Sixth Edition

# *Publication* Manual

## of the American Psychological Association

- efforts to recognize and celebrate diversity; and
- promotion of universal participation in civic life, and hence democracy (Lerner, Balsano, Banik, & Naudeau, 2005, p. 45).

## Writing Style

The prime objective of scientific reporting is clear communication. You can achieve this by presenting ideas in an orderly manner and by expressing yourself smoothly and precisely. Establishing a tone that conveys the essential points of your study in an interesting manner will engage readers and communicate your ideas more effectively.

### 3.05 Continuity in Presentation of Ideas

Readers will better understand your ideas if you aim for continuity in words, concepts, and thematic development from the opening statement to the conclusion. Continuity can be achieved in several ways. For instance, punctuation marks contribute to continuity by showing relationships between ideas. They cue the reader to the pauses, inflections, subordination, and pacing normally heard in speech. Use the full range of punctuation aids available: Neither overuse nor underuse one type of punctuation, such as commas or dashes. Overuse may annoy the reader; underuse may confuse. Instead, use punctuation to support meaning.

Another way to achieve continuity is through the use of transitional words. These words help maintain the flow of thought, especially when the material is complex or abstract. 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 transition devices are time links (*then, next, after, while, since*), cause–effect links (*therefore, consequently, as a result*), addition links (*in addition, moreover, furthermore, similarly*), and contrast links (*but, conversely, nevertheless, however, although*).

### 3.06 Smoothness of Expression

Scientific prose and creative writing serve different purposes. Devices that are often found in creative writing—for example, setting up ambiguity; inserting the unexpected; omitting the expected; and suddenly shifting the topic, tense, or person—can confuse or disturb readers of scientific prose. Therefore, try to avoid these devices and aim for clear and logical communication.

Because you have been so close to your material, you may not immediately see certain problems, especially contradictions the reader may infer. A reading by a colleague may uncover such problems. You can usually catch omissions, irrelevancies, and abruptness by putting the manuscript aside and rereading it later. Reading the paper aloud can make flaws more apparent. (See also section 3.11.)

If, on later reading, you find that your writing is abrupt, introducing more transition devices may be helpful. You may have abandoned an argument or theme prematurely; if so, you need to amplify the discussion.

Abruptness may result from sudden, unnecessary shifts in verb tense within the same paragraph or in adjacent paragraphs. By using verb tenses consistently, you can help ensure smooth expression. Past tense (e.g., "Smith *showed*") or present perfect

tense (e.g., "researchers *have shown*") is appropriate for the literature review and the description of the procedure if the discussion is of past events. Stay within the chosen tense. Use past tense (e.g., "anxiety *decreased* significantly") to describe the results. Use the present tense (e.g., "the results of Experiment 2 *indicate*") to discuss implications of the results and to present the conclusions. By reporting conclusions in the present tense, you allow readers to join you in deliberating the matter at hand. (See section 3.19 for details on the use of verb tense.)

*Noun strings,* meaning several nouns used one after another to modify a final noun, create another form of abruptness. The reader is sometimes forced to stop to determine how the words relate to one another. Skillful hyphenation can clarify the relationships between words, but often the best approach is to untangle the string. For example, consider the following string:

> commonly used investigative expanded issue control question technique

This is dense prose to the reader knowledgeable about studies on lie detection—and gibberish to a reader unfamiliar with such studies. Possible ways to untangle the string are as follows:

- a control-question technique that is commonly used to expand issues in investigations
- an expanded-issue control-question technique that is commonly used in investigations
- a common technique of using control questions to investigate expanded issues
- a common investigative technique of using expanded issues in control questions

One approach to untangling noun strings is to move the last word to the beginning of the string and fill in with verbs and prepositions. For example, *early childhood thought disorder misdiagnosis* might be rearranged to read *misdiagnosis of thought disorders in early childhood.*

Many writers strive to achieve smooth expression by using synonyms or near-synonyms to avoid repeating a term. The intention is commendable, but by using synonyms you may unintentionally suggest a subtle difference. Therefore, choose synonyms with care. The discreet use of pronouns can often relieve the monotonous repetition of a term without introducing ambiguity.

## 3.07 Tone

Although scientific writing differs in form from literary writing, it need not lack style or be dull. In describing your research, present the ideas and findings directly but aim for an interesting and compelling style and a tone that reflects your involvement with the problem.

Scientific writing often contrasts the positions of different researchers. Differences should be presented in a professional, noncombative manner. For example, "Fong and Nisbett did not address . . ." is acceptable, whereas "Fong and Nisbett completely overlooked . . ." is not.

One effective way to achieve the right tone is to imagine a specific reader you are intending to reach and to write in a way that will educate and persuade that individual. Envisioning a person familiar to you may make this technique more effective. You may wish to write, for example, to a researcher in a related field who is trying to keep abreast of the literature but is not familiar with jargon or insider perspectives. What would facilitate his or her understanding of and appreciation for the importance of your work?

## 3.08 Economy of Expression

Say only what needs to be said. The author who is frugal with words not only writes a more readable manuscript but also increases the chances that the manuscript will be accepted for publication. The number of printed pages a journal can publish is limited, and editors therefore often request that authors shorten submitted papers. You can tighten long papers by eliminating redundancy, wordiness, jargon, evasiveness, overuse of the passive voice, circumlocution, and clumsy prose. Weed out overly detailed descriptions of apparatus, participants, or procedures (beyond those called for in the reporting standards; see Chapter 2); elaborations of the obvious; and irrelevant observations or asides. Materials such as these may be placed, when appropriate, in an online supplemental archive (see sections 2.13 and 8.03 for further details).

Short words and short sentences are easier to comprehend than are long ones. A long technical term, however, may be more precise than several short words, and technical terms are inseparable from scientific reporting. Yet the technical terminology in a paper should be readily understood by individuals throughout each discipline. An article that depends on terminology familiar to only a few specialists does not sufficiently contribute to the literature.

**Wordiness.** Wordiness can also impede the ready grasp of ideas. Change *based on the fact that* to *because, at the present time* to *now,* and *for the purpose of* to simply *for* or *to*. Use *this study* instead of *the present study* when the context is clear. Change *there were several students who completed* to *several students completed.* Unconstrained wordiness lapses into embellishment and flowery writing, which are clearly inappropriate in scientific style.

**Redundancy.** Writers often use redundant language in an effort to be emphatic. Use no more words than are necessary to convey your meaning.

In the following examples, the italicized words are redundant and should be omitted:

they were *both* alike

*a total of* 68 participants

four *different* groups saw

instructions, which were *exactly* the same as those used

*absolutely* essential

has been *previously* found

small *in size*

*one and* the same

in *close* proximity

*completely* unanimous

*just* exactly

*very* close to significance

*period of* time

summarize *briefly*

the reason is *because*

**Unit length.** Although writing only in short, simple sentences produces choppy and boring prose, writing exclusively in long, involved sentences results in difficult, sometimes incomprehensible material. Varied sentence length helps readers maintain interest and comprehension. When involved concepts require long sentences, the components should proceed logically. Direct, declarative sentences with simple, common words are usually best.

Similar cautions apply to paragraph length. Single-sentence paragraphs are abrupt. Paragraphs that are too long are likely to lose the reader's attention. A new paragraph provides a pause for the reader—a chance to assimilate one step in the conceptual development before beginning another. If a paragraph runs longer than one double-spaced manuscript page, you may lose your readers. Look for a logical place to break a long paragraph, or reorganize the material.

## 3.09 Precision and Clarity

**Word choice.** Make certain that every word means exactly what you intend it to mean. In informal style, for example, *feel* broadly substitutes for *think* or *believe,* but in scientific style such latitude is not acceptable. A similar example is that *like* is often used when *such as* is meant:

*Correct:*

Articles by psychologists such as Skinner and Watson. . . .

*Correct:*

Like Watson, Skinner believed. . . .

*Incorrect:*

Articles by psychologists like Skinner and Watson. . . .

**Colloquial expressions.** Avoid colloquial expressions (e.g., *write up* for *report*), which diffuse meaning. Approximations of quantity (e.g., *quite a large part, practically all,* or *very few*) are interpreted differently by different readers or in different contexts. Approximations weaken statements, especially those describing empirical observations.

**Jargon.** *Jargon* is the continuous use of a technical vocabulary, even in places where that vocabulary is not relevant. Jargon is also the substitution of a euphemistic phrase for a familiar term (e.g., *monetarily felt scarcity* for *poverty*), and you should scrupulously avoid using such jargon. Federal bureaucratic jargon has had the greatest publicity, but scientific jargon also grates on the reader, encumbers the communication of information, and wastes space.

**Pronouns.** Pronouns confuse readers unless the referent for each pronoun is obvious; readers should not have to search previous text to determine the meaning of the term. Pronouns such as *this, that, these,* and *those* can be troublesome when they refer to something or someone in a previous sentence. Eliminate ambiguity by writing, for example, *this test, that trial, these participants,* and *those reports* (see also section 3.20).

**Comparisons.** Ambiguous or illogical comparisons result from omission of key verbs or from nonparallel structure. Consider, for example, "Ten-year-olds were more likely to play with age peers than 8-year-olds." Does this sentence mean that 10-year-olds were more likely than 8-year-olds to play with age peers? Or does it mean that 10-

year-olds were more likely to play with age peers and less likely to play with 8-year-olds? An illogical comparison occurs when parallelism is overlooked for the sake of brevity, as in "Her salary was lower than a convenience store clerk." Thoughtful attention to good sentence structure and word choice reduces the chance of this kind of ambiguity.

**Attribution.** Inappropriately or illogically attributing action in an effort to be objective can be misleading. Examples of undesirable attribution include use of the third person, anthropomorphism, and use of the editorial *we*.

***Third person.*** To avoid ambiguity, use a personal pronoun rather than the third person when describing steps taken in your experiment.

*Correct:*

We reviewed the literature.

*Incorrect:*

The authors reviewed the literature.

***Anthropomorphism.*** Do not attribute human characteristics to animals or to inanimate sources.

*Correct:*

Pairs of rats (cage mates) were allowed to forage together.

*Incorrect:*

Rat couples (cage mates) were allowed to forage together.

*Correct:*

The staff for the community program was persuaded to allow five of the observers to become tutors.

*Incorrect:*

The community program was persuaded to allow five of the observers to become tutors.

An experiment cannot *attempt to demonstrate, control unwanted variables,* or *interpret findings,* nor can tables or figures *compare* (all of these can, however, *show* or *indicate*). Use a pronoun or an appropriate noun as the subject of these verbs. *I* or *we* (meaning the author or authors) can replace *the experiment.*

***Editorial* we.** For clarity, restrict your use of *we* to refer only to yourself and your coauthors (use *I* if you are the sole author of the paper). Broader uses of *we* may leave your readers wondering to whom you are referring; instead, substitute an appropriate noun or clarify your usage:

*Correct:*

Researchers usually classify birdsong on the basis of frequency and temporal structure of the elements.

*Incorrect:*

We usually classify birdsong on the basis of frequency and temporal structure of the elements.

Some alternatives to *we* to consider are *people, humans, researchers, psychologists, nurses,* and so on. *We* is an appropriate and useful referent:

*Correct:*

As behaviorists, we tend to dispute . . .

*Incorrect:*

We tend to dispute . . .

### 3.10 Linguistic Devices

Devices that attract attention to words, sounds, or other embellishments instead of to ideas are inappropriate in scientific writing. Avoid heavy alliteration, rhyming, poetic expressions, and clichés. Use metaphors sparingly; although they can help simplify complicated ideas, metaphors can be distracting. Avoid mixed metaphors (e.g., *a theory representing one branch of a growing body of evidence*) and words with surplus or unintended meaning (e.g., *cop* for *police officer*), which may distract if not actually mislead the reader. Use figurative expressions with restraint and colorful expressions with care; these expressions can sound strained or forced.

### 3.11 Strategies to Improve Writing Style

Authors use various strategies in putting their thoughts on paper. The fit between author and strategy is more important than the particular strategy used. Three approaches to achieving professional and effective communication are (a) writing from an outline; (b) putting aside the first draft, then rereading it later; and (c) asking a colleague to review and critique the draft for you.

Writing from an outline helps preserve the logic of the research itself. An outline identifies main ideas, defines subordinate ideas, helps you discipline your writing and avoid tangential excursions, and helps you notice omissions. In an outline, you can also identify the subheadings that will be used in the article itself.

Rereading your own copy after setting it aside for a few days permits a fresh approach. Reading the paper aloud enables you not only to see faults that you overlooked on the previous reading but also to hear them. When these problems are corrected, give a polished copy to a colleague—preferably a person who has published in 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.

These strategies, particularly the latter, may require you to invest more time in a manuscript than you had anticipated. The results of these strategies, however, may be greater accuracy and thoroughness and clearer communication.

## Reducing Bias in Language

Scientific writing must be free of implied or irrelevant evaluation of the group or groups being studied. As an organization, APA is committed both to science and to the fair treatment of individuals and groups, and this policy requires that authors who write for APA publications avoid perpetuating demeaning attitudes and biased

assumptions about people in their writing. Constructions that might imply bias against persons on the basis of gender, sexual orientation, racial or ethnic group, disability, or age are unacceptable.

Long-standing cultural practice can exert a powerful influence over even the most conscientious author. Just as you have learned to check what you write for spelling, grammar, and wordiness, practice rereading your work for bias. Another suggestion is to ask people from targeted groups to read and comment on your material.

What follows is a set of guidelines and discussions of specific issues that affect particular groups. These are not rigid rules. You may find that some attempts to follow the guidelines result in wordiness or clumsy prose. As always, good judgment is required. If your writing reflects respect for your participants and your readers and if you write with appropriate specificity and precision, you will be contributing to the goal of accurate, unbiased communication. Specific examples for each guideline are given in the Guidelines for Unbiased Language, which can be found on the APA Style website (www.apastyle.org).

## General Guidelines for Reducing Bias

### Guideline 1: Describe at the Appropriate Level of Specificity

Precision is essential in scientific writing; when you refer to a person or persons, choose words that are accurate, clear, and free from bias. The appropriate degree of specificity depends on the research question and the present state of knowledge in the field of study. When in doubt, be more specific rather than less, because it is easier to aggregate published data than to disaggregate them. For example, using *man* to refer to all human beings is simply not as accurate as the phrase *women and men.* To describe age groups, give a specific age range ("ages 65–83 years") instead of a broad category ("over 65 years"; see Schaie, 1993). When describing racial and ethnic groups, be appropriately specific and sensitive to issues of labeling. For example, instead of describing participants as Asian American or Hispanic American, it may be helpful to describe them by their nation or region of origin (e.g., Chinese Americans, Mexican Americans). If you are discussing sexual orientation, realize that some people interpret *gay* as referring to men and women, whereas others interpret the term as referring only to men (the terms *gay men* and *lesbians* currently are preferred).

Broad clinical terms such as *borderline* and *at risk* are loaded with innuendo unless properly explained. Specify the diagnosis that is borderline (e.g., "people with borderline personality disorder"). Identify the risk and the people it involves (e.g., "children at risk for early school dropout").

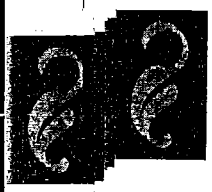
*Gender* is cultural and is the term to use when referring to women and men as social groups. *Sex* is biological; use it when the biological distinction is predominant. Note that the word *sex* can be confused with *sexual behavior. Gender* helps keep meaning unambiguous, as in the following example: "In accounting for attitudes toward the bill, sexual orientation rather than gender accounted for most of the variance. Most gay men and lesbians were for the proposal; most heterosexual men and women were against it."

Part of writing without bias is recognizing that differences should be mentioned only when relevant. Marital status, sexual orientation, racial and ethnic identity, or the fact that a person has a disability should not be mentioned gratuitously.

## Guideline 2: Be Sensitive to Labels

Respect people's preferences; call people what they prefer to be called. Accept that preferences change with time and that individuals within groups often disagree about the designations they prefer. Make an effort to determine what is appropriate for your situation; you may need to ask your participants which designations they prefer, particularly when preferred designations are being debated within groups.

Avoid labeling people when possible. A common occurrence in scientific writing is that participants in a study tend to lose their individuality; they are broadly categorized as objects (noun forms such as *the gays* and *the elderly*) or, particularly in descriptions of people with disabilities, are equated with their conditions—*the amnesiacs, the depressives, the schizophrenics, the LDs,* for example. One solution is to use adjectival forms (e.g., "gay *men,*" "older *adults,*" "amnesic *patients*"). Another is to "put the person first," followed by a descriptive phrase (e.g., "people diagnosed with schizophrenia"). Note that the latter solution currently is preferred when describing people with disabilities.



When you need to mention several groups in a sentence or paragraph, such as when reporting results, do your best to balance sensitivity, clarity, and parsimony. For example, it may be cumbersome to repeat phrases such as "person with _____." If you provide operational definitions of groups early in your paper (e.g., "Participants scoring a minimum of X on the X scale constituted the high verbal group, and those scoring below X constituted the low verbal group"), it is scientifically informative and concise 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, $p = .043$"), provided the terms are inoffensive. A label should not be used in any form that is perceived as pejorative; if such a perception is possible, you need to find more neutral terms. For example, *the demented* is not repaired by changing it to *demented group,* but *dementia group* would be acceptable. Abbreviations or series labels for groups usually sacrifice clarity and may offend: *LDs* or *LD group* to describe people with specific learning difficulties is offensive; *HVAs* for "high verbal ability group" is difficult to decipher. *Group A* is not offensive, but it is not descriptive either.

Recognize the difference between *case,* which is an occurrence of a disorder or illness, and *patient,* which is a person affected by the disorder or illness and receiving a doctor's care. "Manic–depressive cases were treated" is problematic; revise to "The patients with bipolar disorders were treated."

Bias may be promoted when the writer uses one group (often the writer's own group) as the standard against which others are judged, for example, citizens of the United States. In some contexts, the term *culturally deprived* may imply that one culture is the universally accepted standard. The unparallel nouns in the phrase *man and wife* may inappropriately prompt the reader to evaluate the roles of the individuals (i.e., the woman is defined only in terms of her relationship to the man) and the motives of the author. By contrast, the phrases *husband and wife* and *man and woman* are parallel. Usage of *normal* may prompt the reader to make the comparison with *abnormal,* thus stigmatizing individuals with differences. For example, contrasting lesbians with "the general public" or with "normal women" portrays lesbians as marginal to society. More appropriate comparison groups might be *heterosexual women, heterosexual women and men,* or *gay men.*

Also be aware of how order of presentation of social groups can imply that the first-mentioned group is the norm or standard and that later mentioned groups are

deviant. Thus the phrases *men and women* and *White Americans and racial minorities* subtly reflect the perceived dominance of men and Whites over other groups. Similarly, when presenting group data, consider how placing socially dominant groups such as men and Whites on the left side of graphs and/or top of tables may also imply that these groups are the universal standard (Hegarty & Buechel, 2006). Avoid a consistent pattern of presenting information about socially dominant groups first.

### Guideline 3: Acknowledge Participation

Write about the people in your study in a way that acknowledges their participation but is also consistent with the traditions of the field in which you are working. Thus, although descriptive terms such as *college students, children,* or *respondents* provide precise information about the individuals taking part in a research project, the more general terms *participants* and *subjects* are also in common usage. Indeed, for more than 100 years the term *subjects* has been used within experimental psychology as a general starting point for describing a sample, and its use is appropriate. *Subjects* and *sample* are customary when discussing certain established statistical terms (e.g., *within-subject* and *between-subjects* design). Further, the passive voice suggests individuals are *acted on* instead of being actors ("the students *completed* the survey" is preferable to "the students *were given* the survey" or "the survey was *administered* to the students"). "The subjects *completed* the trial" or "we *collected* data from the participants" is preferable to "the participants *were run.*" Consider avoiding terms such as *patient management* and *patient placement* when appropriate. In most cases, it is the treatment, not patients, that is managed; some alternatives are *coordination of care, supportive services,* and *assistance.* Also avoid the term *failed,* as in "eight participants failed to complete the Rorschach and the MMPI," because it can imply a personal shortcoming instead of a research result; *did not* is a more neutral choice (Knatterud, 1991).

As you read the rest of this chapter, consult www.apastyle.org for specific examples of problematic and preferred language in the Guidelines for Unbiased Language as well as further resources and information about nondiscriminatory language.

## Reducing Bias by Topic

### 3.12 Gender

Remember that *gender* refers to role, not biological sex, and is cultural. Avoid ambiguity in sex identity or gender role by choosing nouns, pronouns, and adjectives that specifically describe your participants. Sexist bias can occur when pronouns are used carelessly, as when the masculine pronoun *he* is used to refer to both sexes or when the masculine or feminine pronoun is used exclusively to define roles by sex (e.g., "the nurse . . . *she*"). The use of *man* as a generic noun or as an ending for an occupational title (e.g., *policeman* instead of *police officer*) can be ambiguous and may imply incorrectly that all persons in the group are male. Be clear about whether you mean one sex or both sexes.

There are many alternatives to the generic *he* (see the Guidelines for Unbiased Language at www.apastyle.org), including rephrasing (e.g., from "When an individual conducts this kind of self-appraisal, *he* is a much stronger person" to "When an individ-

ual conducts this kind of self-appraisal, that person is much stronger" or "This kind of self-appraisal makes an individual much stronger"), using plural nouns or plural pronouns (e.g., from "A therapist who is too much like his client can lose *his* objectivity" to "Therapists who are too much like their clients can lose *their* objectivity"), replacing the pronoun with an article (e.g., from "A researcher must apply for *his* grant by September 1" to "A researcher must apply for *the* grant by September 1"), and dropping the pronoun (e.g., from "The researcher must avoid letting *his* own biases and expectations influence the interpretation of the results" to "The researcher must avoid letting biases and expectations influence the interpretation of the results"). Replacing *he* with *he or she* or *she or he* should be done sparingly because the repetition can become tiresome. Combination forms such as *he/she* or *(s)he* are awkward and distracting. Alternating between *he* and *she* also may be distracting and is not ideal; doing so implies that he or she can in fact be generic, which is not the case. Use of either pronoun unavoidably suggests that specific gender to the reader. Avoid referring to one sex as the *opposite sex:* an appropriate wording is the *other sex*. The term *opposite sex* implies strong differences between the two sexes; however, in fact, there are more similarities than differences between the two sexes (e.g., Hyde, 2005).

The adjective *transgender* refers to persons whose gender identity or gender expression differs from their sex at birth; *transgender* should not be used as a noun (National Lesbian & Gay Journalists Association, 2005). The word *transsexual* refers to transgender persons who live or desire to live full time as members of the sex other than their sex at birth, many of whom wish to make their bodies as congruent as possible with their preferred sex through surgery and hormonal treatment (American Psychiatric Association, 2000; Meyer et al., 2001). *Transsexual* can be used as a noun or as an adjective. The terms *female-to-male transgender person, male-to-female transgender person, female-to-male transsexual,* and *male-to-female transsexual* represent accepted usage (Gay & Lesbian Alliance Against Defamation, 2007). Transsexuals undergo *sex reassignment,* a term that is preferable to *sex change. Cross-dresser* is preferable to *transvestite.*

Refer to a transgender person using words (proper nouns, pronouns, etc.) appropriate to the person's gender identity or gender expression, regardless of birth sex. For example, use the pronouns *he, him,* or *his* in reference to a female-to-male transgender person. If gender identity or gender expression is ambiguous or variable, it may be best to avoid pronouns, as discussed earlier in this section (for more detailed information, see www.apastyle.org).

## 3.13 Sexual Orientation

*Sexual orientation* refers to an enduring pattern of attraction, behavior, emotion, identity, and social contacts. The term *sexual orientation* should be used rather than *sexual preference.* For a person having a bisexual orientation, the orientation is not chosen even though the sex of the partner may be a choice. For more information, see *Guidelines for Psychotherapy With Lesbian, Gay, and Bisexual Clients* (APA Committee on Lesbian, Gay, and Bisexual Concerns Joint Task Force on Guidelines for Psychotherapy With Lesbian, Gay, and Bisexual Clients, 2000; see also www.apastyle.org).

The terms *lesbians, gay men, bisexual men,* and *bisexual women* are preferable to *homosexual* when one is referring to people who identify this way. *Lesbian, gay,* and *bisexual* refer primarily to identities and to the culture and communities that have developed among people who share those identities. As such, the terms *lesbians, gay men,*

and *bisexual individuals* are more accurate than *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. *Gay* can be interpreted broadly, to include men and women, or more narrowly, to include only men.

## 3.14 Racial and Ethnic Identity

Preferences for terms referring to racial and ethnic groups change often. One reason for this is simply personal preference; preferred designations are as varied as the people they name. Another reason is that over time, designations can become dated and sometimes negative. Authors are reminded of the two basic guidelines of specificity and sensitivity. In keeping with Guideline 2, use commonly accepted designations (e.g., Census categories) while being sensitive to participants' preferred designation. For example, some North American people of African ancestry prefer *Black* and others prefer *African American;* both terms currently are acceptable. On the other hand, *Negro* and *Afro-American* have become dated; therefore, usage of these terms generally is inappropriate. In keeping with Guideline 1, precision is important in the description of your sample (see section 2.06); in general, use the more specific rather than the less specific term.

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 serve to perpetuate stereotypes. Authors sometimes use the word *minority* as a proxy for non-White racial and ethnic groups. This usage may be viewed pejoratively because *minority* is usually equated with being less than, oppressed, and deficient in comparison with the majority (i.e., Whites). Use a modifier (such as *ethnic* or *racial*) when using the word *minority.* When possible, use the actual name of the group or groups to which you are referring.

Racial and ethnic groups are designated by proper nouns and are capitalized. Therefore, use *Black* and *White* instead of *black* and *white* (the use of colors to refer to other human groups currently is considered pejorative and should not be used). Unparallel designations (e.g., *African Americans* and *Whites; Asian Americans* and *Black Americans*) should be avoided because one group is described by color while the other group is described by cultural heritage. For modifiers, do not use hyphens in multiword names, even if the names act as unit modifiers (e.g., *Asian American* participants).

Designations for some ethnic groups are described next. These groups frequently are included in studies published in APA journals. These examples are far from exhaustive but illustrate some of the complexities of naming (see the Guidelines for Unbiased Language at www.apastyle.org). Depending on where a person is from, individuals may prefer to be called *Hispanic, Latino, Chicano,* or some other designation; *Hispanic* is not necessarily an all-encompassing term, and authors should consult with their participants. In general, naming a nation or region of origin is helpful (e.g., *Cuban, Salvadoran,* or *Guatemalan* is more specific than *Central American* or *Hispanic*).

*American Indian, Native American,* and *Native North American* are all accepted terms for referring to indigenous peoples of North America. When referring to groups including Hawaiians and Samoans, you may use the broader designation *Native Americans.* The indigenous peoples of Canada may be referred to as *First Nations* or *Inuit* people. There are close to 450 Native North American groups, and authors are encouraged to name the participants' specific groups, recognizing that some groups prefer the name for their group in their native language (e.g., *Dine* instead of *Navajo, Tohono O'odham* instead of *Papago*).

The term *Asian* or *Asian American* is preferred to the older term *Oriental.* It is generally useful to specify the name of the Asian subgroup: Chinese, Vietnamese, Korean, Pakistani, and so on. People of Middle Eastern descent may also be identified by nation of origin: Iraqi, Lebanese, and so forth.

## 3.15 Disabilities

The overall principle for "nonhandicapping" language is to maintain the integrity (worth) of all individuals as human beings. Avoid language that objectifies a person by her or his condition (e.g., *autistic, neurotic*), that uses pictorial metaphors (e.g., *wheelchair bound* or *confined to a wheelchair*), that uses excessive and negative labels (e.g., *AIDS victim, brain damaged*), or that can be regarded as a slur (e.g., *cripple, invalid*). Use people-first language, and do not focus on the individual's disabling or chronic condition (e.g., *person with paraplegia, youth with autism*). Also use people-first language to describe groups of people with disabilities. For instance, say *people with intellectual disabilities* in contrast to *the retarded* (University of Kansas, Research and Training Center on Independent Living, 2008).

Avoid euphemisms that are condescending when describing individuals with disabilities (e.g., *special, physically challenged, handi-capable*). Some people with disabilities consider these terms patronizing and offensive. When writing about populations with disabilities or participants, emphasize both capabilities and concerns to avoid reducing them to a "bundle of deficiencies" (Rappaport, 1977). Do not refer to individuals with disabilities as *patients* or *cases* unless the context is within a hospital or clinical setting.

## 3.16 Age

Age should be reported as part of the description of participants in the Method section. Be specific in providing age ranges; avoid open-ended definitions such as "under 18 years" or "over 65 years." *Girl* and *boy* are correct terms for referring to individuals under the age of 12 years. *Young man* and *young woman* and *female adolescent* and *male adolescent* may be used for individuals aged 13 to 17 years. For persons 18 years and older, use *women* and *men.* The terms *elderly* and *senior* are not acceptable as nouns; some may consider their use as adjectives pejorative. Generational descriptors such as *boomer* or *baby boomer* should not be used unless they are related to a study on this topic. The term *older adults* is preferred. Age groups may also be described with adjectives. Gerontologists may prefer to use combination terms for older age groups (*young-old, old-old, very old, oldest old,* and *centenarians*); provide the specific ages of these groups and use them only as adjectives. Use *dementia* instead of *senility;* specify the type of dementia when known (e.g., *dementia of the Alzheimer's type*). For more references relating to age, see *Guidelines for the Evaluation of Dementia and Age-Related Cognitive Decline* (APA Presidential Task Force on the Assessment of Age-Consistent Memory Decline and Dementia, 1998) and "Guidelines for Psychological Practice With Older Adults" (APA, 2004; see also www.apastyle.org).

## 3.17 Historical and Interpretive Inaccuracies

Authors are encouraged to avoid perpetuating demeaning attitudes and biased assumptions about people in their writing. At the same time, authors need to avoid historical

and interpretive inaccuracies. Historians and scholars writing literature reviews must be careful not to misrepresent ideas of the past in an effort to avoid language bias. Changes in nouns and pronouns may result in serious misrepresentation of the original author's ideas and give a false interpretation of that author's beliefs and intentions. In such writing, it is best to retain the original language and to comment on it in the discussion. Quotations should not be changed to accommodate current sensibilities (see sections 4.08 and 6.06).

Contemporary authors may indicate a historical author's original term by following it with an asterisk the first time it appears and by providing historical context directly following the quotation. Below is an example of historically appropriate use of a term that is considered biased by today's standards.

> In forming the elite scientific society called the Experimentalists, Titchener "wanted above all to have free, informal interchange between older and younger men* in the area of experimental psychology, with the goal of socializing the next generation into the profession" (Furumoto, 1988, p. 105).

*In this example, the term *men* seems to convey Titchener's intention to exclude women from the society. Substituting a more gender-neutral or inclusive term may be historically inaccurate.

## Grammar and Usage

Incorrect grammar and careless construction of sentences distract the reader, introduce ambiguity, and generally obstruct communication. The examples in this section represent problems of grammar and usage that occur frequently in manuscripts received by journal editors.

### 3.18 Verbs

Verbs are vigorous, direct communicators. Use the active rather than the passive voice, and select tense or mood carefully.

#### Prefer the active voice.

*Preferred:*

We conducted the survey in a controlled setting.

*Nonpreferred:*

The survey was conducted in a controlled setting.

The passive voice is acceptable in expository writing and when you want to focus on the object or recipient of the action rather than on the actor. For example, "The speakers were attached to either side of the chair" emphasizes the placement of speakers, not who placed them—the more appropriate focus in the Method section. "The President was shot" emphasizes the importance of the person shot.

**Select tense carefully.** Use the past tense to express an action or a condition that occurred at a specific, definite time in the past, as when discussing another researcher's work and when reporting your results.

*Correct:*

Sanchez (2000) presented similar results.

*Incorrect:*

Sanchez (2000) presents similar results.

Use the present perfect tense 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.

*Correct:*

Since that time, several investigators have used this method.

*Incorrect:*

Since that time, several investigators used this method.

**Select the appropriate mood.** Use the subjunctive only to describe conditions that are contrary to fact or improbable; do not use the subjunctive to describe simple conditions or contingencies.

*Correct:*

If the experiment were not designed this way, the results could not be interpreted properly.

*Incorrect:*

If the experiment was not designed this way, the results could not be interpreted properly.

Use *would* with care. *Would* can correctly be used to mean *habitually,* as "The child would walk about the classroom," or to express a conditional action, as "We would sign the letter if we could." Do not use *would* to hedge; for example, change *it would appear that* to *it appears that.*

## 3.19 Agreement of Subject and Verb

A verb must agree in number (i.e., singular or plural) with its subject, regardless of intervening phrases that begin with such words as *together with, including, plus,* and *as well as.*

*Correct:*

The percentage of correct responses as well as the speed of the responses increases with practice.

*Incorrect:*

The percentage of correct responses as well as the speed of the responses increase with practice.

The plural form of some nouns of foreign origin, particularly those that end in the letter *a,* may appear to be singular and can cause authors to select a verb that does not agree in number with the noun.

*Correct:*

The data indicate that Terrence was correct.

*Incorrect:*

The data indicates that Terrence was correct.

*Correct:*

The phenomena occur every 100 years.

*Incorrect:*

The phenomena occurs every 100 years.

Consult a dictionary (APA prefers *Merriam-Webster's Collegiate Dictionary,* 2005) when in doubt about the plural form of nouns of foreign origin. For examples of agreement of subject and verb with collective nouns, see the APA Style website (www.apastyle.org).

## 3.20 Pronouns

Pronouns replace nouns. Each pronoun should refer clearly to its antecedent and should agree with the antecedent in number and gender.

A pronoun must agree in number (i.e., singular or plural) with the noun it replaces.

*Correct:*

Neither the highest scorer nor the lowest scorer in the group had any doubt about his or her competence.

*Incorrect:*

Neither the highest scorer nor the lowest scorer in the group had any doubt about their competence.

A pronoun must agree in gender (i.e., masculine, feminine, or neuter) with the noun it replaces. This rule extends to relative pronouns (pronouns that link subordinate clauses to nouns). Use *who* for human beings; use *that* or *which* for nonhuman animals and for things.

*Correct:*

The students who completed the task successfully were rewarded.

*Correct:*

The instructions that were included in the experiment were complex.

*Incorrect:*

The students that completed the task successfully were rewarded.

Use neuter pronouns to refer to animals (e.g., "the dog . . . it") unless the animals have been named:

The chimps were tested daily. . . . Sheba was tested unrestrained in an open testing area, which was her usual context for training and testing.

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 relative 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* or *she, who* is correct; if you can substitute *him* or *her, whom* is correct.

*Correct:*

Name the participant who you found achieved scores above the median. [You found *he* or *she* achieved scores above the median.]

*Incorrect:*

Name the participant whom you found achieved scores above the median. [You found *him* or *her* achieved scores above the median.]

*Correct:*

The participant whom I identified as the youngest dropped out. [I identified *him* or *her* as the youngest.]

*Incorrect:*

The participant who I identified as the youngest dropped out. [I identified *he* or *she* as the youngest.]

In a phrase consisting of a pronoun or noun plus a present participle (e.g., *running, flying*) that is used as an object of a preposition, the participle can be either a noun or a modifier of a noun, depending on the intended meaning. When you use a participle as a noun, make the other pronoun or noun possessive.

*Correct:*

We had nothing to do with their being the winners.

*Incorrect:*

We had nothing to do with them being the winners.

*Correct:*

The result is questionable because of one participant's performing at very high speed. [The result is questionable because of the performance, not because of the participant.]

*Incorrect:*

The result is questionable because of one participant performing at very high speed.

## 3.21 Misplaced and Dangling Modifiers and Use of Adverbs

An adjective or an adverb, whether a single word or a phrase, must clearly refer to the word it modifies.

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

*Correct:*

Using this procedure, the investigator tested the participants.

*Correct:*

The investigator tested the participants who were using the procedure.

*Incorrect:*

The investigator tested the participants using this procedure. [The sentence is unclear about whether the investigator or the participants used this procedure.]

*Correct:*

On the basis of this assumption, we developed a model. . . .

*Correct:*

Based on this assumption, the model. . . .

*Incorrect:*

Based on this assumption, we developed a model. . . . [This construction says, "we are based on an assumption."]

Many writers have trouble with the word *only.* Place *only* next to the word or phrase it modifies.

*Correct:*

These data provide only a partial answer.

*Incorrect:*

These data only provide a partial answer.

**Dangling modifiers.** Dangling modifiers have no referent in the sentence. Many of these result from the use of the passive voice. By writing in the active voice, you can avoid many dangling modifiers.

*Correct:*

Using this procedure, I tested the participants. [I, not the participants, used the procedure.]

*Incorrect:*

The participants were tested using this procedure.

*Correct:*

Mulholland and Williams (2000) found that this group performed better, a result that is congruent with those of other studies. [The result, not Mulholland and Williams, is congruent.]

*Incorrect:*

Congruent with other studies, Mulholland and Williams (2000) found that this group performed better.

**Adverbs.** Adverbs can be used as introductory or transitional words. Adverbs modify verbs, adjectives, and other adverbs and express manner or quality. Some adverbs, however—such as *fortunately, similarly, certainly, consequently, conversely,* and *regrettably*—can also be used as introductory or transitional words as long as the sense is confined to, for example, "it is fortunate that" or "in a similar manner." Use adverbs judiciously as introductory or transitional words. Ask yourself whether the introduction or transition is needed and whether the adverb is being used correctly.

Some of the more common introductory adverbial phrases are *importantly, more importantly, interestingly,* and *firstly.* Although *importantly* is used widely, whether its adverbial usage is proper is debatable. Both *importantly* and *interestingly* can often be recast to enhance the message of a sentence or simply be omitted without a loss of meaning.

*Correct:*

More important, the total amount of available long-term memory activation, and not the rate of spreading activation, drives the rate and probability of retrieval.

*Correct:*

Expressive behavior and autonomic nervous system activity also have figured importantly. . .

*Incorrect:*

More importantly, the total amount of available long-term memory activation, and not the rate of spreading activation, drives the rate and probability of retrieval.

*Correct:*

We were surprised to learn that the total. . . .

We find it interesting that the total. . . .

An interesting finding was that. . . .

*Incorrect:*

Interestingly, the total amount of available long-term memory activation, and not the rate of spreading activation, drives the rate and probability of retrieval.

*Correct:*

First, we hypothesized that the quality of the therapeutic alliance would be rated higher. . . .

*Incorrect:*

> Firstly, we hypothesized that the quality of the therapeutic alliance would be rated higher. . . .

Another adverb often misused as an introductory or transitional word is *hopefully*. *Hopefully* means "in a hopeful manner" or "full of hope"; *hopefully* should not be used to mean "I hope" or "it is hoped."

*Correct:*

> I hope this is not the case.

*Incorrect:*

> Hopefully, this is not the case.

## 3.22 Relative Pronouns and Subordinate Conjunctions

Relative pronouns (*who, whom, that, which*) and subordinate conjunctions (e.g., *since, while, although*) introduce an element that is subordinate to the main clause of the sentence and reflect the relationship of the subordinate element to the main clause. Therefore, select these pronouns and conjunctions with care; interchanging them may reduce the precision of your meaning.

### Relative pronouns.

**That *versus* which.** *That* clauses (called *restrictive*) are essential to the meaning of the sentence:

> The materials that worked well in the first experiment were used in the second experiment.

*Which* clauses can merely add further information (nonrestrictive) or can be essential to the meaning (restrictive) of the sentence. APA prefers to reserve *which* for nonrestrictive clauses and use *that* in restrictive clauses.

*Restrictive:*

> The cards that worked well in the first experiment were not useful in the second experiment. [Only those cards that worked well in the first experiment were not useful in the second; prefer *that*.]

*Nonrestrictive:*

> The cards, which worked well in the first experiment, were not useful in the second experiment. [The second experiment was not appropriate for the cards.]

Consistent use of *that* for restrictive clauses and *which* for nonrestrictive clauses, which are set off with commas, will help make your writing clear and precise.

### Subordinate conjunctions.

**While *and* since.** Some style authorities accept the use of *while* and *since* when they do not refer strictly to time; however, words like these, with more than one meaning, can cause confusion. Because precision and clarity are the standards in scientific writ-

ing, restricting your use of *while* and *since* to their temporal meanings is helpful. The following examples illustrate the temporal meanings of these terms:

Bragg (1965) found that participants performed well while listening to music.

Several versions of the test have been developed since the test was first introduced.

**While *versus* although, and, or but.** Use *while* to link events occurring simultaneously; otherwise, use *although, and,* or *but* in place of *while.*

*Precise:*

Although these findings are unusual, they are not unique.

*Imprecise:*

While these findings are unusual, they are not unique.

*Precise:*

The argument is purely philosophical, but the conclusion can also yield an empirical hypothesis, amenable to empirical investigation.

*Imprecise:*

While the argument is purely philosophical, the conclusion can also yield an empirical hypothesis, amenable to empirical investigation.

**Since *versus* because.** *Since* is more precise when it is used to refer only to time (to mean "after that"); otherwise, replace it with *because.*

*Precise:*

Data for two participants were incomplete because these participants did not report for follow-up testing.

*Imprecise:*

Data for two participants were incomplete since these participants did not report for follow-up testing.

## 3.23 Parallel Construction

To enhance the reader's understanding, present parallel ideas in parallel or coordinate form. Make certain that all elements of the parallelism are present before and after the coordinating conjunction (i.e., *and, but, or, nor*).

*Correct:*

The results show that such changes could be made without affecting error rate and that latencies continued to decrease over time.

*Incorrect:*

The results show that such changes could be made without affecting error rate and latencies continued to decrease over time.

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.

### ***Between* and *and.***

*Correct:*

We recorded the difference between the performance of subjects who completed the first task and the performance of those who completed the second task. [The difference is between the subjects' performances, not between the performance and the task.]

*Incorrect:*

We recorded the difference between the performance of subjects who completed the first task and the second task.

*Correct:*

between 2.5 and 4.0 years of age

*Incorrect:*

between 2.5–4.0 years of age

### ***Both* and *and.***

*Correct:*

The names were difficult both to pronounce and to spell.

*Incorrect:*

The names were both difficult to pronounce and spell.

Never use *both* with *as well as*: The resulting construction is redundant.

*Correct:*

The names were difficult to pronounce as well as to spell.

*Incorrect:*

The names were difficult both to pronounce as well as to spell.

### ***Neither* and *nor; either* and *or.***

*Correct:*

Neither the responses to the auditory stimuli nor the responses to the tactile stimuli were repeated.

*Incorrect:*

Neither the responses to the auditory stimuli nor to the tactile stimuli were repeated.

*Correct:*

The respondents either gave the worst answer or gave the best answer.

*or*

The respondents gave either the worst answer or the best answer.

*Incorrect:*

The respondents either gave the worst answer or the best answer.

***Not only* and *but also.***

*Correct:*

It is surprising not only that pencil-and-paper scores predicted this result but also that all other predictors were less accurate.

*Incorrect:*

It is not only surprising that pencil-and-paper scores predicted this result but also that all other predictors were less accurate.

Elements in a series should also be parallel in form.

*Correct:*

The participants were told to make themselves comfortable, to read the instructions, and to ask about anything they did not understand.

*Incorrect:*

The participants were told to make themselves comfortable, to read the instructions, and that they should ask about anything they did not understand.

Take care to use parallel structure in lists and in table stubs (see sections 3.04 and 5.13).

# 4

# The Mechanics of Style

When editors refer to *style,* they mean the rules or guidelines a publisher observes to ensure clear, consistent presentation in scholarly articles. Authors writing for a publication must follow the style rules established by the publisher to avoid inconsistencies among journal articles or book chapters. For example, without rules of style, three different manuscripts might use *sub-test, subtest,* and *Subtest* in one issue of a journal or in one book. Although the meaning of the word is the same and the choice of one style over the other may seem arbitrary (in this case, *subtest* is APA Style), such variations in style may distract or confuse the reader.

This chapter describes the style for APA journals regarding the most basic tools for conveying meaning—punctuation, spelling, capitalization, italics, abbreviations, numbers, metrication, and statistics. It omits general rules explained in widely available style manuals and examples of usage with little relevance to APA journals. Style manuals agree more often than they disagree; where they disagree, the *Publication Manual* takes precedence for APA publications.

## Punctuation

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

### 4.01 Spacing After Punctuation Marks

Insert one space after

- commas, colons, and semicolons;
- periods that separate parts of a reference citation; and