewers or to an associate editor who then serves as the action editor. Associate editors, on the basis of the reviews received, then make a recommendation to the journal editor. It is extremely rare that editors accept a paper for publication without formal peer review; exceptions might include an introduction to a special section or an editorial.

In general, the review process takes approximately 2 to 3 months, during which authors can typically view the status of their manuscript (e.g., with the editor, sent out to reviewers) through the journal's manuscript submission portal. After that time, authors can expect to be notified about a decision on their manuscript. It would be appropriate for an author to contact the editor if no communication regarding a decision has been received after more than 3 months.

12.8 Manuscript Decisions

Reviewers provide the editor with evaluations of a manuscript on the basis of their assessment of the scholarly quality of the manuscript, the importance of the contribution the work might provide, and the appropriateness of the work for the particular journal. The decision to accept a manuscript, to invite a revision, or to reject it is the responsibility of the editor; the editor's decision may differ from the recommendation of any or all of the reviewers.

Once a manuscript is accepted, it enters the production phase of publication, in which it is copyedited and typeset. During this phase, authors may not make significant changes to content (e.g., adding a new section of analysis or a table) other than those recommended by the copyeditor. Authors are responsible for the completion of all associated paperwork (e.g., signing copyright transfers, submitting disclosures, securing permissions for any

to a manuscript may reveal to the author or to the editor and reviewers deficiencies that were not apparent in the original manuscript, and the editor may request further revision to correct those deficiencies. During the review process, an editor may ask an author to supply material that supplements the manuscript (e.g., raw data, complex statistical tables, instructions to participants). As the manuscript moves through the review process, editors are free to solicit reviews from reviewers who were not among the initial set of reviewers. Additional reviewers might be selected if their expertise is needed or if a previous reviewer is no longer available.

If the editor returns a manuscript to the author for revision, the editor explains why the revisions are required. The editor does not have to provide the reviewers' comments to the author but frequently chooses to do so. Editors do not undertake major editorial revision of a manuscript. Authors are expected to attend to editors' and reviewers' recommendations for revision; however, the content and style of the article remain the sole responsibility of the authors.

Authors should respond to reviewers' recommendations thoughtfully and judiciously. Frequently, authors are required to resubmit a version of their original manuscript with tracked changes that reflect revisions made on the basis of reviewer feedback. When resubmitting a revised manuscript, authors are also encouraged to enclose a cover letter thanking editors and reviewers for their feedback, accompanied by a document explaining how they have responded to all of the reviewers' comments (regardless of whether they agreed or disagreed with the comments). Often referred to as a response to reviewers, this file specifies how the authors addressed each critique made by a reviewer (e.g., by adding text or data) and where the revision can be found in the revised manuscript. Authors are not required to make every change suggested by a reviewer, but the response should explain the rationale behind the authors' decisions, including decisions not to make a change. Providing a response to reviewers facilitates the timeliness of the review process by reducing the number of follow-up questions and ultimately helps the editor decide whether to publish the article. For a sample response to reviewers, see the APA Style website (https://apastyle.apa.org).

Some journals offer authors the opportunity to revise their paper into a brief report; the journal's policies will indicate whether this option exists. For such journals, authors may also submit a brief report initially. Articles of this

type generally describe a study of limited scope, contain novel or provocative findings that need further replication, or represent replications and extensions of prior published work. Research published in this format generally cannot be resubmitted as a longer research article somewhere else (see Section 1.16 on duplicate publication).

A manuscript is usually rejected because the work (a) is seen as falling outside the coverage domain of the journal; (b) contains such severe flaws of design, methodology, analysis, or interpretation that the editor questions the validity of the findings; or (c) is judged as making a limited contribution to the field, given the standards of the journal. At times, editors reject good manuscripts simply because they lack the space to publish all of the high-quality manuscripts that are submitted to the journal.

Editors may desk reject a manuscript outright—that is, after an initial review but before review by an associate editor or by reviewers—in two cases. The first is when the editor determines that the manuscript is not appropriate for the specific journal because either the content or the format is not in keeping with the journal's mission. The second is when the editor determines that it is unlikely that the paper will be evaluated favorably during the peer review process. Both decisions allow for a more efficient and effective review process. Similarly, an editorial reject might occur when initial review of the manuscript reveals formatting flaws such as exceeding the prescribed page limits.

A manuscript that has been rejected by a journal may not be revised and resubmitted to that same journal without invitation from the editor. If a manuscript is rejected on the basis of the peer review, the editor explains why it was rejected and may provide feedback from the reviewers. Authors who believe a pertinent point was overlooked or misunderstood by the reviewers may contact the editor to appeal the decision. Those who feel that their manuscript was unfairly rejected should consult the journal or publisher website regarding the appeals process. Authors are free to submit the rejected manuscript to another journal. Reviewers may provide feedback that authors find useful when revising their manuscript; authors should give careful attention to these comments and suggestions from peers and incorporate them to improve the scientific rigor and overall quality of the paper.

Manuscript Preparation

12.9 Preparing the Manuscript for Submission

This section summarizes the steps to follow in preparing a manuscript for submission to a journal. First, follow APA Style guidelines as described in this manual when formatting and writing the paper. In particular, consult Chapter 3 to become acquainted with the reporting standards for the type of research you have conducted. Also, check whether the journal to which you are submitting your manuscript has a checklist or specific guidelines for manuscript submission. Manuscript preparation and submission guidelines APA found the APA website for iournals can he on (https://on.apa.org/2E0FPOT).

Many publishers, including APA, offer a suite of author services and support that provide help with writing, translation, figure creation, and so forth. Authors are encouraged to use these services to ensure that the manuscript they submit to the publisher is in the best form possible. These guidelines and services are continually updated; authors should follow the most current guidelines for the publisher to which they are submitting their work (for APA journals, see the Journal Manuscript Preparation Guidelines at https://on.apa.org/2P0119j).

12.10 Using an Online Submission Portal

You will most likely submit your article electronically through an online manuscript submission portal. For APA journals, each journal has its own submission portal accessed via its website. Review the instructions for using the submission portal and understand the format for saving all files before beginning the submission process. Guidance on navigating the Editorial Manager system used by all APA journals can be found on the APA website (https://on.apa.org/2FLydBA).

Upon submission of your manuscript, you will be asked to upload at least two files—a manuscript file and a cover letter. Additional files may be needed depending on the publisher's requirements.

The manuscript file consists of your manuscript, including the title page, abstract, text (body), and reference list, as well as tables and figures, footnotes, and appendices, if applicable. Whereas some journals accept all sections as a single file, others require authors to upload separate files (e.g., the title page in a separate file for masked review, all figures in separate files).

If you are submitting supplemental materials with your manuscript, check the journal's website to determine the preferred format (see Section 2.15). Keep in mind that if your manuscript is accepted, your supplemental materials most likely will not be copyedited and thus will be made available to readers in the exact format in which you submit them. Be sure to review all supplemental materials carefully for content and proper format prior to submission.

Authors often must submit a cover letter as a separate file to accompany their manuscript. Check the journal's website for the current editor's name and for specific instructions on submission. See Section 12.11 for guidance on what to include in the cover letter to the journal editor.

Finally, you may need to supply additional information via the submission portal, including the following:

- article title and abstract
- byline, affiliation, contact information, and order of authors
- article word count or page count
- number of tables and figures
- keywords
- names of potential reviewers (see Section 12.7)

Requirements for additional information are specific to each journal and publisher. Follow instructions as prompted by the manuscript submission portal to ensure that you enter or upload all the requested information.

12.11 Writing a Cover Letter

When writing a cover letter requesting consideration of your manuscript for publication, include the information requested by the journal. Cover letters

often include the following:

- specific details about the manuscript (e.g., title and authors)
- assurances that all authors agree with the content of the manuscript and with the order of authorship (see Sections 1.21–1.22)
- assurances that the corresponding author will take responsibility for informing coauthors in a timely manner of editorial decisions, reviews received, changes made in response to editorial review, and content of revisions (if the manuscript is accepted, all the authors will need to certify authorship)
- information about the existence of any closely related manuscripts that have been submitted for simultaneous consideration to the same or to another journal (see Section 1.16 on piecemeal publication and exceptions)
- notice of any conflicts of interest or activities that might be seen as influencing the research (e.g., financial interests in a test or procedure, funding by a pharmaceutical company for drug research)
- a request for masked review, if that is an option for the journal and you choose to use it (see Section 12.7)
- verification that the treatment of human participants or nonhuman animal subjects was in accordance with established ethical standards (see Sections 1.18 and 12.13)
- a copy of any permissions granted to reproduce copyrighted material or a notice that permissions are pending (see Sections 12.14–12.18; the publisher must have copies of all granted permissions before your work can be published)
- the telephone number, email address, and mailing address of the corresponding author for future correspondence

Some journals have an author agreement checklist that authors must submit along with or in lieu of a cover letter. Check the specific policies of the journal to which you are submitting your manuscript and follow those policies. Nonadherence to submission instructions can delay the review process. For sample cover letters, see the APA Style website (https://apastyle.apa.org).

12.12 Corresponding During Publication

While a manuscript is under consideration, it is the responsibility of the authors to inform the editor of any substantive corrections needed, any changes in contact information, and so forth. In all correspondence during the publication process, include the complete manuscript title, the authors' names, and the manuscript number (assigned when the manuscript was first received). Any author may correspond with the editor or editorial staff during the submission and publication process. Most often, however, correspondence is handled by the corresponding author.

Following publication, the corresponding author serves as the main point of contact and responds to questions about the published article. All authors should decide prior to submission who will serve as the corresponding author. Although any author can serve as the corresponding author, the corresponding author often has taken the lead in executing a study or heads the lab in which the data were collected. See Section 2.7 for how to present the corresponding author's information in the author note.

12.13 Certifying Ethical Requirements

In Chapter 1 (Sections 1.11 and 1.18), we noted that authors are responsible for demonstrating that they have complied with the ethical standards that govern both the conduct of research and its scholarly publication (see Standard 8, Research and Publication, of the APA Ethics Code; APA, 2017a). When you submit a manuscript to a journal, you may be asked to provide proof of compliance with these standards. You are also expected to comply with legal standards of fair use when reprinting or adapting the work of others and to comply with the publication policies established by the journal publisher. The forms APA requires for journal publication and the instructions for the forms can be found on the APA website (https://on.apa.org/2zuMDk2).

When you submit your manuscript, you may be asked to verify that you have complied with ethical standards in the conduct of your

research. This includes whether your study has been evaluated and approved by an institutional review board (IRB) or an institutional animal care and use committee (IACUC), if such approval is required. Authors conducting research outside the United States should describe the process of ethical review their study underwent if it differs from an IRB evaluation. Authors submitting to APA journals are also required to submit the Certificate of Compliance With APA Ethical Principles Form (https://on.apa.org/2NrGSsY) if the research included human participants or

Copyright and Permission Guidelines

12.14 General Guidelines for Reprinting or Adapting Materials

Most of the time, authors need to provide only an author—date in-text citation and a reference list entry to properly credit the words or ideas of other authors (see Chapters 8–11). However, according to U.S. copyright law, reprinting or adapting certain kinds of works (e.g., figures published in journal articles, images from websites, lengthy quotations) requires a more comprehensive acknowledgment of the copyright status of the reprinted or adapted work in the form of a copyright attribution, a brief statement providing details of the original work and naming the copyright holder (see Section 12.18 for formatting guidance).

Reprinting means reproducing material exactly as it appeared originally, without modifications, in the way in which it was intended. Adapting refers to modifying material so that it is suitable for a new purpose (e.g., using part of a table or figure in a new table or figure in your paper). A copyright attribution is used instead of an author—date in-text citation to credit these works; each work also should appear in the reference list. For a subset of cases (see Section 12.17), authors need to seek and obtain explicit written permission from the copyright holder to reprint or adapt the material, a process that can take substantial time and comes with no guarantee that the copyright holder will consent to the use. Because these policies are a matter of law, not specifically of APA Style, all writers—even students whose work will not be formally published—should follow them.

The remainder of this section guides authors through the process of

- understanding what types of material require a copyright attribution;
- identifying the copyright status of the material and understanding its implications for the intended use;
- determining whether permission is necessary to reproduce the material on the basis of its copyright status and the legal concept of fair use;
- securing permission (if necessary) to reproduce the material; and
- writing the copyright attribution in APA Style.

12.15 Materials That Require a Copyright Attribution

The following are examples of materials that authors often want to reprint or adapt that may require a copyright attribution; they may also require permission (see Section 12.17). Other materials may also require a copyright attribution and permission before they can be reprinted or adapted, such as songs, poetry, and art.

- Most types of visual displays require a copyright attribution to reprint or adapt, including tables and figures published in journal articles, books, reports, webpages and websites, and other works, as well as images from the internet such as illustrations, infographics, photographs, screenshots, and most clip art. Depending on the work's place of publication and copyright status, permission may or may not be required. Copyright ownership and permission status can be particularly difficult to establish for images downloaded from the internet, but journals cannot publish them without full documentation. There is no need to seek permission or to write a copyright attribution for images taken from a database whose purpose is the open dissemination of stimuli for academic research (e.g., the International Affective Picture System); for these, an author–date citation suffices.
- Published or unpublished data from another source require a copyright attribution and permission to directly reproduce. Data that have been reconfigured or reanalyzed to produce different numbers do not require permission or a copyright attribution; cite these data with a regular author–date citation instead (see Section 10.9).
- reprinted or adapted from copyrighted and commercially available tests or scales (e.g., Minnesota Multiphasic Personality Inventory–2, Wechsler Adult Intelligence Scale, Stanford–Binet Intelligence Scales) require a copyright attribution and permission. Obtaining these permissions can be difficult and time consuming, and a preferable alternative to reproducing the exact items in your manuscript may be to instead reword or paraphrase those items. Permission is required, and may be denied, to reproduce even one item from such instruments. Furthermore, many test and scale developers ask authors to submit a request (typically through their website

or email) to use their measure prior to the authors administering it to participants in their study and to inform them of any publications that may result from its use. Likewise, the developers should be consulted before you make any changes to a measure (e.g., adaptations for different age groups, translation of specific items). Authors should also consider whether reprinting or adapting test materials could threaten the materials' integrity and security, as described in APA Ethics Code Standard 9.11, Maintaining Test Security.

Although most quotations taken from a published work need only an author—date citation, you should seek permission and provide a copyright attribution to reproduce a long quotation, the definition of which varies by copyright holder. It is the author's responsibility to determine the policy of each copyright holder; large publishers usually provide their permission policies on their websites. For APA's policy, see Section 12.17.

Two special cases of material with copyright requirements are commercial stock photography and clip art. If you find photos, clip art, and other images via an online search engine, the guidelines in this section apply to those search results, too.

- Unless a stock image has a Creative Commons license (see Section 12.16) or is in the public domain, it is not permissible to reproduce it without purchasing a license from the vendor. Commonly used vendors of stock images are Getty Images, Shutterstock, and iStock. A license usually allows the license holder to reproduce the image without a copyright attribution; however, without your own license, you cannot reproduce the image.
- Most clip art does not require permission to reproduce, but it may require a copyright attribution. For clip art included with a computer program (e.g., Microsoft Word), purchase of the program provides a license for that clip art, and you can use it in an academic paper or scholarly article without a copyright attribution or author—date citation. If the clip art comes from a free clip art website, check the copyright status of the image to determine whether a copyright attribution or citation is needed (see Section 12.16). See Example 98 in Chapter 10 for a reference

list entry for clip art when a reference is needed.

12.16 Copyright Status

The copyright status of a work determines how you are allowed to use it in your own paper. Copyright is usually indicated on the first page of an article, on the copyright page of a book or report, below an image published online, or in the footer of a website.

The following are some common copyright statuses:

• Copyright is often indicated simply by the word "copyright" or the copyright symbol.

Sometimes determining who holds a copyright can be a challenge, particularly for older works, because publishers may merge and copyrights may change hands. Materials described in Section 12.15 require a copyright attribution, and permission may be required as well.

- Creative Commons licenses are indicated by "Creative Commons" or "CC." Most Creative Commons licenses allow you to reprint and/or adapt a work (including images) without permission from the copyright holder as long as you give credit to the original author in the form of a copyright attribution, note the license type, and indicate whether you have adapted the original. The specific terms of Creative Commons licenses vary, so check the license associated with the work you want to reproduce to determine what you are allowed to do and what specific copyright attributions, if any, are required.
- Works that are not bound by copyright are considered to be in the public domain. This means that you can reprint them and/or adapt them however you want, so long as you credit the original author in the form of a copyright attribution. Assume that a work is under copyright unless you see the words "public domain" on it or the work was produced by the U.S. government (in which case it is automatically in the public domain). Although copyright does expire with time—meaning that works that were once copyrighted may now be in the public domain—the laws

governing this process are complex and vary by country; consult a librarian if you have questions regarding expired copyrights.

• If no copyright is indicated, treat the material as copyrighted. U.S. copyright law states that a work is copyrighted as soon as it is fixed in tangible form (e.g., when you can see it on a computer screen or on paper), even if the work does not have the word "copyright" or the copyright symbol on it, and even if it is not widely distributed or professionally published. For example, students automatically own the copyright to their classroom assignments.

12.17 Permission and Fair Use

Permission is not required to reprint or adapt a work (see Section 12.15 for examples) when it has a Creative Commons license or is in the public domain; however, a copyright attribution is still required in most cases. For works that are copyrighted (or for which the copyright status is unknown), permission is not always required to reprint or adapt the work. The nature of the original publication (i.e., an academic work vs. a commercial publication) and the concept of fair use govern whether permission is needed.

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- The purpose of the use is scholarly comment, noncommercial research, or educational.
- Full credit is given to the author and the publisher as copyright holders through a complete and accurate copyright attribution.
- A maximum total of three figures or tables are being reprinted or adapted from a journal article or book chapter.
- Single text extracts being reprinted are fewer than 400 words, or a series of text extracts being reprinted totals fewer than 800 words. For quotations under these thresholds, use an author—date citation (permission and copyright attributions are not required).

All publishers have their own permission policies, which may differ from guidelines provided here and may cover cases not described in this section (e.g., reproducing whole articles or chapters). Check with the publisher of the material to determine whether permission is necessary.

You may be able to reprint or adapt a copyrighted work as described in Section 12.15 without permission if your use is considered "fair." Fair use is a loosely defined and complex legal concept (for a summary, see U.S. Copyright Office, 2019) but, in general, means that under certain circumstances it is permissible to reprint or adapt a copyrighted table, figure, image, test item, questionnaire, or long quotation without obtaining permission as long as you credit the work with a copyright attribution. If in doubt, check with the copyright holder to determine what they consider fair use, especially for items from measures, questionnaires, scales, tests, or instruments. However, the use is probably fair if it meets the following criteria:

- It is for use in an academic work and not for profit (e.g., paper for a class, article in a scholarly journal).
- It represents facts or data (e.g., a chart or diagram) rather than creative self-expression (e.g., artwork, although some famous works of art are in the public domain and thus do not require permission).
- It is small in relation to the entire work (e.g., a chart within a report) and not the whole work or the heart of the work (e.g., a whole cartoon).
- Reproducing the work will not hurt the market or potential market for the original.

If you photographed a person who is identifiable in the photograph, you must submit a signed release from that person for the photograph to be published. The release should specify that both electronic and print permissions are granted. This is not a matter of copyright but rather of permission from the individual to have their likeness reproduced. It is not necessary to mention the release in the paper or to write a copyright attribution for such a photograph. No release is necessary if the photograph is of one of the authors of the paper.

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Allow ample time (several weeks) to secure permission. Once permission is granted, you need to

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12.18 Copyright Attribution Formats

An APA Style copyright attribution contains information from the reference list entry of the work, but in a different order than in the reference entry, and with additional information about the material's copyright and permission status. To write a copyright attribution,

- state whether the material was reprinted or adapted (use "From" for reprintings and "Adapted from" for adaptations);
- provide the title, author, year of publication, and source of the material;
- indicate the material's copyright status, which will be the copyright year and the name of the copyright holder, a statement that the work is licensed in the Creative Commons, or a statement that the work is in the public domain; and
- provide the permission statement as requested by the copyright holder if permission was sought and obtained.

Place the copyright attribution as follows:

- For a reprinted or adapted table, figure, or other image (including reproduced [but not reanalyzed] data in a table), place the copyright attribution at the end of the general note for the table or figure (see Sections 7.14 and 7.28).
- For reproduced test items, questionnaires, or long quotations, place the copyright attribution in a footnote to the reproduced text (see Section 2.13).

See Table 12.1 for copyright attribution templates and Table 12.2 for examples. See Chapter 7 for examples in context, including

- an adapted table that does not require permission (Table 7.14 in Section 7.21),
- a reprinted figure that does not require permission (Figure 7.3 in Section 7.36),
- a reprinted figure in the public domain (Figure 7.14 in Section 7.36), and
- a figure reproduced with permission (Figure 7.21 in Section 7.36).

Table 12.1 Copyright Attribution Templates

Source ^a	Reprinted or adapted status	Source information	Copyright status	Permission statement ^b

Table 12.2 Example Copyright Attributions for Reprinted or Adapted Tables and Figures

Example copyright attribution

When you use a copyright attribution, also provide a reference list entry for the work. However, the copyright attribution is used instead of an in-text citation; it is not necessary to include both.

During and After Publication

12.19 Article Proofs

After your manuscript has been accepted, but prior to its publication, you will be contacted by the journal's editorial staff to review the article proofs. Proofs are usually handled via an annotation website. Through the site, you will be able to make changes or annotations directly to the proofs to correct minor style or formatting errors. It is also where you will receive and be asked to respond to specific questions posed by copyeditors or editorial staff. Keep in mind that the proof stage is your last chance to change your article. This is not, however, the time to rewrite text or to add new analyses, citations, or interpretation. Any major revisions to the text or analyses made in the proofs may require review by the editor.

Review the proofs carefully. Be alert for changes in meaning that may have inadvertently occurred during copyediting, and be attentive to levels of heading and formatting of statistics, equations, tables, and so forth. Copyeditors correct errors, ensure consistency of style, and clarify expression; you should compare the proofs with your original manuscript to confirm that any changes are consistent with the meaning you intended to convey. Limit changes to fixing spelling or grammar, correcting copyediting or typesetting errors, and updating references (e.g., to update in-press citations, to fix DOIs and URLs that no longer work). If you request changes, be explicit, because the typesetter will have only your written instructions to work from and thus will need clear direction to implement the changes correctly. In addition, be sure to check the following:

- Have you answered all copyeditor queries fully?
- Are author names and affiliations correct and consistent with prior publications?
- Is the hierarchy of headings and subheadings correct?
- Are all numbers and symbols in text, tables, and mathematical and statistical copy correct?
- Are tables correct? Are all columns aligned as expected, and do

superscripts correspond to table notes? Are all table notes correct?

• Are figures correct? Are labels properly spelled? Do symbols in the legend match those in the figure? Are photographs reproduced successfully? Are all figure notes correct?

If coauthors participate in reviewing the proofs, the corresponding author is responsible for consolidating necessary changes and incorporating them into the proofs. It is important to submit your requested changes to the publisher within the established deadline so that publication of your article is not delayed.

Once you have submitted all proof corrections to the production office, your article will soon be made available. Often, publishers publish the final, typeset article online first, referred to as advance online publication, with the print version to follow (see Section 8.5). This is the point of official publication, and your article may now be discovered and cited.

12.20 Published Article Copyright Policies

Until publication, the copyright of a manuscript belongs to the author(s). At publication, however, it is common for the copyright of the work to change. Two of the most common scenarios are transfer of copyright to the publisher and entry into the public domain.

When a manuscript is accepted for publication, authors typically transfer copyright of their manuscript to the publisher. By transferring copyright, authors permit publishers to (a) widely distribute the article, (b) monitor and control republication of the article (in whole or in part) by others, and (c) handle the paperwork involved in copyright registration and administration. The publisher in turn represents the authors' interests and permits authors to freely reuse their own article (in whole or in part) in several ways. By law, publishers own the copyright on their journal articles for 95 years from the time of publication. The copyright transfer includes both print and electronic rights to the article to allow the publisher to disseminate the work as broadly as possible. APA journals use the APA Publications Rights Form (see https://on.apa.org/32psDvX) to complete the transfer of copyright.

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12.21 Open Access Deposit Policies

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As you decide where to submit your article, check your funder and

12.22 Writing a Correction Notice

As described in Section 1.13, errors sometimes occur in published journal articles. If you detect an error in your published article (including the advance online publication) and think that a correction is warranted, submit a correction notice to the journal editor and publisher. A formal correction tells readers (a) exactly what the error was, (b) what the correct information is, and (c) whether some or all versions of the original article have been corrected (i.e., no longer contain the error). Because it is not the purpose of corrections to place blame for mistakes, correction notices do not identify the source of the error (e.g., unintentional oversight, mathematical errors).

It is not necessary to formally correct every error found in a published article. Minor typographical errors do not need to be called out as part of the public record of science. The following are examples of errors that need formal, public correction:

- adding an author or rearranging the order of authorship
- completely changing the affiliation (e.g., because the affiliation on the published work does not reflect where the author worked when the study was conducted)
- replacing an entry in the reference list with a completely different reference
- altering the data in a way that may or may not change the significance of the results
- substituting one word for another or rewriting a sentence or paragraph in a way that substantially impacts the meaning

A correction notice should contain the following:

- journal title and year, volume number, issue number, DOI, and inclusive page numbers of the article being corrected (as applicable)
- complete article title and names of all authors, exactly as they appear in the published article
- precise location of the error (e.g., page, column, line)
- an exact quotation of the error or, in the case of a lengthy error or an error in a table or figure, an accurate paraphrasing of the error

• a concise, unambiguous wording of the correction or, in the case of an error in a table or figure, a replacement version of the table or figure

Once the proposed correction has been reviewed by the editor and publisher, a decision is made to either move forward with a correction notice or leave the error within the published article as is. When a correction is approved, the publisher uses the information provided by the author to compile the correction notice in an official template. Correction notices are usually published with a DOI, like published articles, and appear in print and online. If the article being corrected has already appeared in print, the correction notice is published in the next available issue of the journal. If the article being corrected has not yet appeared in print, the correction notice is published within the same issue as the article. If the article being corrected has been published only online and will remain so after the next issue of the journal, an online version of the correction notice is published to amend the article while the article and correction notice await placement in a print issue. website for See the APA Style sample correction notices (https://apastyle.apa.org).

12.23 Sharing Your Article Online

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12.24 Promoting Your Article

Authors are encouraged to promote their article after its publication. One way they may do so is to develop short summaries describing their work in plain language and share these along with the article DOI through their social media networks. A journal may also ask for a public health significance statement or impact statement as part of the article; authors can use this statement as a foundation for communicating their work and its broader impact to the public. The name of this section and whether it is required depend on the journal, but the goal is to make the research more accessible to the public. Guidance on writing public health significance or impact statements can be found on the APA website (https://on.apa.org/2DKj1lH). Similarly, organizations or universities where the author is employed may ask for text to include in a press release to disseminate key findings from the study. These materials are typically brief, so make sure that the language is clear and that findings are reported accurately and appropriately.

Communicating your research in plain language to the public is important for reaching a wide array of readers who might otherwise be unaware of your work and its potential significance. Many publishers offer various tools to assist authors in promoting their work and tracking its impact. Advice on promoting your article, including how to work with the media, write social media posts, and track readership of your article, can be found on the APA

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- **Table 3.2:** Adapted from "Journal Article Reporting Standards for Qualitative Primary, Qualitative Meta-Analytic, and Mixed Methods Research in Psychology: The APA Publications and Communications Board Task Force Report," by H. M. Levitt, M. Bamberg, J. W. Creswell, D. M. Frost, R. Josselson, and C. Suárez-Orozco, 2018, American Psychologist, 73(1), pp. 34–37 (https://doi.org/10.1037/amp0000151). Copyright 2018 by the American Psychological Association.
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- **Table 7.3:** Adapted from "Introduction of the DSM-5 Levels of Personality Functioning Questionnaire," by S. K. Huprich, S. M. Nelson, K. B. Meehan, C. J. Siefert, G. Haggerty, J. Sexton, V. B. Dauphin, M. Macaluso, J. Jackson, R. Zackula, and L. Baade, 2018, Personality Disorders: Theory, Research, and Treatment, 9(6), p. 557 (https://doi.org/10.1037/per0000264). Copyright 2017 by the American Psychological Association.
- **Table 7.4:** Adapted from "A Meta-Analysis of Context Integration Deficits Across the Schizotypy Spectrum Using AX-CPT and DPX Tasks," by C. A. Chun, L. Ciceron, and T. R. Kwapil, 2018, Journal of Abnormal Psychology, 127(8), pp. 795–797 (https://doi.org/10.1037/abn0000383). Copyright 2018 by the American Psychological Association.
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