Writing and Assembling an APA-Format Research Report

CHAPTER 14

What Is APA Format?

Sections of the APA-Format Paper

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- Results • Discussion • References • Appendix
- Author Note • Headings

Writing in APA Style

- General Guidelines • Grammatical Guidelines

APA Editorial Style

Preparing Your Manuscript

Student Views of Professional Activities

The final step in the scientific process is communicating your results to other people who are interested in your research topic. As you have seen in numerous police shows, detectives also have to spend time writing their reports. Their purpose is no different from ours—communicating what has happened to a particular audience. Sherlock Holmes knew the importance of communicating clearly when he said to Watson, "Never trust to general impressions, my boy, but concentrate yourself upon details" (Doyle, 1927, p. 197). We have hinted at writing and organizing various parts of a manuscript in American Psychological Association (APA) format throughout several chapters of this book. In this chapter we will cover all the aspects of writing a research report in APA format. We will use a student research project as our example, tracing it from the research stage through manuscript preparation, to publication. In this chapter we will introduce Allison Dickson, Traci Giuliano, James Morris, and Keri Cass's (2001) research project concerning the effects of race of performer and type of music on ratings of a musical performer. Dickson, Morris, and Cass were students at Southwestern University in Georgetown, Texas, and Giuliano was their supervising professor. We include this research as an example not to intimidate you, but to show you what is possible at the undergraduate level.

What Is APA Format?

Although several styles exist for the preparation of reports in various academic disciplines, psychologists developed their own format to meet their specific needs. Because the American Psychological Association originally developed this style, it is often referred to as **APA format**. In Chapter 1 we saw that in the 1920s University of Wisconsin psychologist Joseph Jastrow found a need to bring uniformity to the publication of research articles in our field. The lack of a set model or pattern had resulted in published research reports that were nearly impossible to compare. In addition to the fact that there was no prescribed order for the presentation of information, there was no consistent manner for describing one's methodology, procedure, or data analysis. In short, the order

APA format Accepted American Psychological Association form for preparing reports describing psychological research.

and manner of presentation varied from one article to the next. The APA format for preparing papers was developed to bring order to this state of chaos.

The particular form for preparing APA format papers discussed here is found in the fifth edition of the *Publication Manual of the American Psychological Association* (American Psychological Association, 2001). The APA *Publication Manual* (*PM*) has changed and evolved since it was first published in 1952. Many of the changes that have occurred over the years, as well as much of the actual format itself, were implemented to assist printers—after all, APA format was adopted to help make the publication of journal articles more uniform. Although many earlier APA-format matters had the printer in mind, the latest edition of the APA *PM* clearly shows the influence and importance of the computer. For example, the earlier requirement of large 1 1/2-inch margins has been replaced by more computer-friendly 1-inch margins. Likewise, the reference section has reverted back to hanging indentations (the first line begins at the margin and subsequent lines are indented) from the third edition because computers and word processing programs can easily deal with hanging indents. In addition to being computer friendly, the general layout and design of the APA-format paper are reader friendly. For example, using separate, specifically designated sections allows the reader to know exactly which part of the project is being discussed. Authors use **headings** to divide the APA-format paper into sections to help the reader understand the paper's organization.

Headings Titles for various sections of a psychology paper that are designed to help the reader understand the outline and importance of the parts of the paper.

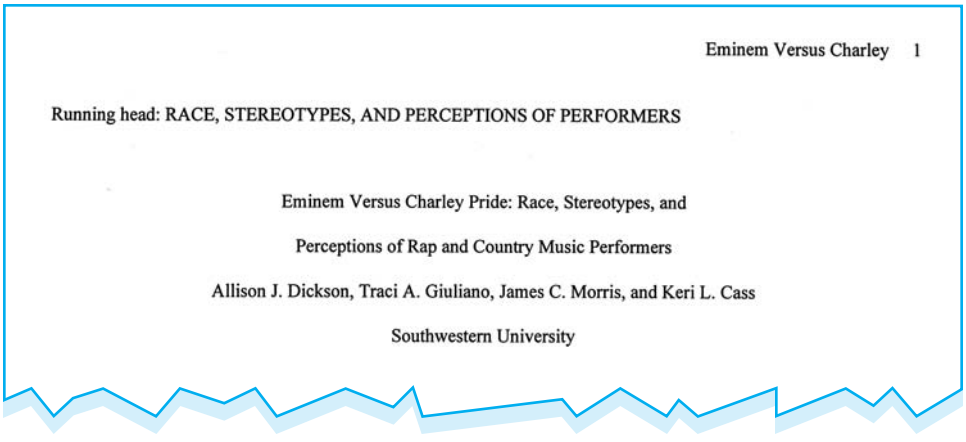
Before we get started, we have to make an important point: This chapter is not meant to substitute for the *PM* (APA, 2001). There is simply no way for us to condense a 439-page book into a single chapter for this text. You should buy a *PM* and think of it as an investment in your future. As well as using it in this class, you will use it when you write term papers in other psychology classes and for any other writing you will do if you go to graduate school in psychology. In addition, other academic disciplines are beginning to adopt APA style for their writing assignments. One of your authors has had colleagues in education, political science, and communication disorders borrow his *PM* for pointers on formatting and style.

Sections of the APA-Format Paper

The major components of an APA-format paper are, in order:

1. Title page
2. Abstract
3. Introduction
4. Method section
5. Results section
6. Discussion section
7. References
8. Appendixes (if any)
9. Author note
10. Tables (if any)
11. Figures (if any)

As we look at the various sections of the APA-format paper, we will refer to the Dickson, Giuliano, Morris, and Cass manuscript as an example (Figures 14-1 through 14-16; *M* indicates manuscript, and the number after *M* represents page order). In addition, you can refer to the published article (Dickson, Giuliano, Morris, & Cass, 2001) displayed in Figures 14-17 through 14-21 (*JA* indicates journal article) to see how a manuscript is reformatted as a journal article. (After our initial citation, the correct format for citing this manuscript is Dickson et al., 2001; we will refer to it using only Dickson's name in order to conserve space.)


Eminem Versus Charley 1

Running head: RACE, STEREOTYPES, AND PERCEPTIONS OF PERFORMERS

Eminem Versus Charley Pride: Race, Stereotypes, and

Perceptions of Rap and Country Music Performers

Allison J. Dickson, Traci A. Giuliano, James C. Morris, and Keri L. Cass

Southwestern University

FIGURE 14-1 (M1). Title page.

Title Page

The title page of Dickson's manuscript appears in Figure 14-1. The *PM* contains information about the **title page** on pages 10–12 and 296–298. The important features are the manuscript page header, page number, running head, author(s), and affiliation(s). The **manuscript page header**, which consists of the first two or three words of the title, is used to identify the pages of a particular manuscript should they become separated. It appears in the upper right-hand portion of each page two lines above the 1-inch margin. The page header appears either five spaces to the left of the page number or two lines above the page number. Neither the page number nor the page header should extend beyond the margin on the right side of the page. The manuscript page header and page number appear on *all* pages of the paper, *except* the figures.

Title page The first page of an APA-format paper. It includes the manuscript page header, the running head, the manuscript's title, and the name(s) of the author(s) and their affiliation(s).

Manuscript page header The first two or three words of the report's title. Appears with the page number on each page of the research report.

Two lines below the manuscript page header, flush against the left margin, we find the **running head**. The running head, which is a condensed title, will be printed at the top of alternate pages when your paper is published in a journal. When you type the running head on the title page, it appears in all-capital letters. Also, note that the *h* in running head is not capitalized. The running head "should be a maximum of 50 characters, including letters, punctuation, and spaces between words" (APA, 2001, p. 12). As you can see in Figure 14-1, Dickson used different phrases for the manuscript page header and the running head. Although the same phrase might be a logical choice for both elements, APA style does not specify that they must be identical. The manuscript page header may not make sense, but the running head should communicate information about the contents of your manuscript because it would be printed in a published article (see Figure 14-18, p. 366).

Running head A condensed title that is printed at the top of alternate pages of a published article.

The title of the paper, which is centered, may begin six or eight lines below the page number. Capitalize the first word and all major words (4 or more letters, according to the *PM*) of the

title. Your title should summarize clearly and simply the nature of the research you are reporting, but it should not be overly long. APA's recommended length for the title is from 10 to 12 words. If your title is too long to fit on one line, you can type it on two lines. You should be especially careful when you choose a title for your paper. Although it is often tempting to compose a title that is cute or catchy, such titles are often failures at communicating anything about the article's content. Keep in mind that many people will read your title and will use it to decide whether to read the entire paper. Dickson's title is slightly longer than the APA's guideline; the subtitle fully communicates that the paper deals with the variables of race, stereotypes, and perceptions of musical performers. The title is slightly longer than the recommended length because of the four-word "main" title—although it does not communicate much about the content of the article, it is certainly attention getting. Your instructor (or journal editor) may give you some leeway with the 10- to 12-word recommendation, as in this case.

The name of the author is double-spaced below the title. The author's institutional affiliation is double-spaced below the author's name. If there is more than one author, the authors' names appear in order of importance of their contributions to the research project. If authors are from the same institution, all the names are on one line, if they will fit. Dickson's final manuscript included an additional author. The class project was a group effort conducted by Dickson, Morris, and Cass for their research methods course, so they were the original authors. Giuliano was the professor of the class and helped them develop their ideas, supervised the research project, assisted in the statistical analysis and interpretation, and participated with Dickson in cowriting the manuscript for submission after the class was finished. Morris and Cass did not participate in rewriting the manuscript after the class. Thus, although the research originated as a student group project, by the time it was published, it had become a team effort among three students and a faculty member. Sometimes it is difficult to decide whether an individual merits being listed as an author on a publication. According to the *PM*, "Authorship encompasses not only those who do the actual writing but also those who have made substantial scientific contributions to a study" (p. 6). This guideline is somewhat vague and results in people having to make judgment calls about authorship.

Abstract

Level 1 heading A centered section title in which the first letters of major words are capitalized. Occupies a line by itself.

Figure 14-2 shows the abstract page. Note, once again, the placement of the manuscript page header and page number. The word "Abstract" is centered and appears two lines below the page number. A centered section title in which the first letters of major words are capitalized is designated as a **Level 1 heading**. Remember that headings demarcate sections of the APA-format paper. (Full information explaining different levels of headings appears on pp. 289–290 in the *PM* and on pp. 363–364 in this book.)

Imagine that you have just picked up a journal issue and are skimming through it to see whether you might be interested in reading any of the articles. What feature of an article will you use as a guide in deciding whether to read it? What information would you use in making this decision?

Eminem Versus Charley 2

Abstract

The present study explored the effects of stereotype deviation in the music industry on people's perceptions of performers. One hundred college students (48 men, 52 women) examined a profile of a fictitious performer containing a picture, a brief biography, and a lyric sample. As part of a 2-way between-subjects design, participants made judgments about either a Black or a White musician who performed either rap or country music. The results showed that a Black rap performer was rated more favorably than a Black country performer, and a White country performer was rated more favorably than a White rap performer. Consistent with predictions, people who violate societal expectations are judged more harshly than are people who conform to societal expectations, particularly in cases involving strong preexisting racial stereotypes.

FIGURE 14-2 (M2). Abstract.

Of course, the title of this section answers the first question; you will use the abstract as a guide to determine whether you want to read the complete article. The **abstract** of an experimental report consists of a brief (up to 120 words), one-paragraph description of the research presented in your paper. In order to help you make an educated decision about pursuing an article in depth, the paragraph comprising the abstract should include a description of the intent and conduct (including participants and method) of your project, the results you obtained, and the project's implications or applications. Note that the abstract is typed in block form; there is no indentation on the first line.

Abstract A brief description of the research that is presented in an APA-format paper.

The *PM* states that an abstract for an experimental study should contain information about the problem, participants, experimental method, findings, and conclusions.

Can you find information about each of the five topics (problem, participants, method, findings, conclusion) in the abstract shown in Figure 14-2?

Here's where we found the relevant information:

Problem: lines 1–2
Participants: line 2
Experimental method: lines 2–5
Findings: lines 5–6
Conclusions: lines 6–8

Did you find all the necessary information? Writing a good abstract is challenging because of the large amount of information that must be covered in little space. You can find more information about abstracts on pages 12–15 and 298 of the *PM*.

Introduction

Introduction The first major section of the APA-format paper. Contains the thesis statement, review of relevant literature, and experimental hypothesis.

Your **introduction** section begins on page 3 of your report. Notice that the word *Introduction* does not appear as the Level 1 heading that begins this section. Rather, you repeat the title from page 1. Be sure that the title is *exactly* the same in both places. Figure 14-3 shows the first page of Dickson's introduction section (Figure 14-4 on page 340 shows the second page of the introduction); the concluding page of the introduction section appears in Figure 14-5 on page 341.

We like to use the analogy of a funnel to describe a good introduction section. Like the introduction, a funnel starts off broad, then narrows to a specific focus. At the end the focus is very specific, and in the case of the introduction section it leads to a logical experimental question: your experiment. In Dickson's example, the first paragraph is broad, establishing the race and genre of musicians as the variables of interest. The second and third paragraphs provide basic background information about racial stereotypes. The fourth and fifth paragraphs begin to narrow the funnel. Here, you read about some specific effects of stereotypes and race associated with music, as well as the effects of stereotype inconsistencies. Finally, the last paragraph lays out the specific experimental hypothesis of this research.

Can you identify the thesis statement in Dickson's introduction?

Thesis statement A statement of the general research topic of interest and the perceived relation of the relevant variables in that area.

The first sentence on page 5 (Figure 14-5) forms the thesis statement for the student manuscript. The **thesis statement** should indicate the general topic in which you are interested and your general view of the relation of the relevant variables in that area. Beginning with "we expected that," you see the specific predictions made for the performance of participants rating musical artists under stereotype-consistent conditions compared to stereotype-inconsistent conditions. Some writers prefer to present the thesis statement in the opening paragraph of the introduction. The exact location is not important as long as you include your thesis statement somewhere in the introduction. The *PM* provides more information concerning introductions on pp. 15–17.

Other than presenting the thesis statement, the introduction reports the results of previous research that support or refute your thesis statement. This material represents the outcome of your literature review. Give careful thought to its presentation; good organization and a logical flow of ideas are important ingredients. The introduction is similar to telling a story to someone who may not be familiar with what you are talking about; you must be clear and not make unwarranted assumptions. First, you establish the big picture. Then, you begin

Eminem Versus Charley Pride: Race, Stereotypes, and

Perceptions of Rap and Country Music Performers

What do Eminem and Charley Pride have in common? Perhaps the connection these two performers share is subtle, but they are in fact quite similar in at least one aspect of their careers. Both Charley Pride, a Black country music performer, and Eminem, a White rap performer, deviate from social expectations that are a part of the music industry. Specifically, these two musicians defy cultural stereotypes by performing types of music that are not typically associated with their race.

Racial stereotypes exist in most individuals, and they can influence subsequent judgments made by a perceiver (Devine, 1989; Dovidio, Evans, & Tyler, 1986; Gaertner & McLaughlin, 1983). For example, Gaertner and McLaughlin (1983) studied the effect of racial stereotypes on perceptions and found that White students responded faster to positive stereotyped words (e.g., *smart*) when the words followed the race *White* rather than *Black*. In addition, Sagar and Schofield (1980) examined the perceptions made by sixth-grade boys about ambiguous behavior. They found that both Black and White boys construed ambiguously aggressive behaviors (such as one child bumping into another) as being more threatening if the actions were performed by a Black boy rather than a White boy. Most people today would not be likely to openly express racist beliefs, but the results of the above studies support the aversive racism perspective, which suggests that subtle and indirect forms of racism persist in society today (Dovidio & Gaertner, 1991; Gaertner & Dovidio, 1986). That is, although current cultural values emphasize fairness and racial equality, White individuals have a historic tradition of having negative beliefs concerning Blacks and other minority groups (Dovidio, Brigham, Johnson, & Gaertner, 1996). Consequently, racial stereotypes continue to exist and to influence interactions among individuals in society, but perhaps in more subtle ways.

Because stereotypes can influence the judgments and behaviors of perceivers, deviations from a stereotype should have similar effects. In general, the expectations of the perceiver and the extent to which these expectations are confirmed or disconfirmed can influence judgments. When behavior only slightly varies from expectations, the difference might not be noticed, but perceivers often magnify the discrepancy when actions differ significantly from expectations. This phenomenon is known as the contrast effect (Brehm, Kassin, & Fein, 1999). In fact, a person who displays behavior inconsistent with societal expectations is often evaluated more extremely than is a person who

FIGURE 14-3 (M3). First page of introduction.

behaves consistently with expectations (Knight, Giuliano, & Sanchez-Ross, 2001). Jackson, Sullivan, and Hodge (1993) examined the effects of describing stereotype-consistent or stereotype-inconsistent behavior of Black out-group targets and White in-group targets on social evaluations made by participants who assessed a college application. They found that people who deviate from a norm are judged more extremely than if they behave as the norm dictates. Specifically, stereotype-inconsistent Black applicants with strong credentials were evaluated more favorably than were strong White applicants, and stereotype-inconsistent White applicants with weak credentials were evaluated less favorably than were weak Black applicants.

Both stereotypes and stereotype-inconsistent behavior affect the evaluations individuals make about other people in a variety of social interactions. Fried (1996, 1999) studied biased reactions involving the music industry and found that individuals had very different reactions to music labeled as *rap* or *country* despite the fact that the song lyrics were exactly the same. In two studies, she found that people generally considered rap music to be more violent and more offensive than country music. Furthermore, a folk song that was presented as being performed by a Black artist was judged more negatively than the very same song when it was presented as being performed by a White artist (Fried, 1996). Fried (1999) attributed her results to stereotypes in that rap is usually associated with Black culture whereas country music is often thought of as being a part of White culture. By priming a Black stereotype with the use of the label *rap*, it is possible that individuals apply negative stereotypes that have been shown to be associated with African Americans (Brigham, 1971). Therefore, racial stereotypes can impact evaluations of music performers (Fried, 1996, 1999).

According to Fiske and Taylor (1991), long-held stereotypes are not easily altered, but modification of stereotypes may begin with a divergence by stereotyped individuals or groups. Previous research has examined the effects of stereotypes and stereotype deviation on people's evaluations of other individuals (Jackson et al., 1993; Knight et al., 2001). The present study attempted to integrate and expand on these concepts in relation to the music industry. Specifically, whereas Fried (1996, 1999) examined the effect of either the race of the performer or the labeled genre of music of a song on evaluations about the music itself, the design of the present experiment explored the interactive effects of the race of the performer and the genre of music on participants' evaluations of the performer. In doing so, we explored the difference between perceptions of persons who adhere to social expectations versus persons who deviate from the stereotype.

FIGURE 14-4 (M4). Second page of introduction.

Consistent with previous research (Jackson et al., 1993; Knight et al., 2001), we expected that participants would judge performers who behave consistently with social norms (i.e., Black rap artists and White country performers) more favorably than performers who deviate from societal expectations (i.e., White rap artists and Black country performers). That is, because country music is associated with White culture, a Black country performer does not exhibit behavior consistent with this stereotype and, as a result, this performer should elicit negative judgments. The same reaction should occur with a White rap artist because his or her behavior is inconsistent with the stereotype that rap is predominantly a part of Black culture.

Method

Participants

Data were collected from 100 undergraduates (48 men, 52 women) at Southwestern University, a small liberal arts college in the Southwest. Demographically, the university is composed primarily of White, middle- to upper middle-class students; as such, the current sample (which was representative of the campus at large) consisted almost exclusively of White students. Participant volunteers ranged in age from 18 to 26 years (M = 19.77 years). Data from four participants were excluded from the analysis because these participants either failed to follow instructions or they did not pass the manipulation check. Specifically, these participants were unable to identify the race of the performer and genre of his music that was presented in the their survey packet.

Design and Procedure

The present study used a 2 (race of performer: Black or White) x 2 (genre of music: rap or country) between-subjects design to explore the effect of the race of a performer and the genre of music on perceptions of the performer. We recruited participants from various locations on campus and asked them to contribute to an investigation exploring "people's perceptions of music." Once they agreed, participants viewed a picture of a male performer, read a brief biography about him, and read a lyric sample of his music. Next, they completed a survey in which they made judgments about the performer and his music, and they responded to filler questions concerning their taste in music in general to corroborate the cover story. Each participant was randomly assigned to one of four experimental conditions and read a profile of either a Black rap artist, a White rap artist, a Black country performer, or a White country performer. Measures of the primary dependent variable (i.e., how favorably participants rated the performers) were embedded among filler questions in the survey. Following completion of the survey and a brief

FIGURE 14-5 (M5). Last page of introduction; first two method subsections.

to fill in the details. Your ultimate goal is to lead the reader to a description of what you plan to do in your experiment. This description usually appears at the end of the introduction section. It is here that you will state your experimental hypothesis.

Citation A notation in text that a particular reference was used. The citation provides the name(s) of the author(s) and date of the work's publication.

Reference A full bibliographic record of any work cited in the text of a psychological paper.

Reference section A complete listing of all the references cited in a psychological paper.

Although we cannot teach you *how* to write in the limited space available, we can give you a few pointers to assist you in preparing your introduction section. Note that every fact-based statement is supported by a **citation** to a **reference**. If you wish to locate one of the references cited, you can find the necessary information in the **reference section** (also known as the *reference list*) at the end of the paper (see Figures 14-14 and 14-15, pp. 358–359). As you can see from Dickson's introduction, when citing references in the text of an APA-format paper, you use the last name of the author(s) and the year of publication. Such citations can take one of two forms. In the first form, the authors are either the subject or the object in a sentence in the text. In such cases, only the date of the publication appears in parentheses. This type of citation takes the following form:

> Jackson, Sullivan, and Hodge (1993) examined the effects . . .

In the second form of citation, you may wish to cite a reference only as support for a statement you have made. In this instance you would include the author(s) *and* the year of publication *inside* the parentheses. This type of citation takes the following form:

> This phenomenon is known as the contrast effect (Brehm, Kassin, & Fein, 1999).

There are two additional considerations for such citations. When there are multiple authors, the name of the last author is preceded by the ampersand (&) sign, *not* the word *and*. When you cite more than one study within parentheses, you should arrange the various citations alphabetically by the first author's last name.

How do you cite two papers published in the same year by exactly the same authors? How can you distinguish between these papers when you cite them in your research report?

To report papers published in the same year, simply place a lowercase *a* or *b* after the date of each reference in question. Thus, if you had two 2000 references by Smith and Jones, you would cite them as follows:

Smith and Jones (2000a, 2000b)

or

(Smith & Jones, 2000a, 2000b)

The *a* and *b* designations will *also* appear as part of the complete reference of the article in the reference section (see the section on references later in this chapter).

When a citation includes three to five authors, include each author's last name in the first citation; subsequent citations include only the first author's last name followed by et al. (Latin

for "and others") and the date. As shown in paragraphs 3 and 5 of Dickson's introduction, this rule creates the following citations:

Jackson, Sullivan, and Hodge (1993) [first citation, paragraph 3]

(Jackson et al., 1993) [second citation, paragraph 5]

If a citation includes six or more authors, *all* citations (including the first) consist of the first author's last name followed by et al. and the date. In the reference section, you include the first six names followed by et al. The *PM* provides more information about reference citations in text on pages 207–214.

A second pointer on writing in APA style is that the use of unbiased language is imperative. **Unbiased language** is language that does not state or imply a prejudice toward any individual or group. According to the *PM*:

> APA is committed both to science and to the fair treatment of individuals and groups, and this policy requires authors of APA publications to 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 should be avoided. Scientific writing should be free of implied or irrelevant evaluation of the group or groups being studied.
>
> 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 reading over your work for bias. You can test your writing for implied evaluation by reading it while (a) substituting your own group for the group or groups you are discussing or (b) imagining you are a member of the group you are discussing. (APA, 2001, pp. 61–62)

Unbiased language Language that does not display prejudice toward an individual or group.

Once you have presented your thesis statement, reviewed the relevant literature, and stated your experimental hypothesis, you are ready to tell the readers how you conducted your research. We turn to this topic next.

Method

The objective of the **method section** is to provide sufficient detail about your experiment to enable readers to evaluate its appropriateness or to replicate your study should they desire. The method section is typically made up of three subsections: *participants, apparatus* (also designated *materials* or *testing instruments*), and *procedure*. Note that "Method" is a Level 1 section head. You do not begin the method section on a new page if there is room on the previous page. There is no break between the introduction, method, results, and discussion sections of an APA-format paper. You begin on a new sheet of paper only if a heading falls on the last line of a page; if it does, move it to the next page and begin the section there.

Method section The second major section of the APA-format paper. Contains information about the participants; the apparatus, materials, and testing instrument(s); and the procedures used in the experiment.

Participants (Subjects) The **participants subsection** enumerates and describes the experimental participants. Figure 14-5 shows the first subsection of Dickson's method section; *subjects* is a permissible label if an experimenter uses animals in the experiment. (Note that *Participants* is a **Level 3 heading**.)

Participants subsection The first subsection of the method section. Provides full information about the participants in the study.

Level 3 heading A section title that is left-margin justified, italicized, and has the first letter of each major word capitalized. Occupies a line by itself.

The subsection on participants answers three questions: Who participated in the study? How many participants were there? How were the participants selected? As you can see in Figure 14-5, Dickson gathered data from 100 students at Southwestern University. The students were almost evenly divided by sex; we see their age range, average age, and racial composition. She provided details about 4 participants excluded from the research for various reasons. Notice that she described the participants (and their important characteristics) in sufficient detail to allow a replication of the study. The only missing information is any inducement the participants received for being in the study; Dickson labeled them "volunteers," but we do not know whether they received extra credit in a class, a monetary payment, or anything else. See pages 18–19 of the *PM* for more information about this subsection.

If you use animal subjects, your description must be detailed enough to allow another investigator to replicate your samples. In addition to providing sample selection information, you should indicate any special arrangements, such as housing conditions, dietary conditions, and so on. The following description of animal subjects, from a paper on evaluating rats' behavior in a startle paradigm by Megan Kazlauskas, a student at Saint Anslem College in Manchester, New Hampshire, and Mark Kelland, her faculty advisor, is a good example of the type of information to include.

> In this study we examined stargazer rats (homozygous stg/stg; stg group) and unaffected littermates (heterozygous stg/+; LM group) provided by Dr. Charles R. Ashby, Jr., of the Brookhaven National Laboratory (Upton, NY). Rat pups were bred in the vivarium and phenotyped at 14 days of age as stargazers or littermates, based upon the demonstration of stargazing behavior. After weaning, the rats were housed in pairs (stargazer with littermate), in rooms maintained at 25° C, 40% humidity, a 12-hr light/dark cycle (light, 0700–1900 hrs), with food and water available ad libitum. After being shipped to Saint Anselm College the rats were allowed to accommodate for 7 days, being maintained on a 12-hr light/dark cycle (light, 0800–2000 hrs), with food and water ad lib. All behavior measurements were performed during the light cycle, from 0800 to 1200 hrs. (Kazlauskas & Kelland, 1997, p. 92)

Materials subsection
The second subsection of the method section. When appropriate, contains information about materials other than the equipment used in the experiment.

Apparatus, Materials, or Testing Instruments Figure 14-6 shows the **materials subsection** of the method section. This subsection can have various names depending on what you use in your particular experiment; you should choose the term that best describes the elements you used in conducting your experiment. Dickson chose "Materials" because she created written information for her research. If you use items such as slides, pictures, videotapes, or paper-and-pencil tests that are not standardized, you would probably want to label this section *Materials*. For example, Dunham and Yandell (2005) developed a scale to measure artistic self-efficacy, so it was important to describe the scale items. They provided the following description:

> Each question addresses one of the following drawing concepts or skills: countour lines, negative space, value, shading, texture, perspective, proportion, portraits, and composition. Example pictures were chosen to illustrate each skill. After the question topics were selected, they were then written on a basic reading level and did not contain any art jargon that non-artists would not understand. Two non-art professors from the Psychology Department reviewed the questions for clarity. The questions ranged in skill difficulty and were all paired with an example picture illustrating the skill in question. Each question is phrased similarly, beginning with "How well do you believe that you could . . ." and ending with "similar to the picture below." All questions were answered with a 10 point Likert-type scale ranging from 1 (*cannot do at all*) and 10 (*certain can do*). The possible maximum score is 90, indicating high drawing self-efficacy, and the possible minimum score is 9, indicating low drawing self-efficacy. (Dunham & Yandell, 2005, p. 18)

manipulation check that focused on the performer's race and the genre of music, we explained the purpose of the present study to the participants and asked them not to discuss it with anyone.

Materials

A three-page experimental packet, which ostensibly contained a survey about people's perceptions of music, was distributed along with an envelope. The first page contained a "performer profile" and included a color picture of a Black or White male performer, a brief biography about him indicating that he was either a rap or country performer, and a lyric sample from one of his songs. The subsequent pages contained the survey, which was used to measure participants' reactions to what they had seen and read on the previous page.

Each performer profile contained a biography that included the name of the performer (i.e., D.J. Jones), his hometown (Atlanta, Georgia), and a brief summary of his musical career (e.g., "D.J. has been singing since he was 14, and recently signed a record deal with a major country label. He will soon be on an international tour opening for a popular country artist"). To create the sample song lyrics, we slightly altered and combined two rock songs (May, 1973; May & Staffell, 1973). With the exception of the two manipulations, we used the same biography and song lyrics in each of the four experimental conditions. The first manipulation altered the genre of music (i.e., rap or country) that the artist performed. Specifically, the name of the performer and the type of music he performed was labeled beneath his picture, and this label coincided with the genre of music described in the biography. Next, a photograph manipulated the race of the performer so that each biography was accompanied by a picture of either a Black or a White man. To ensure that the only attribute differing between the Black and White performers was in fact race, we conducted a pilot test in a Research Methods class to match the Black and White performers on attractiveness and age. The participants in the pilot test were all White, which is representative of the ethnic composition of the participants in the present study. From a pool of 20 color photographs of nonfamous Black and White men selected from magazines, the two stimuli selected for the present study were most similar in perceived - attractiveness and age.

Following the performer profile were the questions that assessed perceptions of the performer and his music, as well as the musical tastes of the participants. Embedded among demographic questions (e.g., sex and age) and other filler questions (e.g., "On average, how many CDs and/or tapes do you buy a month?") were the items that examined participants' perceptions of the performer. Specifically, participants rated on 7-point scales with endpoints

FIGURE 14-6 (M6). Materials subsection of method section.

Apparatus subsection
The second subsection of the method section. When appropriate, contains information about the equipment used in an experiment.

If you use equipment in the experiment, you should label this subsection the **apparatus subsection**. You should briefly describe the equipment used in the experiment and its function(s) in this subsection. If your equipment was commercially produced, mention the name of the manufacturer and the model number of the equipment. For example, in their study of memory for different types of images, Lucas et al. (2005) used computer equipment to present their stimuli:

> Participants viewed images independently on separate Gateway E-3400 Pentium III 1000 Mega Hertz PC computers. All computers were equipped with Windows 2000 Professional Edition, 256MB of memory, and ATI RAGE 128 PRO Ultra GL AGP video cards. These computers had 17 inch monitors with a resolution of 1024 × 768 pixels and display of 16 million colors. Software written in Java by the second author displayed the images to participants. (Lucas et al., 2005, p. 45)

If your equipment was custom made, provide a more detailed description. In the case of complex equipment, you may want to include a diagram. If you report any physical measurements, such as height, weight, or distance, you should report them in metric units. The *PM* contains extensive sections describing the use of metric measurements and their correct abbreviations (see pp. 130–136).

Testing instrument(s) subsection The second subsection of the method section. When appropriate, contains information about standardized tests used in the experiment.

If your "equipment" consists of standardized psychological testing materials, then the label **testing instrument(s) subsection** (or measures) would be appropriate. For example, Niki James (a student at the University of Evansville, Evansville, Indiana) and Mary Pritchard (a faculty member at Boise State University, Boise, Idaho) described the instrument they used to measure stress in college students in the following manner:

> The Inventory of College Students Recent Life Experiences (Kohn, Lafreniere, & Gurevich, 1990) was used to assess stressful events particularly related to college students' lives (e.g., "Dissatisfaction with school"). Participants were asked to rate how much these responses have been a part of their lives in the past month on a 4-point scale (1 = *not at all a part of my life*, 4 = *very much part of my life*). This is a highly reliable and valid measure (Kohn et al., 1990). (James & Pritchard, 2005, p. 63)

If your experiment entailed the use of more than one category of materials, apparatus, or testing instruments, you should combine the relevant names when labeling this subsection. The *PM* contains a short discussion about this subsection on pages 19–20.

Procedure subsection
The third subsection of the method section. Provides a step-by-step account of what the participants and experimenter did during the experiment.

Procedure The **procedure subsection** (see Figures 14-5 and 14-6) summarizes how you conducted the experiment. In addition to describing the steps that you followed, you must include a description of the experimental manipulations and controls (see Chapter 6), such as randomization, balancing, constancy, or counterbalancing, that you employed. Summarize any instructions you used unless they are unusual or complex. In the latter instance, you may want to present the instructions word for word.

If the experiment is involved and has several stages or phases, the procedure section can become lengthy. Dickson's procedure section is intermediate in length. In contrast, the procedure involved in the administration of a questionnaire may be straightforward and brief. For example, in their study of drawing self-efficacy, Dunham and Yandell (2005) indicated the following:

> The participants first signed a consent form. They were then given the Dunham Drawing Self-Efficacy Scale. There were two sessions of non-art students ranging between 2 and 14 participants,

> there was one session of beginning art students with 12 participants, and there were two sessions of advanced art students ranging between four and five participants. After each group completed the self-efficacy scales, the group was debriefed. Each session took approximately 15 minutes. (p. 18)

Your primary goal in the procedure subsection is to describe how you conducted your experiment. You should give enough information to allow a replication of your method, but do not include unnecessary details (e.g., note that you recorded times with a stopwatch—the brand and model number would be overkill).

What critical methodological details do you find in Dickson's procedure subsection?

Critical details are pertinent points that another experimenter would have to copy in a replication study. We believe that the following details are critical:

- 2 × 2 design
- between-subjects design
- recruited participants from various locations on campus
- order of presentation of materials
- random assignment
- DV questions embedded among filler questions
- debriefing after participation
- 4 experimental conditions (type of artist: Black rap, White rap, Black country, White country)

Did we include any details that you left out? If so, reread the procedure subsection to see why we think that detail is absolutely necessary. For example, did you ignore the method of participant recruitment? We believe that this detail clarifies our earlier question about whether participants received any inducement to take part in the experiment—it appears unlikely from this statement.

The procedure subsection is typically the longest of the three components of the method section. Its length will vary depending on the complexity of your experiment. Dickson's procedure section is shorter than the materials section, but her procedure was rather simple, and she had to include more detail about the materials used. To read more about the procedure subsection, check page 20 of the *PM*.

Finally, you should not be surprised to find variations in researchers' method sections. Sections with combined names (e.g., *Design and Procedure* in Dickson's case) or with subsections in different orders are not unusual (Dickson's *Materials* section came after *Procedure*). The key point is that experimenters should provide you with the information you need to understand what they did in their experiment and how they did it.

Results section The third major section of the APA-format paper. Contains information about the statistical findings from the experiment.

Results

We introduced the format for the **results section** in Chapter 10 and reinforced those ideas in Chapters 11 and 12 when we discussed the notion of translating statistics into words. We do not use the word *translating* lightly—to some people, statistics resembles a foreign language. It is your job in the results section to decode the meaning of your numbers into words for the reader. At the same time you must provide the factual, numerical basis to back your decoding. The *PM* covers the presentation of statistical results on pages 20–26 and 136–147. Figure 14-7 contains Dickson's results section. As you conduct your library research, you may notice that sometimes authors combine the results and discussion sections into one section in a published journal article. This combination is common for certain journals or for shorter experimental articles. It is likely that your instructor will want you to keep your sections separate.

Inferential Statistics As you write the results section, you should assume that your reader has a good understanding of statistics; therefore, you do not review basic concepts such as how to reject the null hypothesis and so on. The most important information to report is the specific findings from your inferential statistics. In Dickson's paper, you see an example of how to report results from factorial ANOVA (*F* tests; see Chapter 12 for review) and post hoc *t* tests.

Why did Dickson use a factorial ANOVA to analyze her data? What was or were her IV(s)? What was or were her DV(s)?

First, you should remember from Chapter 12 that a factorial ANOVA is appropriate when you have more than one IV—thus, you should look for more than one IV in Dickson's experiment. One focus of the experiment was race of the performer, so one IV was race (Black vs. White). The other IV was the genre of the performer's music (rap vs. country).

In the procedure and materials subsections, you found out that Dickson asked the participants to rate the performers on four scales and then averaged the scores on the four scales. The experiment, therefore, had one DV: the overall index rating of the performers.

In presenting inferential statistical results, you must present the test that was used, the degrees of freedom for the test, the test statistics, the probability level, and a measure of effect size. In looking at Dickson's results, the second sentence provides us a good example:

> Data analysis revealed a significant main effect of race such that Black performers ($M = 4.32$, $SD = .91$) were rated more positively than were White performers ($M = 3.76$, $SD = 1.00$), $F(1, 92) = 10.42$, $p = .002$, $\eta^2 = .10$.

Notice that the statistical findings at the end of the sentence give us all five pieces of information: an *F* test (analysis of variance) was used, there were 1 and 92 degrees of freedom, the calculated test value was 10.42, the probability of these data occurring if the null hypothesis is true was 2 in 1,000, and the effect size was small (.10). You should present the same type of information for findings relevant to the experimental hypothesis

labeled at 1 (*not at all*) and 7 (*very much*): (a) "Overall, how much do you like this performer?"; (b) "How talented do you think this performer is?"; (c) "How legitimate is this performer?"; and finally (d) "How successful do you predict this performer will be in the music industry?" Because these items were highly correlated, they were combined into an overall index reflecting participants' favorability of the performer (Cronbach's $\alpha = .80$). The scores on the four items were averaged together, and consistent with the scales on the individual items, the overall index is on a 7-point scale with higher numbers representing a more favorable perception of the performer and lower numbers indicating an unfavorable perception.

Results

A 2 (race of performer: Black or White) x 2 (genre of music: rap or country) between-subjects analysis of variance (ANOVA) was performed on the index assessing the favorability of the performer (i.e., likability, perceived talent, perceived legitimacy, and predicted success). Data analysis revealed a significant main effect of race such that Black performers ($M = 4.32$, $SD = .91$) were rated more positively than were White performers ($M = 3.76$, $SD = 1.00$), $F(1, 92) = 10.42$, $p = .002$, $\eta^2 = .10$. However, this main effect was qualified by the significant two-way interaction between race of performer and genre of music, which was consistent with predictions, $F(1, 92) = 26.72$, $p = .0001$, $\eta^2 = .23$. An inspection of the means in Figure 1 shows that participants rated a Black rap artist ($M = 4.79$, $SD = .68$) more favorably than a Black country artist ($M = 3.85$, $SD = .87$), $t(46) = 4.17$, $p = .0001$; however, they judged a White country artist ($M = 4.19$, $SD = .92$) more favorably than a White rap artist ($M = 3.33$, $SD = .91$), $t(46) = 3.24$, $p = .0001$. There was no main effect of genre of music, $F < 1$, *ns*: Participants reported similar ratings for rap performers ($M = 4.06$, $SD = 1.09$) and country performers ($M = 4.02$, $SD = .90$).

Discussion

The present study integrated and expanded on two lines of research. First, it extended previous research (Fried, 1996, 1999) on stereotyping involving the music industry. Whereas Fried (1996, 1999) examined reactions to music lyrics based on either the genre label or the performer's race, our study considered the interactive effect of both the race of the performer and the genre of music on people's evaluations of performers. The current study also differs from previous research conducted by Fried (1996, 1999) in that the lyrics in our study did not attempt to convey negative images such as violence or aggression. That is, Fried (1996, 1999) asked participants specifically

FIGURE 14-7 (M7). Results section; portion of discussion section.

Source: Adapted from "Relating Pretrial Publicity, Judicial Instruction, and Thought Suppression with Guilt Ratings," by V. M. Gauthraux, 2000, *Psi Chi Journal of Undergraduate Research, 5*, pp. 21–28. Copyright © 2000 Psi Chi, The National Honor Society in Psychology (www.psichi.org). Reprinted by permission. All rights reserved.

even if you do not find statistical significance. Although information from different test statistics may appear in a slightly different fashion, these five basic pieces of information are always necessary. We presented a set of *t* test results in Chapter 10 to which you can refer. You can find examples of how to present other statistical test results on pages 138–139 of the *PM*.

Descriptive Statistics In order to give a full picture of the data, it is customary to present descriptive statistics in addition to the inferential statistics. Means and standard deviations typically allow readers to get a good feel for the data. With a small number of groups, you can present the descriptive statistics in the text (as Dickson did), as we showed you in Chapter 10. On the other hand, with many groups, it may be more efficient and clearer to present the descriptive statistics in either a table or a figure, which we will discuss next.

Complementary Information In presenting your results, you must first decide how best to give the reader the necessary information. If your statistical information is relatively simple, merely reporting your findings in words and numbers is usually adequate. For more complex analyses or results, you may wish to include tables or figures to explicate your words and numbers.

Figure A pictorial representation of a set of results.

Figures Because Dickson's DV showed a significant interaction, she used a **figure** to clarify the presentation of her results. The figure appears in Figure 14-8. Figures can take the form of graphs (line, bar, circle, pie, scatter, or pictorial graphs), charts, dot maps, drawings, or photographs.

The *PM* presents information regarding figures on pages 176–201. As you can guess from the number of pages devoted to figures, they can be difficult to produce. The vast majority of the *PM* information about figures involves preparing figures for publication. Because you will probably be submitting your research paper as a class requirement, your instructor may not be a stickler for enforcing every APA requirement on figures you submit with your paper. For example, you can see from Figure 14-9 that figure caption(s) appear on a separate page in a manuscript prepared for publication. Your instructor may choose to have you put the caption on the page with each figure.

It is likely that the majority of figures you use will be line graphs or bar graphs (see Chapter 9) that depict findings similar to Dickson's. Graphs are particularly good for showing interaction patterns. Because we showed interaction patterns in Chapter 12 with line graphs, we have reformatted Dickson's table as a line graph in Figure 14-10 (see p. 352). It may be easier for you to see the interaction from the line graph than from the bar graph. Regardless of what type of figure you decide to use, you probably have access to a number of good software programs for graphing. For your class project, ask your instructor about his or her preference as to how you should produce a figure. Regardless of how you create your figures, one rule is constant: Be certain that you refer to your figures in the text at an appropriate place. This reference will cue the reader to look at the figure in order to process its meaning.

Table A chart containing an array of descriptive statistics.

Tables A **table** consists of a display of data, usually in numerical form. Tables are an alternative method of presenting data. To use a table, your data display should be large enough that it would be difficult or confusing to present it in the text.

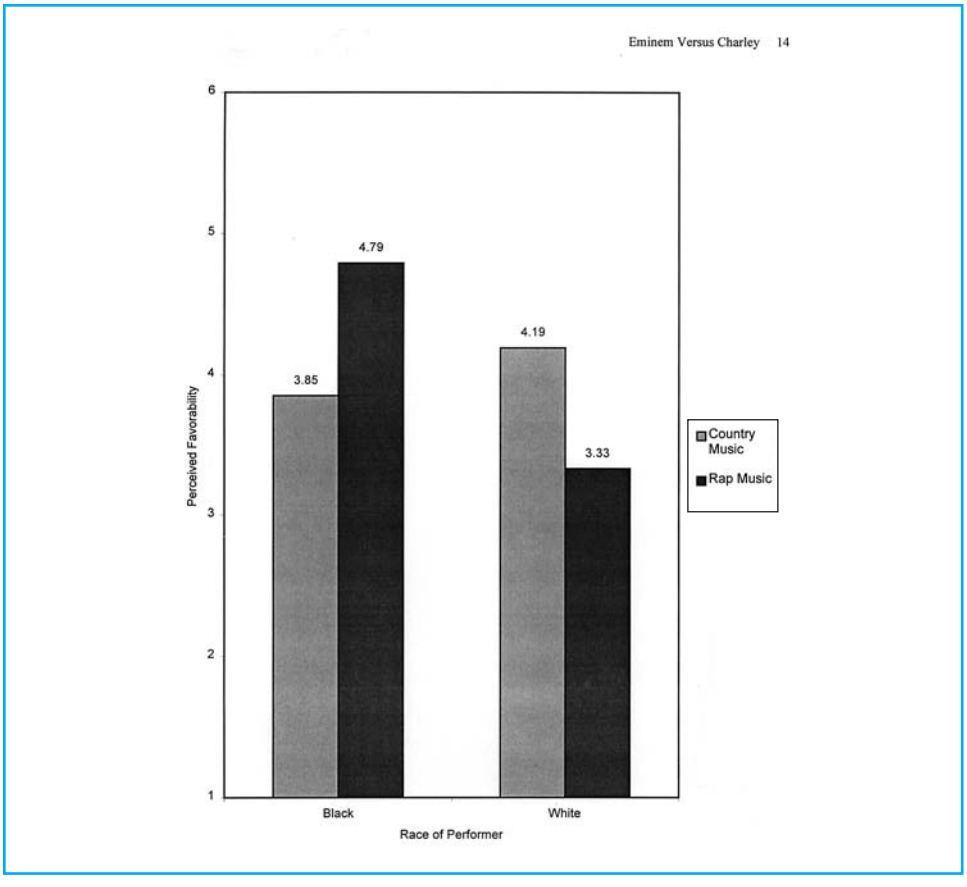


FIGURE 14-8 (M14). Dickson's figure.

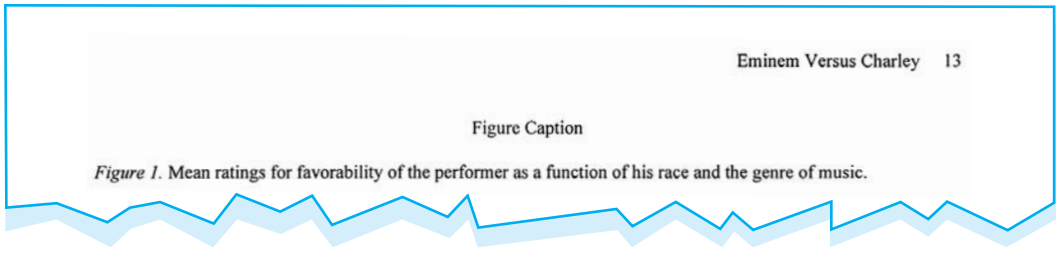


Figure Caption

Figure 1. Mean ratings for favorability of the performer as a function of his race and the genre of music.

FIGURE 14-9 (M13). Caption for Dickson's figure.

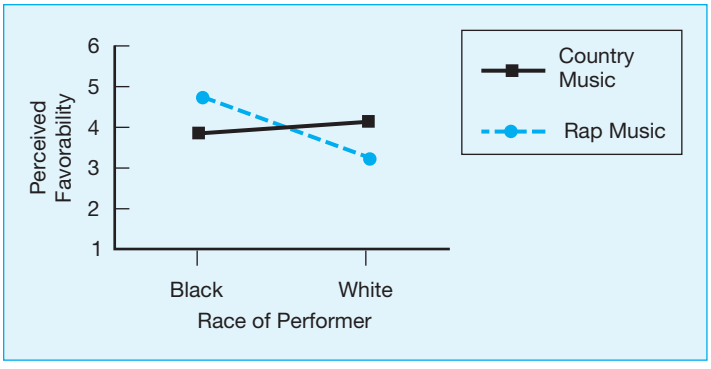


FIGURE 14-10 Adaption of Dickson's results to line graph.

Table 1
Perceived Favorability of Performance Based on Performer's Race and Music Genre

	Performer's Race	
Music Genre	Black	White
Rap		
M	3.85	4.19
SD	.87	.92
Country		
M	4.79	3.33
SD	.68	.91

Note. Favorability ratings made on a scale from 1 *(negative)* to 7 *(positive).*

FIGURE 14-11 Adaption of Dickson's results to table.

You often have to decide between using a table or a figure to present your data. Notice that Dickson presented her data only with a figure, not a table. We have adapted the data from her Figure 1 into the format that you see in Figure 14-11 (Dickson would have included a manuscript page header and page number if this page were actually in her manuscript).

The advantage of the table over the figure is that standard deviations can be included in the table. The advantage of the figure over the table is accessibility; the data, particularly the significant interaction, seem easier to understand and conceptualize in the pictorial presentation. Considering these advantages, the figure seemed a better choice in this situation. For your experimental report, your decision may be different. APA presents many guidelines for developing tables (see pp. 147–176 of the *PM*). You should check with your instructor to find out which guidelines you must follow in your paper. Because you will typically generate a table directly in your word-processing program, you may find a table easier to produce than a figure. You should, however, make your choice of a table versus a figure based on the quality of information provided to the reader rather than on ease of production. Again, if you use a table in your paper, be sure to refer to it at the appropriate point.

Can you think of a specific situation in which you would prefer to use a table instead of a figure?

The most obvious answer to this question is a situation in which you have a large number of means to present but for which there is not a significant interaction. We hope that a comparison of Figures 14-8 and 14-11 convinced you of the benefit of a figure for portraying interactions.

Discussion

You can find Dickson's **discussion section** in Figures 14-7, 14-12, and 14-13. According to the *PM* (pp. 26–27), you can address such issues as problem choice, levels of analysis, and application and synthesis in the discussion section. We like the somewhat simpler and clearer guidelines laid out in the previous edition of the *PM* (APA, 1994, p. 19), which recommended that you be guided by three questions in the discussion section:

- *What have I contributed here?*
- *How has my study helped to resolve the original problem?*
- *What conclusions and theoretical implications can I draw from my study?*

Discussion section The fourth major section of the APA-format paper. Contains a summary of the experiment's results, a comparison of those results to previous research, and the conclusion(s) drawn from the experiment.

Typically, authors answer these three questions by (a) briefly restating their findings, (b) comparing and contrasting their findings to previous research cited in the introduction, and (c) giving their interpretation of their findings.

Restating Results Your first task in the discussion section is to recap your results as briefly as possible. Typically, you will summarize only your significant findings, unless a null finding is particularly meaningful. If you conducted a large study with many outcomes, you may wish to feature only the most important findings at this point—usually those findings that have some bearing on your experimental hypothesis. This summary ensures that the reader can extract the most important information from your results section.

If you examine Dickson's (2001) discussion section, you will find that she used the three techniques listed just before this section. In the first paragraph, she summarized the information from the results section in one sentence: "In our study, participants judged Black rap artists more favorably than Black country music performers, whereas they judged White country music performers more favorably than White rap artists" (Dickson et al., 2001, p. 178). The sentence describes the significant interaction that Dickson found rather than the main effect of race because the interaction qualified the race effect.

Comparing Results to Previous Research It is important for you to evaluate how your results "stack up" against previous findings in your area of research that you summarized in your introduction. The previous research studies will be related to, but not the same as, your experiment. Typically, you will have made a prediction before the experiment about your expected findings based on your survey of previous research. You should tell the reader how

about their negative impressions of the song lyrics (e.g., its offensiveness, its threat to society, its need for warning labels), whereas the current study emphasized overall impressions of the performer. Rap may be more often associated with negative topics, but these topics can be found in both rap and country music. We chose to use neutral lyrics in the present study because we were not focusing on the relation between negative themes and music genre. Instead, the current study was based on findings that rap is associated with a Black culture that has both positive and negative attributes (Brigham, 1971). We examined the connection between music genre and the stereotype-consistent or stereotype-inconsistent race of the performer. In our study, participants judged Black rap artists more favorably than Black country music performers, whereas they judged White country music performers more favorably than White rap artists. These results support the hypothesis that individuals who deviate from societal expectations are judged more negatively than are individuals who adhere to social norms (Jackson et al., 1993; Knight et al., 2001). Manis, Nelson, and Shedler (1988) found that extreme stereotypes yielded contrast effects when behavior was discrepant from the established stereotype. In the present study, Black country music performers and White rap artists contrast from fairly ingrained societal expectations and thus received more negative judgments than the performers who adhere to societal norms.

The present study could be extended in a number of ways. For example, like Fried's (1996, 1999) research, the current study also presented the lyric sample to participants on paper. It would be interesting to explore whether an audio-recorded lyric sample would affect participants' evaluations of performers or the music. Perhaps auditory processing and visual processing of stereotype-consistent and stereotype-inconsistent information differ. In addition, the present study could broaden its scope by including a more varied sample of participants. That is, future studies could incorporate participants of different races and ages. The data in the current study were collected primarily from White undergraduate students at a liberal arts university, and the results from such a homogenous sample may not necessarily generalize to alternative populations or settings. Furthermore, exploring alternate stereotype violations could support the findings of the present study, and one area of interest could be the world of sports. For instance, Black hockey players violate societal expectations similar to the apparent violation made by Black country music performers and White rap performers. According to our findings, Black hockey players would receive more negative evaluations than would White hockey players because their behavior is inconsistent with societal expectations.

FIGURE 14-12 (M8). Second page of discussion.

Because the population of other minority groups (e.g., Latinos) is approaching that of the Black population in America, future research concerning racial stereotypes in the music industry could examine the impact of the increasing popularity of Latin music (Gonzales, 1990). Garcia and Zapatel (2000) recently examined how the labels *Black rap*, *Latino rap*, and *alternative music* influence perceptions made by both Anglo and Hispanic participants and found that participants' perceptions of music differed depending on their own race. Specifically, Hispanic participants judged music labeled *Latino rap* more positively than music labeled *alternative*, whereas Anglo participants rated music labeled *alternative* more favorably than music labeled *Latino rap*. Similar to previous findings (Jackson et al., 1993), out-group categories (i.e., *Latino rap* for Anglo participants and *alternative* music for Hispanic participants) were judged more negatively than were categories that corresponded to the participants' ethnicity. Extended to a more diverse sample, the present study could offer support for the idea that out-group categories are judged more negatively than in-group categories by examining the relation between participants' ethnicities and their evaluations of rap and country music. Thus, regardless of the race of the performer, Black participants would be expected to rate country music more negatively than rap music, whereas White participants would be expected to judge rap music more negatively than country music. Furthermore, it would be interesting to determine whether or not performers of Latin music will remain primarily Latin and to examine perceptions of stereotype-consistent and stereotype-inconsistent performers in this genre. If future performers do deviate from racial stereotypes, the present study suggests that non-Latino performers of Latin music would be perceived less favorably than would Latino performers.

In closing, Eminem and Charley Pride share a connection in that their actions deviate from widespread stereotypes that specific races are associated with certain types of music. Although people may recognize these two performers because of their musical talent, it is more likely that they are recognized because they were bold enough to defy stereotypes in the music industry. By being a White rap artist and a Black country music performer, Eminem and Charley Pride became forerunners for performers who do not adhere to social norms, and they may have possibly influenced numerous music fans to expect the unexpected.

FIGURE 14-13 (M9). Final page of discussion.

accurate your predictions were. This information will help the reader to draw conclusions. For example, if you correctly predicted your results from previous research, the previous research and your study are both validated. On the other hand, if your prediction is not borne out, some doubt is cast—either your research or the previous research may be flawed in some way.

Looking at the first paragraph of Dickson's discussion section, you will see the comparison to previous research findings. In this case the previous research studies were related to Dickson's study because they dealt with stereotyping and music. On the other hand, these studies were different because they did not specifically combine performer's race and genre of music. Dickson's study demonstrated an interaction between those two variables, which was an important finding.

Interpreting the Results This portion of the discussion section gives you more of a free hand to engage in conjecture and speculation than any other portion of the experimental write-up. It is here that you draw the "bottom line" to your study: What is your overall conclusion? What are the implications of your results for any psychological theories? How can your results be applied in various settings—the laboratory, the real world, our body of psychological knowledge? What new research should grow out of this study? As you can see, there are a variety of questions you can address in your discussion section. Not all of these questions are appropriate for every study—pick the ones that are most important for your particular experiment.

The interpretation of Dickson's results appears in the last three sentences of the discussion section's first paragraph. The results of this study supported the notion that people who deviate from societal expectations are judged more harshly than people who conform to stereotypes.

The second and third paragraphs of Dickson's discussion section include possible directions for future research.

How many ideas for further research can you find in these two paragraphs?

We see four possible experiments mentioned:

1. Using audio-recorded lyrics rather than printed lyrics
2. Using participants from populations other than White students
3. Exploring racial stereotype expectations in sports settings
4. Extending the music genre to include Latin music

You may wish to mentally file this example away for future reference. As you read discussion sections of published articles, you might find ideas for your own research projects.

References

There are two important reasons why it is your responsibility to provide a complete list of accurate references to any published works cited in your research report. First, you must give credit to the original author(s) for any ideas and information that you got from reading their works. If you take exact wordings, paraphrases, or even ideas from an author without giving credit for that source, you are guilty of **plagiarism** (see Chapter 2). Second, you are providing a historical account of the sources you used in the event that a reader might wish to read them in their entirety. Have you

Plagiarism Using someone else's work without giving credit to the original source.

ever worked on a term paper and "lost" a good source that you had read because you didn't write down all the necessary bibliographic information and couldn't find it again? Most of us have had this experience, and it is quite frustrating. You can prevent that frustrating experience from happening by providing your reader with a complete and accurate reference list. The *PM*, which describes the reference list on page 28, provides general pointers about the list as well as examples of APA format for 95 different types of sources on pages 239–281. Reference formatting is so important that the *PM* now devotes a separate chapter (Chapter 4, pp. 215–281) to this topic.

Before proceeding, we must distinguish between a reference list and a bibliography, which you might have learned about in English classes. The reference list is *not* a list of every source that you read when you were writing your introduction and planning your experiment. The only references that you list are those from which you actually obtained information and that you cited somewhere in your paper. If you do not cite a particular source, you should not reference it.

The list of references begins on a new page after the end of your discussion section. You will find Dickson's references in Figures 14-14 and 14-15.

Look at Figures 14-14 and 14-15. How many different types of references can you find? Can you identify each type?

Five different types of references appear in Dickson's list:

1. *Book:* Brehm, Kassin, & Fein; Fiske & Taylor; Gonzales
2. *Journal article:* Brigham; Devine; Dovidio, Evans, & Tyler; Fried (both); Gaertner & McLaughlin; Jackson, Sullivan, & Hodge; Knight, Giuliano, & Sanchez-Ross; Manis, Nelson, & Shedler; Sagar & Schofield
3. *Chapter in edited book:* Dovidio, Brigham, Johnson, & Gaertner; Dovidio & Gaertner; Gaertner & Dovidio
4. *Conference presentation:* Garcia & Zapatel
5. *Music recording:* May; May & Staffell

As you look at a reference, you will find that the information about author(s) and date is listed first. This location makes it easy for the reader to see an author and date citation in your text and then to find the corresponding reference in your reference list. The reference list is alphabetized by the surname of the first author. If you have more than one article by the same first author, you alphabetize by the name of the second author. If the author information for two or more articles is identical, you should arrange the references by date, with the earliest article listed first. If the author information and dates are identical, alphabetize by the first main word of the title, and add lowercase letters (a, b, etc.) to the date to differentiate between the articles, as we previously mentioned.

The title of the scholarly work is the next piece of information, followed by supplementary information that helps a reader locate that work. As you can see, the supplementary

References

Brehm, S. S., Kassin, S. M., & Fein, S. (1999). *Social psychology* (4th ed.). Boston: Houghton Mifflin.

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Garcia, S. D., & Zapatel, J. P. (2000, January). *Perceptions of lyrics as a function of ethnicity and music genre.* Paper presented at the annual meeting of the Social Psychologists in Texas, San Antonio.

Gonzales, J. L., Jr. (1990). *Racial and ethnic groups in America: A collection of readings.* Dubuque, IA: Kendall/Hunt.

FIGURE 14-14 (M10). First page of reference list.

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May, B. (1973). The night comes down. [Recorded by Queen]. On *Queen* [Record]. London: EMI Records.

May, B., & Staffell, T. (1973). Doing all right. [Recorded by Queen]. On *Queen* [Record]. London: EMI Records.

Sagar, H. A., & Schofield, J. W. (1980). Racial and behavioral cues in Black and White children's perceptions of ambiguously aggressive acts. *Journal of Personality & Social Psychology, 39,* 590-598.

FIGURE 14-15 (M11). Last page of reference list.

information differs depending on the particular type of reference you are using. Let's take a look at the general format for the three different types of references you are most likely to use in your papers: periodical articles, books, and chapters from edited books.

Periodical Articles The *PM* shows examples of 22 different types of references to periodicals on pages 240–247. Your most typical use of periodicals will probably be to reference articles in journals. The general format for periodicals is as follows (example adapted from APA, 2001, p. 239):

Author, A. A., Author, B. B., & Author, C. C. (date). Title of article. *Title of Periodical, vol*, ppp–ppp.

To see some examples, you can examine the 10 references shown in Figures 14-14 and 14-15, which we discussed in the answer to the last *Psychological Detective* question. The last names and initials of *all* authors appear in the same order as they appear in the journal article. You will remember, earlier in this chapter, we mentioned using et al. for multiple-author works. You typically *do not* use et al. in the reference list. List all authors except when there are more than six authors—then you list the first six in typical reference format and add et al. after the sixth name. The date refers to the year in which the particular journal issue containing the article was published. Be careful here—you may have to look at the front of the journal to get this information.

Type the title of the article with *only* the first word capitalized and *not* italicized. If the article title includes a colon, capitalize the first word after the colon also. In addition, you should capitalize any words that are normally capitalized (e.g., names, state, organizations, test names).

On the other hand, type the journal title with all primary words capitalized (APA's definition is any word of four letters or more). Words such as *a, and*, and *the* are not capitalized unless they are the first word or follow a colon. The journal title *is* italicized, as is the volume number of the journal (and its following comma) that immediately follows the journal title. Type only the volume number—do not precede it by *Vol.* or *V*. Volumes of journals sometimes also have issue numbers. For example, volume 59 represents the 2004 issues of *American Psychologist*; each month's issue is represented by its own number. Thus, the January 2004 issue would be Volume 59, Number 1, and so on. Most journals use continuous pagination throughout a volume; that is, the first issue of a new volume begins on page 1 and the pages run continuously until the next volume, which begins with page 1. In this case the issue number is not needed to find the referenced article and does not appear in the reference. A few journals, however, repaginate; that is, they begin *each issue* with page 1. If this is the case, then the issue number is necessary to find the article and is included in the reference. This reference format follows (example adapted from APA, 2001, p. 240):

Author, A. A., Author, B. B., & Author, C. C. (date). Title of article. *Title of Periodical, vol*(n), ppp–ppp.

Notice that the issue number (n) appears within parentheses (no space after the volume number) and is *not* italicized. Finally, give the inclusive page numbers of the article—numbers only, no *p.* or *pp.* preceding.

Books The *PM* provides 11 examples of references to books on pages 248–251. This category consists of references to entire books rather than to chapters in edited books. The general format for book references is as follows (example adapted from APA, 2001, p. 248):

Author, A. A. (date). *Title of work*. Location: Publisher.

We have used a one-author example here, but don't be misled by it. You should include all authors' names and initials (see Brehm, Kassin, & Fein in Dickson's reference list), just as in the journal examples given previously. Use the date of the original publication of the book, which usually appears at the front of the book facing the title page.

The book title's format is a combination of the styles seen earlier for article titles and journal titles. It follows the style for an article title in terms of capitalization—you capitalize only the first word (and the first word after a colon or normally capitalized words)—however, like a journal title, the book's title is italicized.

The location and the name of the publisher appear in the last portion of the reference. If the city, such as New York, is well known for publishing, you type it alone (see p. 217 of the *PM* for a complete list); otherwise, you must give the city and state (two-letter postal abbreviation) or country. Many publishers now have offices in several locations—typically the first location listed is the one referenced. The name of the publisher is given in a brief form, omitting "superfluous terms, such as *Publishers, Co.*, or *Inc.*, which are not required to identify the publisher" (APA, 2001, p. 230). Many times you will find that a corporate author and publisher are the same, as with the *PM*. In such a case, rather than repeat the information for the publisher, you simply type "Author" after the location (e.g., see the reference to the *PM* in the reference list for this book). Dickson's manuscript has three examples of references to books.

Chapters From Edited Books Most edited books contain chapters written by different authors. This type of reference allows you to cite information from a single chapter within

such a book. The *PM* gives seven examples of such references on pages 252–255. The general format of such a reference is as follows (example adapted from APA, 2001, p. 239):

Author, A. A., & Author, B. B. (date). Title of chapter. In C. C. Editor, D. D. Editor, & E. E. Editor (Eds.), *Title of book* (pp. nnn–nnn). Location: Publisher.

As you can see, this type of reference is much like a journal article reference combined with a book reference. This example includes two authors and three editors, but any number of either is possible. You would provide the information concerning author(s) and date as we have previously discussed. The title of the chapter refers to the specific smaller work within the larger book. Capitalize the chapter title in the same manner as a journal article title: Capitalize only the first word, the first word after a colon, and words that are normally capitalized.

List all the editors' names. Notice that you do not reverse the initials and surnames. After a comma, you list the book's title (italicized), with capitalization in the same fashion as mentioned previously for a book title. The inclusive pages of the chapter appear parenthetically after the book's title to make it easier for the reader to locate the specific chapter in the book (be sure to type "pp."). Finally, include the location and publisher information as for any book. Dickson's manuscript includes three examples of chapters in edited books, as listed previously.

World Wide Web Sources Providing references for information obtained from the World Wide Web is just as important as providing references for written material—in fact, it may be even more important. Unlike journal articles or books, material on the Web can change quite rapidly. Authors can modify Web information from day to day, which can create a problem in keeping current. The *PM* has an extensive section dealing with electronic media references, which includes 25 examples of Internet and Web references, on pages 268–281. Because there are so many different types of electronic media sources, it is impossible to cover them all. We will provide an example of a citation to information on a Web site; if you have a different type of source, be sure to consult the *PM*.

American Psychological Association. (2003). *APA Style.org: Electronic references.* Retrieved July 17, 2005, from http://www.apastyle.org/elecref.html

Note that this reference style is similar to a book reference; however, you include the actual retrieval site and date. This additional information allows a reader to find the site and to determine whether the information still exists (or perhaps has been updated) at that site. Providing an exact date of retrieval is extremely important for these reasons. Interestingly, APA style for electronic references is evolving quickly. You can go to the Web site listed in the reference earlier in this section for the latest updates or to help answer questions you may have.

The relevant text citation for this reference would be the same for a book; in this case it would be (American Psychological Association, 2003). If you wish to cite an entire Web site (rather than a specific document on the Web site), you can simply list the site in the text—no reference is necessary (e.g., http://www.apa.org for the APA site).

Other References Although we expect that most of your references will be to periodicals, books, and chapters in edited books, the *PM* has 30 examples of other types of references you might use. These other references include technical and research reports, proceedings of meetings and symposia, doctoral dissertations and master's theses, unpublished works and publications of limited circulation, reviews, and audiovisual media. No matter what type of material you wish to reference, the *PM* has a format for you.

A Disclaimer The fourth edition of the *PM* (APA, 1994) used a different reference format. Although all the information included was the same, the appearance of the references was different. In the older format, the initial line of each reference was indented and subsequent lines began at the left margin; however, when references were printed in journal articles, this margin situation was reversed—the first line began at the left margin and subsequent lines were indented (referred to as a "hanging indent"). With this type of formatting, the first authors' names stand out and are easier to locate. Under the new (2001) guidelines, manuscript references are formatted exactly as they appear in publication.

We give you this explanation to alert you to the possibility that you might see an older student paper with references formatted in the old manner. It is not unusual for students to find previous copies of research papers to use as examples. If you copy that style of reference format, you will be in error. While examining the manuscript pages of Dickson's paper and the published product, you may have noted other differences.

PSYCHO-LOGICAL DETECTIVE

Can you figure out why an APA-formatted manuscript and a published article (or final copy) might differ in appearance?

APA format is intended to help authors and journal editors produce a product more easily. In a published article or final copy; however, the appearance of the document is the more important goal. It is difficult for instructors to decide whether to require strict APA format or to accept a more aesthetically appealing product.

Appendix

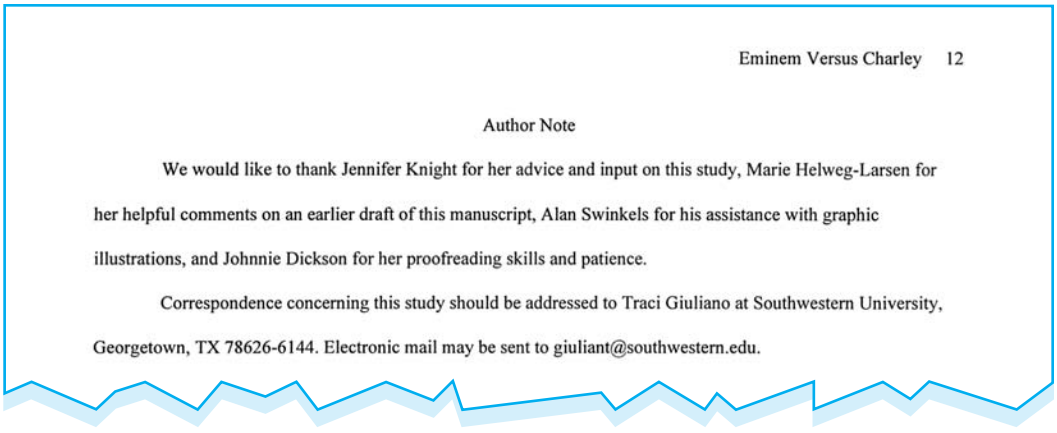
Most published articles do not contain an appendix because of space limitations; appendixes are more common in student papers (*PM*, 2001, p. 324). Typically you include information that might help readers understand some detail(s) of your study that would be distracting in the body of the paper. The *PM* (p. 28) gives as examples a new computer program, an unpublished test, a mathematical proof, a list of stimuli used, and the description of a complex piece of equipment.

Dickson included an appendix that contained the lyrics to the music used in her experiment. We have *not* included the appendix in the text because of space limitations (but the reference to the appendix appears in the "Materials" subsection in Figure 14-19).

Author Note

Author note A note at the end of an experimental report that contains information about the author or paper for readers' use.

Your manuscript may have an **author note**, depending on your instructor's preferences. If you do use an author note, begin it on a new page. As you can see from Dickson's author note in Figure 14-16, she acknowledged several people who helped on the project and provided a name and address for readers to contact her for information or copies of the paper. Other information might be an acknowledgment of an earlier presentation of the paper (e.g., at a conference) or sources of



Eminem Versus Charley 12

Author Note

We would like to thank Jennifer Knight for her advice and input on this study, Marie Helweg-Larsen for her helpful comments on an earlier draft of this manuscript, Alan Swinkels for his assistance with graphic illustrations, and Johnnie Dickson for her proofreading skills and patience.

Correspondence concerning this study should be addressed to Traci Giuliano at Southwestern University, Georgetown, TX 78626-6144. Electronic mail may be sent to giuliant@southwestern.edu.

FIGURE 14-16 (M12). Author note page.

financial support making the study possible. The *PM* provides information about the author note on pages 29, 203–205, and 300; Dickson did not include all four paragraphs described on pages 203–205 because the journal did not require them. Your instructor may have you deviate from the *PM*'s standard format for a class report.

Headings

To recapitulate, APA-format papers use a different type of heading for each section of the report. The major sections of the report, such as the introduction, method, results, and discussion, are introduced by a Level 1 heading. Subsections within these main sections are introduced by lower level headings. For example, the participants, apparatus, and procedure subsections of the method section are generally introduced by a Level 3 heading. Level 3 headings are left-margin justified, are italicized, have the first letter of each major word capitalized, and occupy a line by themselves. Should you have to further subdivide these subsections, use a **Level 4 heading**. Level 4 headings are indented five spaces and italicized, have only the first letter of the first word capitalized, and end with a period. You begin typing on the same line following the period that concludes a Level 4 heading. Level 2 headings are rarely used except in multiexperiment studies; they are centered, italicized, and have capitalized main words. In a multiexperiment study, typical Level 1 headings become Level 2 (e.g., *Method*).

Level 4 heading A section title that is indented five spaces, italicized, has only the first word capitalized, and ends with a period; it does not occupy a separate line.

Table 14-1 summarizes the five types of section headings used in APA-format articles. Level 1 and Level 3 headings are the ones most frequently used in preparing a research report that describes a single experiment (as in Dickson's example). As we have seen, however, the description of a single experiment may require the use of Level 4 headings when the participants, apparatus, and procedure subsections are further subdivided (see Table 14-1). Likewise, when you are presenting more than one experiment, you will use Level 1, 2, 3, and 4 headings as shown in Table 14-1.

TABLE 14-1 Levels and Locations of Headings Used in an APA-Format Paper: Selecting the Levels of Heading

Find the section of your paper that breaks into the finest level of subordinate categories. Then use the guidelines that follow to determine the level, position, and arrangement of headings. Few articles require all levels of heading. Note that each subheading must have at least one counterpart at the same level within a section; for brevity, the examples that follow do not include counterparts.

One level. For a short article, one level of heading may be sufficient. In such cases, use only centered uppercase and lowercase headings (Level 1).

Two levels. For many articles in APA journals, two levels of headings meet the requirements. Use Level 1 and Level 3 headings:

Method ← Level 1

Procedure ← Level 3

If the material subordinate to the Level 1 headings is short or if many Level 3 headings are necessary, indented, italicized lowercase paragraph headings (Level 4) may be more appropriate than Level 3 headings. (A Level 4 heading should apply to all text between it and the next heading, regardless of the heading level of the next heading.)

Three levels. For many articles, three levels of headings are needed. Use Level 1, Level 3, and Level 4 headings.

In a single-experiment study, these three levels of headings may look like this:

Method ← Level 1

Apparatus and Procedure ← Level 3

Pretraining period. ← Level 4

In a *multiexperiment study*, these three levels of headings may look like this:

Experiment 2 ← Level 1

Method ← Level 3

Participants. ← Level 4

Four levels. For some articles, particularly multiexperiment studies, monographs, and lengthy literature reviews, four levels of headings are needed. Use heading Levels 1 through 4:

Experiment 2 ← Level 1

Method ← Level 2

Stimulus Materials ← Level 3

Auditory stimuli. ← Level 4

Five levels. Occasionally, an article requires five levels of headings. In such cases, subordinate all four levels above by introducing a Level 5 heading—a centered uppercase heading—above the other four.

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Eminem Versus Charley Pride: Race, Stereotypes, and Perceptions of Rap and Country Music Performers

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JAMES C. MORRIS
KERI L. CASS
Southwestern University

The present study explored the effects of stereotype deviation in the music industry on people's perceptions of performers. One hundred college students (48 men, 52 women) examined a profile of a fictitious performer containing a picture, a brief biography, and a lyric sample. As part of a 2-way between-subjects design, participants made judgments about either a Black or a White musician who performed either rap or country music. The results showed that a Black rap performer was rated more favorably than a Black country performer, and a White country performer was rated more favorably than a White rap performer. Consistent with predictions, people who violate societal expectations are judged more harshly than are people who conform to societal expectations, particularly in cases involving strong preexisting racial stereotypes.

WHAT DO EMINEM AND CHARLEY PRIDE HAVE in common? Perhaps the connection these two performers share is subtle, but they are in fact quite similar in at least one aspect of their careers. Both Charley Pride, a Black country music performer, and Eminem, a White rap performer, deviate from social expectations that are a part of the music industry. Specifically, these two musicians defy cultural stereotypes by performing types of music that are not typically associated with their race.

Racial stereotypes exist in most individuals, and they can influence subsequent judgments made by a perceiver (Devine, 1989; Dovidio, Evans, & Tyler, 1986; Gaertner & McLaughlin, 1983). For example, Gaertner and McLaughlin (1983) studied the effect of racial stereotypes on perceptions and found that White students responded faster to positive stereotyped words (e.g., *smart)* when the words followed the race *White* rather than *Black*. In addition, Sagar and Schofield (1980) examined the perceptions made by sixth-grade boys about ambiguous behavior. They found that both Black and White boys construed ambiguously aggressive behaviors (such as one child bumping into another) as being more threatening if the actions were performed by a Black boy rather than a White boy. Most people today would not be likely to openly express racist beliefs, but the results of the above studies support the aversive racism perspective, which suggests that subtle and indirect forms of racism persist in society today (Dovidio & Gaertner, 1991; Gaertner & Dovidio, 1986). That is, although current cultural values emphasize fairness and racial equality, White individuals have a historic tradition of having negative beliefs concerning Blacks and other minority groups (Dovidio, Brigham, Johnson, & Gaertner, 1996). Consequently, racial stereotypes continue to exist and to influence interactions among individuals in society, but perhaps in more subtle ways.

Author note. We would like to thank Jennifer Knight for her advice and input on this study, Marie Helweg-Larsen for her helpful comments on an earlier draft of this manuscript, Alan Swinkels for his assistance with graphic illustrations, and Johnnie Dickson for her proofreading skills and patience.

Correspondence concerning this study should be addressed to Traci Giuliano at Southwestern University, Georgetown, TX 78626-6144. Electronic mail may be sent to giuliant@southwestern.edu.

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FIGURE 14-17 (JA1).

Source: From "Eminem vs. Charley Pride: Race, Stereotypes and Perceptions of Rap and Country Music Performers," by A. J. Dickson, T. A. Giuliano, J. C. Morris, and K. L. Cass, 2001, *Psi Chi Journal of Undergraduate Research, 6*, pp. 175–180. Copyright © 2001 Psi Chi, The National Honor Society in Psychology (www.psichi.org). Reprinted by permission. All rights reserved.

Because stereotypes can influence the judgments and behaviors of perceivers, deviations from a stereotype should have similar effects. In general, the expectations of the perceiver and the extent to which these expectations are confirmed or disconfirmed can influence judgments. When behavior only slightly varies from expectations, the difference might not be noticed, but perceivers often magnify the discrepancy when actions differ significantly from expectations. This phenomenon is known as the contrast effect (Brehm, Kassin, & Fein, 1999). In fact, a person who displays behavior inconsistent with societal expectations is often evaluated more extremely than is a person who behaves consistently with expectations (Knight, Giuliano, & Sanchez-Ross, 2001). Jackson, Sullivan, and Hodge (1993) examined the effects of describing stereotype-consistent or stereotype-inconsistent behavior of Black out-group targets and White in-group targets on social evaluations made by participants who assessed a college application. They found that people who deviate from a norm are judged more extremely than if they behave as the norm dictates. Specifically, stereotype-inconsistent Black applicants with strong credentials were evaluated more favorably than were strong White applicants, and stereotype-inconsistent White applicants with weak credentials were evaluated less favorably than were weak Black applicants.

Both stereotypes and stereotype-inconsistent behavior affect the evaluations individuals make about other people in a variety of social interactions. Fried (1996, 1999) studied biased reactions involving the music industry and found that individuals had very different reactions to music labeled as *rap* or *country* despite the fact that the song lyrics were exactly the same. In two studies, she found that people generally considered rap music to be more violent and more offensive than country music. Furthermore, a folk song that was presented as being performed by a Black artist was judged more negatively than the very same song when it was presented as being performed by a White artist (Fried, 1996). Fried (1999) attributed her results to stereotypes in that rap is usually associated with Black culture whereas country music is often thought of as being a part of White culture. By priming a Black stereotype with the use of the label rap, it is possible that individuals apply negative stereotypes that have been shown to be associated with African Americans (Brigham, 1971). Therefore, racial stereotypes can impact evaluations of music performers (Fried, 1996, 1999).

According to Fiske and Taylor (1991), long-held stereotypes are not easily altered, but modification of stereotypes may begin with a divergence by stereotyped individuals or groups. Previous research has examined the effects of stereotypes and stereotype deviation on people's evaluations of other individuals (Jackson et al., 1993; Knight et al., 2001). The present study attempted to integrate and expand on these concepts in relation to the music industry. Specifically, whereas Fried (1996, 1999) examined the effect of either the race of the performer or the labeled genre of music of a song on evaluations about the music itself, the design of the present experiment explored the interactive effects of the race of the performer and the genre of music on participants' evaluations of the performer. In doing so, we explored the difference between perceptions of persons who adhere to social expectations versus persons who deviate from the stereotype.

Consistent with previous research (Jackson et al., 1993; Knight et al., 2001), we expected that participants would judge performers who behave consistently with social norms (i.e., Black rap artists and White country performers) more favorably than performers who deviate from societal expectations (i.e., White rap artists and Black country performers). That is, because country music is associated with White culture, a Black country performer does not exhibit behavior consistent with this stereotype and, as a result, this performer should elicit negative judgments. The same reaction should occur with a White rap artist because his or her behavior is inconsistent with the stereotype that rap is predominantly a part of Black culture.

Method

Participants

Data were collected from 100 undergraduates (48 men, 52 women) at Southwestern University, a small liberal arts college in the Southwest. Demographically, the university is composed primarily of White, middle- to upper middle-class students; as such, the current sample (which was representative of the campus at large) consisted almost exclusively of White students. Participant volunteers ranged in age from 18 to 26 years (M = 19.77 years). Data from four participants were excluded from the analysis because these participants either failed to follow instructions or they did not pass the manipulation check. Specifically, these participants were unable to identify the race of the performer and genre of his music that was presented in the their survey packet.

Design and Procedure

The present study used a 2 (race of performer: Black or White) × 2 (genre of music: rap or country) between-subjects design to explore the effect of the

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FIGURE 14-18 (JA2).

race of a performer and the genre of music on perceptions of the performer. We recruited participants from various locations on campus and asked them to contribute to an investigation exploring "people's perceptions of music." Once they agreed, participants viewed a picture of a male performer, read a brief biography about him, and read a lyric sample of his music. Next, they completed a survey in which they made judgments about the performer and his music, and they responded to filler questions concerning their taste in music in general to corroborate the cover story. Each participant was randomly assigned to one of four experimental conditions and read a profile of either a Black rap artist, a White rap artist, a Black country performer, or a White country performer. Measures of the primary dependent variable (i.e., how favorably participants rated the performers) were embedded among filler questions in the survey. Following completion of the survey and a brief manipulation check that focused on the performer's race and the genre of music, we explained the purpose of the present study to the participants and asked them not to discuss it with anyone.

Materials

A three-page experimental packet, which ostensibly contained a survey about people's perceptions of music, was distributed along with an envelope. The first page contained a "performer profile" and included a color picture of a Black or White male performer, a brief biography about him indicating that he was either a rap or country performer, and a lyric sample from one of his songs. The subsequent pages contained the survey, which was used to measure participants' reactions to what they had seen and read on the previous page.

Each performer profile contained a biography that included the name of the performer (i.e., D.J. Jones), his hometown (Atlanta, Georgia), and a brief summary of his musical career (e.g., "D.J. has been singing since he was 14, and recently signed a record deal with a major country label. He will soon be on an international tour opening for a popular country artist"). To create the sample song lyrics, we slightly altered and combined two rock songs (May, 1973; May & Staffell, 1973; see Appendix A). With the exception of the two manipulations, we used the same biography and song lyrics in each of the four experimental conditions. The first manipulation altered the genre of music (i.e., rap or country) that the artist performed. Specifically, the name of the performer and the type of music he performed was labeled beneath his picture, and this label coincided with the genre of music described in the biography. Next, a photograph manipulated the race of the performer so that each biography was accompanied by a picture of either a Black or a White man. To ensure that the only attribute differing between the Black and White performers was in fact race, we conducted a pilot test in a Research Methods class to match the Black and White performers on attractiveness and age. The participants in the pilot test were all White, which is representative of the ethnic composition of the participants in the present study. From a pool of 20 color photographs of nonfamous Black and White men selected from magazines, the two stimuli selected for the present study were most similar in perceived attractiveness and age.

Following the performer profile were the questions that assessed perceptions of the performer and his music, as well as the musical tastes of the participants. Embedded among demographic questions (e.g., sex and age) and other filler questions (e.g., "On average, how many CDs and/or tapes do you buy a month?") were the items that examined participants' perceptions of the performer. Specifically, participants rated on 7-point scales with endpoints labeled at 1 *(not at all)* and 7 *(very much)*: (a) "Overall, how much do you like this performer?"; (b) "How talented do you think this performer is?"; (c) "How legitimate is this performer?"; and finally (d) "How successful do you predict this performer will be in the music industry?" Because these items were highly correlated, they were combined into an overall index reflecting participants' favorability of the performer (Cronbach's $\alpha = .80$). The scores on the four items were averaged together, and consistent with the scales on the individual items, the overall index is on a 7-point scale with higher numbers representing a more favorable perception of the performer and lower numbers indicating an unfavorable perception.

Results

A 2 (race of performer: Black or White) × 2 (genre of music: rap or country) between-subjects analysis of variance (ANOVA) was performed on the index assessing the favorability of the performer (i.e., likability, perceived talent, perceived legitimacy, and predicted success). Data analysis revealed a significant main effect of race such that Black performers ($M = 4.32$, $SD = .91$) were rated more positively than were White performers ($M = 3.76$, $SD = 1.00$), $F(1, 92) = 10.42$, $p = .002$, $\eta^2 = .10$. However, this main effect was qualified by the significant two-way interaction between race of performer and genre of music, which was consistent with predictions, $F(1, 92) = 26.72$, $p = .0001$, $\eta^2 = .23$. An inspection of the means in Figure 1 shows that participants rated a Black rap artist ($M =$

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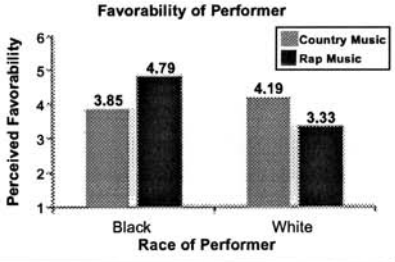
FIGURE 14-19 (JA3).

FIGURE 1

Mean ratings for favorability of the performer as a function of his race and the genre of music.



4.79, $SD = .68$) more favorably than a Black country artist ($M = 3.85$, $SD = .87$), $t(46) = 4.17$, $p = .0001$; however, they judged a White country artist ($M = 4.19$, $SD = .92$) more favorably than a White rap artist ($M = 3.33$, $SD = .91$), $t(46) = 3.24$, $p = .0001$. There was no main effect of genre of music, $F < 1$, *ns:* Participants reported similar ratings for rap performers ($M = 4.06$, $SD = 1.09$) and country performers ($M = 4.02$, $SD = .90$).

Discussion

The present study integrated and expanded on two lines of research. First, it extended previous research (Fried, 1996, 1999) on stereotyping involving the music industry. Whereas Fried (1996, 1999) examined reactions to music lyrics based on either the genre label or the performer's race, our study considered the interactive effect of both the race of the performer and the genre of music on people's evaluations of performers. The current study also differs from previous research conducted by Fried (1996, 1999) in that the lyrics in our study did not attempt to convey negative images such as violence or aggression. That is, Fried (1996, 1999) asked participants specifically about their negative impressions of the song lyrics (e.g., its offensiveness, its threat to society, its need for warning labels), whereas the current study emphasized overall impressions of the performer. Rap may be more often associated with negative topics, but these topics can be found in both rap and country music. We chose to use neutral lyrics in the present study because we were not focusing on the relation between negative themes and music genre. Instead, the current study was based on findings that rap is associated with a Black culture that has both positive and negative attributes (Brigham, 1971). We examined the connection between music genre and the stereotype-consistent or stereotype-inconsistent race of the performer. In our study, participants judged Black rap artists more favorably than Black country music performers, whereas they judged White country music performers more favorably than White rap artists. These results support the hypothesis that individuals who deviate from societal expectations are judged more negatively than are individuals who adhere to social norms (Jackson et al., 1993; Knight et al., 2001). Manis, Nelson, and Shedler (1988) found that extreme stereotypes yielded contrast effects when behavior was discrepant from the established stereotype. In the present study, Black country music performers and White rap artists contrast from fairly ingrained societal expectations and thus received more negative judgments than the performers who adhere to societal norms.

The present study could be extended in a number of ways. For example, like Fried's (1996, 1999) research, the current study also presented the lyric sample to participants on paper. It would be interesting to explore whether an audio-recorded lyric sample would affect participants' evaluations of performers or the music. Perhaps auditory processing and visual processing of stereotype-consistent and stereotype-inconsistent information differ. In addition, the present study could broaden its scope by including a more varied sample of participants. That is, future studies could incorporate participants of different races and ages. The data in the current study were collected primarily from White undergraduate students at a liberal arts university, and the results from such a homogenous sample may not necessarily generalize to alternative populations or settings. Furthermore, exploring alternate stereotype violations could support the findings of the present study, and one area of interest could be the world of sports. For instance, Black hockey players violate societal expectations similar to the apparent violation made by Black country music performers and White rap performers. According to our findings, Black hockey players would receive more negative evaluations than would White hockey players because their behavior is inconsistent with societal expectations.

Because the population of other minority groups (e.g., Latinos) is approaching that of the Black population in America, future research concerning racial stereotypes in the music industry could examine the impact of the increasing popularity of Latin music (Gonzales, 1990). Garcia and Zapatel (2000) recently examined how the labels *Black rap, Latino rap,* and

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FIGURE 14-20 (JA4).

alternative music influence perceptions made by both Anglo and Hispanic participants and found that participants' perceptions of music differed depending on their own race. Specifically, Hispanic participants judged music labeled *Latino rap* more positively than music labeled *alternative*, whereas Anglo participants rated music labeled *alternative* more favorably than music labeled *Latino rap*. Similar to previous findings (Jackson et al., 1993), out-group categories (i.e., *Latino rap* for Anglo participants and *alternative* music for Hispanic participants) were judged more negatively than were categories that corresponded to the participants' ethnicity. Extended to a more diverse sample, the present study could offer support for the idea that out-group categories are judged more negatively than in-group categories by examining the relation between participants' ethnicities and their evaluations of rap and country music. Thus, regardless of the race of the performer, Black participants would be expected to rate country music more negatively than rap music, whereas White participants would be expected to judge rap music more negatively than country music. Furthermore, it would be interesting to determine whether or not performers of Latin music will remain primarily Latin and to examine perceptions of stereotype-consistent and stereotype-inconsistent performers in this genre. If future performers do deviate from racial stereotypes, the present study suggests that non-Latino performers of Latin music would be perceived less favorably than would Latino performers.

In closing, Eminem and Charley Pride share a connection in that their actions deviate from widespread stereotypes that specific races are associated with certain types of music. Although people may recognize these two performers because of their musical talent, it is more likely that they are recognized because they were bold enough to defy stereotypes in the music industry. By being a White rap artist and a Black country music performer, Eminem and Charley Pride became forerunners for performers who do not adhere to social norms, and they may have possibly influenced numerous music fans to expect the unexpected.

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FIGURE 14-21 (JA5).

REVIEW SUMMARY

1. Psychologists have developed their own format, **APA style**, for the preparation of scientific reports.
2. The major sections of an APA paper include the title page, abstract, introduction, method, results, discussion, references, author note, tables, and figures.
3. The **title page** of a manuscript includes a manuscript page header and page number, the running head, the title, and author information.
4. The **abstract** provides a brief (100–120 words) summary of the contents of the paper.
5. The **introduction section** includes a thesis statement, literature review, and statement of the experimental hypothesis.
6. The **method section** contains a thorough description of the participants (**participants subsection**), the objects used in the experiment (**apparatus, materials, or testing instruments subsection**), and what took place during the study (**procedure subsection**).
7. The **results section** presents inferential and descriptive statistics to describe the experimental outcomes. **Figures** or **tables** may aid in presenting the statistical information.
8. In the **discussion section**, the researcher draws conclusions from the experiment by summarizing the results, comparing the results to previous research, and interpreting the results.
9. The **reference list** provides bibliographic information for any works cited in the paper. APA format includes different reference formats for periodical articles, books, chapters from edited books, and a host of other sources.
10. The **author note** allows the author to thank people for their help, cite a previous presentation of the findings, and designate a contact person for further information about the experiment.
11. The specific sections of the APA-format paper are designated by various headings. **Level 1** and **Level 3 headings** are most commonly used with experimental reports. For more complex papers, **Level 2** and **4 headings** may have to be added.

Check Your Progress

1. What is meant by the term *APA format*? Why was it developed?
2. Matching

1. manuscript page header	A. indicates the general topic you are interested in
2. running head	B. centered; upper- and lowercase letters
3. level 1 heading	C. first two or three words of the title
4. level 3 heading	D. left margin, underlined; upper- and lowercase letters
5. level 4 heading	E. condensed title
6. thesis statement	F. indented five spaces, underlined; only first word is capitalized; ends with period

3. Why is the abstract the most widely read section of most research reports?
4. How is the introduction section similar to what is found in a typical term paper? How is it different?
5. A citation includes three authors. The third citation of this study in the text should
   a. list all three authors
   b. list just the first author
   c. list the first author followed by et al.
   d. none of the above
6. List three different purposes of the method section. Which do you think is most important? Why?
7. We draw conclusions with _____ statistics and create a picture of our data with _____ statistics.
8. Could you use figures or tables as your sole information in a results section? Why or why not?
9. Some people believe that the discussion section is the most important section of an experiment report. Do you agree? Why or why not?
10. Why is the reference for a chapter from an edited book more complex than the reference for either a journal article or a book?
11. Matching:

1. title page	A. presents statistical findings
2. abstract	B. a short summary of the article
3. introduction	C. includes full address of author
4. method	D. reports the "bottom line" of the experiment
5. results	E. includes manuscript page header and running head
6. discussion	F. bibliographic information
7. references	G. reviews previous research
8. author note	H. tells how the experiment was conducted

Writing in APA Style

We hope that you were a good student in your English composition classes because good writing is quite important when it comes time to write your research report. Although we do not want to attempt to teach writing here, we do want to provide some helpful pointers. One of the topics covered in Chapter 2 of the *PM* is "expressing ideas." You should read that whole chapter carefully. In the next sections we will give you some general and specific guidelines to assist you in writing your research report. As you will see, there are some differences between APA style and the way you learned to write in English classes. Scientific writing style is different in many ways from creative writing.

General Guidelines

The main objective of scientific writing is clear communication. It is your job to communicate your ideas as clearly as possible to the reader. The *PM* provides you with several hints about how to accomplish this goal; be sure to read pages 31–40 in the *PM* to supplement the following information.

Orderly Presentation of Ideas The key idea here is continuity. From the beginning of your research report to the end, you are writing a continuous idea or thought in which you tell the reader about your experiment. Do you remember sitting in class and getting lost in a lecture because you couldn't tell where the teacher was going (or where the teacher had been)? Those little side excursions in a lecture ("chasing rabbits") may be a delightful diversion in class, but they do tend to make you lose track of where you're going. Don't detour as you write your manuscript. Get on track and stay there with a single-minded purpose.

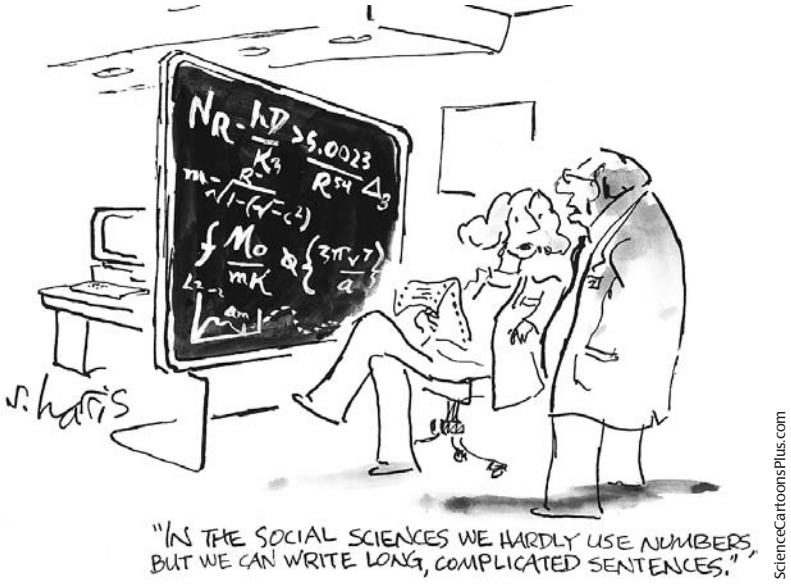
Smoothness of Expression Writing in a continuous fashion will greatly aid in your smoothness of expression. Creative writing often is not smooth because it uses literary devices to create tension or to conceal plot lines or to hide a surprise for later. Remember that scientific writing's goal is communication, not escape or entertainment. One of the best things you can do to make your writing smooth is to work on transition sentences when you shift from one topic to another. Try to avoid abrupt shifts that make readers feel they have run into a wall.

Economy of Expression Again, with your primary goal being communication, it is important to be direct and to the point in your writing. When journal editors work on submitted manuscripts, they have only a limited number of pages available for the printed journal; thus, it is to their advantage to have manuscripts that are short and communicative rather than long and unclear. Some people are surprised to find out that they can often shorten their writing and make it clearer at the same time. The *PM* specifically advises you to avoid jargon, wordiness, and redundancy. Also, you should not repeat yourself. (Yes, that second sentence was there on purpose—did you catch the unnecessary repetition?)

Precision and Clarity We encourage you to work on becoming a wordsmith rather than a wordmonger. As you probably know, a smith is someone who works with a particular material (e.g., a tinsmith, a goldsmith). A wordsmith works carefully with words, whereas a wordmonger uses words carelessly. Make sure the words you use fit the exact purpose and meaning that you have in mind. One of the major problems many of us have with writing is that we write in the same manner that we speak. Ambiguities may occur in speech, but we can clarify matters because we can interact directly with the speaker. Interaction is not possible when reading a text passage. Choose your words carefully so that you say just what you mean. Such clarity rarely occurs on a first attempt at writing: Reread and edit everything you write.

Strategies to Improve Writing Style The *PM* (APA, 2001, p. 40) suggests three approaches to becoming a more effective writer.

1. ***Write from an outline.*** If you have a "road map" for your writing, you are more likely to arrive at your destination in a timely fashion.
2. ***Write your first draft, put it away, and reread it after a delay.*** If you attempt to cram your writing into a short time period, you will have difficulty editing your writing because you are likely to have the same thoughts you had a few minutes earlier. By giving yourself a time break, you are more likely to see the things you missed the first time—and it will be easier to think of ways to correct the problems.



We hope you recognize that both statements in this cartoon are incorrect. In psychology, we do *use numbers and we work hard at communicating clearly.*

3. ***Ask someone to evaluate your writing.*** It is usually quite helpful to have at least one other person read your papers before you submit them. It is easier for someone who is unfamiliar with the work to spot inconsistencies, weaknesses, ambiguities, and other flaws in your writing. Of course, you are asking *only* for a critique of your writing style, not the substance of your paper. Having someone help you with substance is unethical unless that person is a coauthor. Some instructors offer to critique rough drafts of your work—you should always take advantage of such an offer. Ask classmates to critique your writing and offer to do the same for them. You may learn a great deal both from their critiques and from reading and critiquing someone else's writing.

Grammatical Guidelines

The *PM* covers a variety of guidelines about grammar on pages 40–61. Most of these guidelines are standard conventions of grammar that you learned in grammar classes. We urge you to review these pages. Rather than turning this book into a grammar handbook at this point, we will cover only those conventions that are specific to APA style or with which students seem to have difficulty.

Passive Voice According to the *PM*, as well as other style guides, you should use active voice rather than passive voice in writing your research report. In passive voice, the true object of the verb becomes the subject of the sentence and the true subject becomes the object (Bellquist, 1993). Passive voice often appears in methods sections because writers use the passivity to avoid personalizing that section. Let us give an example to clarify:

After viewing the slides, a recall test was given to participants.

This sentence is not direct and active; rather, it is indirect and passive. The test should be the object of the sentence, not the subject. Who did the acting? Presumably the experimenter did, but the experimenter is not even present in this sentence.

Reread the passive voice sentence. Can you recast it in active voice?

Actually, there are several ways to change this sentence into an active voice, depending on whether you want to include the experimenter. You could write,

> I gave the participants a recall test after they viewed the slides.

If you have coauthors for your experiment, the sentence could become this:

> We gave the participants a recall test after they viewed the slides.

Although many experimenters seem to be uncomfortable using first person (*I, we*), the *PM* does permit it. In fact, the manual specifically says to avoid third-person references to yourself (e.g., "the experimenter," pp. 37–38). If you still wish to avoid first person, you could write,

> The participants completed a recall test after viewing the slides.

In each of these sample sentences, you now have actors acting (active voice) rather than having something done to them (passive voice).

That* Versus *Which Clauses beginning with *that* are termed restrictive clauses and should be essential to the meaning of the sentence. Clauses beginning with *which* can be either restrictive or nonrestrictive (simply adding additional information). In APA style, you should confine yourself to using *which* for nonrestrictive clauses. Thus, you should not use *that* and *which* interchangeably. Using *which* is similar to making an "oh, by the way" addition to your sentence. To further help you distinguish the difference, remember that nonrestrictive clauses should be set off with commas. Let's look at an example:

> The stimulus items *that* the participants did not recall were the more difficult items.

The phrase "that the participants did not recall" is essential to the sentence's meaning. Imagine the sentence without that phrase—it would make no sense. Let's look at another sentence:

> The stimulus items, *which* were nouns, appeared on a computer monitor.

The phrase "which were nouns" is not essential to the meaning of this sentence. If we delete this phrase, the sentence retains its original meaning. The phrase does add some additional information about the stimulus items, but you could include this information elsewhere.

Words With Temporal Meaning The words *since* and *while* can cause difficulty in scientific writing because they have more than one meaning in everyday usage. Writers often use *since* interchangeably with *because* and use *while* to substitute for *although*. Some grammar

books allow these multiple uses. APA style, however, does not. You should use *since* and *while* only for temporal purposes—in other words, to make time comparisons. Thus, use *while* to denote events that occur at the same time and *since* to denote that time has passed. Again, here are some examples:

> Many different IQ tests have evolved *since* Binet's original version.

Note that here *since* refers to time that occurred after Binet's test; this sentence is acceptable.

> *Since* the XYZ group scored higher, we concluded that they learned the material better.

This use of *since* is incorrect; you should substitute *because* in its place.

> *While* the participants were studying the verbal items, they heard music.

Note that *while* in this sentence tells you that studying and music playing occurred simultaneously; this sentence is acceptable.

> *While* some psychologists believe in Skinner's ideas, many others have rejected his beliefs.

This use of *while* is incorrect—nothing is occurring at the same time. Instead, a contrast is being drawn. You should substitute *although* or *whereas* in this sentence.

Bias in Language Remember that we stressed the use of unbiased language earlier in this chapter. We believe that this type of writing is important in helping maintain a neutral (unbiased) approach to science. Thus, we wish to remind you of the need for removing biased terms from your writing. The *PM* gives three guidelines that may be helpful in reducing bias in writing (APA, 2001, pp. 61–76).

- ***Describe at the appropriate level of specificity.*** In other words, you should describe people as specifically as you can. When we use broad terms to describe people, we are more likely to include people who should not be included. For example, "Japanese Americans" is more specific than "Asian Americans."
- ***Be sensitive to labels.*** When we use stereotyped labels, we are likely using terms that contain bias. Basically, we should refer to groups as they wish to be referred to rather than imposing our labels on them. When at all possible, it is better to avoid labels. As the *PM* points out, "people diagnosed with schizophrenia" is both more accurate and more preferred than "schizophrenics" (APA, 2001, p. 64).
- ***Acknowledge participation.*** This guideline is generally aimed at experiments that use human participants, although it would not hurt us to keep it in mind for animal studies also. The general idea of this guideline is to make sure you remember that the participants in your experiment are individuals. This idea formed the rationale for changing the label *subjects* to the label *participants*. Using active rather than passive voice also helps to personalize your participants.

A Disclaimer Please remember that we could not possibly squeeze all the grammar guidelines from the *PM* into this section. Again, we chose to highlight the few that we did because they may differ from what you learned in English classes or because we know that students (and professors) tend to have trouble with these points of grammar and usage. We did not leave out the others because they are unimportant or even less important. We urge you to read pages 40–61 in the *PM* to review your knowledge of grammar.

APA Editorial Style

Chapter 3 of the *PM* addresses APA editorial style on pages 77–214—virtually a third of the book. This chapter gives writers a style guide to follow that will help create uniformity in writing by different authors in different publications. We have already covered the most important aspects of APA editorial style in this chapter: levels of headings, metrication, statistical copy in text, tables, figures, reference citations in text, and reference lists.

In addition to these important aspects of APA editorial style, you should be aware that the *PM* gives you guidance on such issues as punctuation, spelling, capitalization, italics, abbreviations, seriation, quotations, numbers, footnotes, and appendixes. Again, we do not have the space it would take to address every possible concern in this chapter. When you have questions about any of these matters, consult Chapter 3 in the *PM*.

Preparing Your Manuscript

Chapter 5 of the *PM* (pp. 283–320) provides the guidelines you need in order to type your experimental paper. This is probably one of the most-used chapters in the manual because it includes three sample papers (pp. 306–320). These sample papers include notations of specific *PM* sections for each important component of the paper. We hope that the combination of the sample manuscript in this chapter and the sample papers given in the *PM* will make typing your paper a relatively simple matter.

Chapter 5 of the *PM* is primarily a reference chapter much like Chapters 3 and 4. You should consult it whenever you have a question about typing a specific portion of your manuscript. Let us provide you with a short list of the highlights of the typing instructions:

- ***Line spacing*** Double-space everything everywhere.
- ***Margins.*** Use at least 1-inch margins on all sides. Keep in mind that for the top margin, this figure refers to the point at which the text begins rather than the manuscript page header and number. Thus, you can set the top margin in your word processor to less than 1 inch so that the text begins at least 1 inch down from the top of the paper.
- ***Lines.*** Set your word processor to left justification. Your paper should have a ragged right edge throughout (i.e., the right margin should *not* line up down the page like it does in this book). Do not divide or hyphenate words between lines.
- ***Pages.*** Number all pages (including the title page; excepting figures) consecutively. The following sections should begin on new pages: title page, abstract, introduction (remember not to label it *Introduction*), references, appendixes, author note, footnotes, tables (a separate page for each), figure captions (all on one sheet), figures (each on a separate page).
- ***Word spacing.*** Space once after all punctuation, including plus and minus signs in equations. There is no spacing before or after hyphens (-) or dashes (– or —). Use a hyphen to denote a negative value; in this case use a space before the hyphen but not after.
- ***Quotations.*** Enclose quotations that are shorter than 40 words in double quotation marks (" ") and write them as part of the text. You should block (indent) longer quotations from the left margin—be sure to double-space them.

Consult Table 14-2 for more comprehensive guidelines regarding APA formatting of your manuscript. If you have questions about other matters as you type your manuscript, consult Chapter 5 of the *PM*.

TABLE 14-2 Checklist for Correct APA Formatting

General Formatting and Typing

	Publication Manual Section
• There are 1-in. (2.54-cm) margins on all four sides of each page of the manuscript.	5.04
• The typeface is the correct size (12 points on a word processor) and the correct style (serif typefaces such as Courier or Times Roman).	5.02
• The manuscript is double-spaced throughout, including title page, references, tables, figure captions, author notes, and appendixes.	5.03
• The page header is the first two or three words of the title.	5.06
• The page number appears (a) on the same line with the page header and is five spaces to the right or (b) below the page header.	5.06
• The page header and page number are typed at the top of each page of the manuscript (except pages containing figures).	5.06
• The page header and figure number are handwritten on the back of figures (or on the front, outside the image area of the figure).	5.22
• There is only one space after these punctuation marks: commas, colons, semicolons, punctuation at the end of sentences, periods in citations, and all periods in the references section.	5.11
• URLs should work; in Reference list they should have no end punctuation.	4.15, 4.16
• Lowercase letters in parentheses have been used to indicate a series of events or items within a paragraph.	5.12
• Words are not broken (hyphenated) at the end of a line.	5.04
• All units of measurements have correct abbreviations.	3.25, 3.51
• Arabic numbers have been used correctly to express	3.42
all numbers in the abstract	
numbers that are 10 or larger	
numbers less than 10 *only when* those numbers are compared to a number greater than 10 (e.g., "Participants included 15 humanities and 3 natural science majors.")	
numbers that immediately precede a unit of measurement	
numbers that represent fractions and percentages	
numbers that represent times, dates, ages, participants, samples, populations, scores, or points on a scale	
Words have been correctly used to express	3.43
numbers less than 10	
numbers at the beginning of a title, sentence, or heading	

(*Continued*)

TABLE 14-2 (Continued)

	Publication Manual Section
Title Page	
The running head is aligned with the left margin and is equal to or less than 50 characters and spaces long.	1.06, 5.15
The author note *does not* appear on the title page; instead, the author note appears on a separate page after tables, figures, and appendixes (if included).	3.89, 5.20
Abstract	
The word Abstract is typed at the top of the page.	5.16
The first line of the abstract is even with the left margin.	5.16
The abstract is not more than 120 words.	1.07, 5.16
Body of the Manuscript	
There are *no* one-sentence paragraphs.	2.03
Gender-inclusive language is used through plural pronouns (e.g., *they, their*), by using nouns (e.g., *one, an individual, participant's*), by sparse use of *he or she* or *she or he*, or by sparse use of alternating between gendered pronouns (e.g., *he . . . ; she . . .*).	2.13
The words *male* and *female* are used *only* as adjectives (e.g., *female* quail), whereas the words *men, women, boys,* and *girls* are used as nouns.	Table 2.1
Quotations are word-for-word accurate and page numbers are provided.	3.35, 3,39
The word *while* is used *only* to indicate events that take place simultaneously (alternatives: *although, whereas, and, but*).	2.10
The word *since* is used *only* to indicate the passage of time (alternative: *because*).	2.10
Terms that are abbreviated are written out completely the first time they are used, then always abbreviated thereafter.	3.21
Latin abbreviations are used sparingly and *only* in parenthetical material.	3.24
The word *and* is used in citations outside of parentheses.	3.95
The ampersand (&) is used in citations within parentheses.	3.07, 3.95
When two or more citations are in parentheses, the citations are typed in the same order in which they appear in the references section.	3.99

(*Continued*)

TABLE 14-2 (Continued)

	Publication Manual Section
Each and every citation used in the manuscript is correctly typed in the references section.	4.01, 4.02
The phrase *et al.* is used with each citation that lists six or more authors, and with each citation that lists three to five authors *after* the first instance of that citation.	3.95
In the method section the word *participants* is consistently used (use *subjects* only with animals).	1.09, 2.12
In the results section all test statistics (e.g., *F, t, p*) are italicized.	3.19, 3.58
References Section	
All entries are typed in alphabetical order.	4.04
Each and every entry occurs in the body of the manuscript.	4.01
Authors' names are separated by commas.	4.08
The volume numbers of journals are italicized.	4.11
Each entry is typed in a "hanging indent" format, meaning that the first line of each reference is flush with the left margin and subsequent lines are indented.	4.07, 5.18
The names of journals, book chapters, and books are correctly capitalized.	4.11

Source: Adapted from Dunn, J., Ford, K., Rewey, K. L., Juve, A., Weiser, J. A., and Davis, S. F. (2001). "A Modified Presubmission Checklist." *Psi Chi Journal of Undergraduate Research, 6,* 142–144. Copyright © 2001 Psi Chi., The National Honor Society in Psychology (www.psichi.org). Reprinted by permission. All rights reserved.

Student Views of Professional Activities

Preparing an APA-format paper does indeed involve a reasonable amount of effort; however, the rewards for this effort are genuine and substantial. You will have mastered a valuable skill, writing in an accepted scientific format, and you will have a completed paper that you can submit for publication. Throughout this book we have "gently encouraged" you to take advantage of professional development opportunities such as presenting your research at a convention and publishing your research. Let's conclude with a more in-depth look at these professional activities. They are not as daunting as you might think.

Your first decision will be which type of professional activity to pursue. In Chapter 1 we talked about sharing your results through presentation and publication. In this chapter we have primarily focused on publication with Dickson's paper. You may, of course, have two different types of presentation opportunities: presenting your research in either a poster or paper format at a conference (see Chapter 1 for a list of possible conferences). In a poster format, you

will display your research in a visual format—most often a small amount of text to inform viewers about the basics of your experiment plus graphs, figures, or charts to depict your findings. Typically, poster sessions take place in a large room with quite a few researchers displaying posters simultaneously. Conference attendees walk through the room to view the posters, often stopping to converse with researchers whose posters interest them. They may have questions for you or offer suggestions for further research on your topic.

On the other hand, a paper presentation consists of making an oral presentation of your research. You might have 10–15 minutes to talk about your research and findings in a room where people are seated. Typically, you would give a brief summary of the background literature, your methodology, your findings, and the implications of your research—much like the order of the sections in your written paper. Researchers presenting talks often display their findings visually with overhead transparencies or computer projection systems. Usually, the audience has a few minutes after your presentation to ask questions.

If you plan on attending a conference to make either a poster or paper presentation, you typically will have to submit an abstract of your presentation to the conference organizers for their review. The organizers will choose to accept or reject each abstract submitted. Depending on the type of conference, the rate of acceptance will vary; typically, conferences designed specifically for undergraduates will have high rates of acceptance. Professional conferences designed more for graduate students and faculty often have lower rates of acceptance. Because of the review process, conference presentations are considered professional activities; you can record such activities on your vita (an academic version of a résumé, see Landrum & Davis, 2007). Researchers often make a presentation of their research at a conference before attempting to publish that research. The feedback you receive from an audience might help you improve your manuscript before you pursue publication.

If you decide to try to publish your research, your faculty advisor can assist you in deciding where to submit your paper (we made some suggestions in Chapter 1). Once you have made that decision, you should consult a recent issue of the journal you have selected to determine exactly how many copies to send, as well as any other special requirements the journal may have. Follow these instructions *very* carefully. When your submission is received, the editor, most likely, will send your paper to several (usually three) reviewers who will read, critique, and evaluate your work. After the reviewers have finished reading and critiquing your paper, each one will make a publication recommendation (such as accept, accept pending minor revisions, accept pending major revisions, or reject) to the editor. The editor will evaluate the reviewers' recommendations and comments and make a final publication decision about your paper. The editor's letter describing the publication decision, as well as the reviewers' comments and critiques (often including the copies of your paper that they have marked and returned to the editor), is then returned to you. This process can take two or more months, so be patient.

It is likely that you will have to revise your paper one or more times before the editor and reviewers determine it is suitable for publication. Don't give up! If you are interested in understanding the publication process from the editor's point of view, we recommend that you read Smith's (1998) article. Consult with your faculty advisor at each step of the process. Having a publication is well worth the time and effort you will expend.

Very briefly, those are our views on these professional activities; we have asked three students to give you their views about them. We turn now to the students' views of making a poster presentation, presenting a paper, and publishing an article.

Presenting a Poster at an Undergraduate Psychology Conference

I spent most of my undergraduate college career as a nontraditional student, meaning older than the other students and working a full-time job. When I began to reach the end of my undergraduate studies and really started thinking about graduate school, I found out quickly that with the ratio of applications to acceptances given for my chosen field, I would need something to set myself apart from the other applicants.

I began taking advantage of the advising sessions offered at my university and found out that I could do research projects with my professors. These research projects included gaining IRB approval, setting up surveys, informed consents, debriefing forms, administering surveys, setting up the database, and data analysis. I found immediately that I loved research!

One project I developed was entitled *Sexual Orientation and Family Dynamics: Exploration of the Psychosocial View*; it was based on my interest in prejudicial attitudes. I developed this project while I was in a Human Sexuality class. There was a passage in my textbook that mentioned the psychosocial view of sexuality, which is basically the idea that nurture causes sexuality to develop. Two panels of Lesbian, Gay, Bisexual, and Transgender (LGBT) individuals spoke to our class; they discussed their development and talked about their feelings and the reactions of family and friends. I noticed a common theme with almost every speaker. They all stated that they knew very early in childhood (between the ages of 3 and 5) that they were "different" from their peers. This information made me question the psychosocial theory.

Once I had developed a working survey, I completed the paperwork for IRB approval. This process went smoothly. Most of the professors in the psychology department at my university encouraged their students to participate, and I soon had over 200 participants from my department alone.

I was extremely proud of this research; when the results showed something new, I wanted to share it. My faculty mentors encouraged me to present my research at a regional conference for undergraduates in my area. I submitted my application and received approval to present a poster within a week. My next challenge was finding what information needed to be displayed in this session. My mentors suggested that Ilimit my poster to 10–12 PowerPoint sheets for the sake of clarity. I found that the hardest part of the entire process was picking and choosing the most important parts. Finally, I cut my presentation down from 37 to 12 PowerPoint sheets.

My poster session was presented at the Georgia Undergraduate Research in Psychology (GURP) Conference; this conference is held for all universities in the Southeastern U.S. One note that I would like to add here is that many universities have monies set aside for students to attend and present oral papers and posters at conferences. I encourage you to explore the possibility of obtaining university funding; attending a conference can be expensive. I was fortunate enough to have professors who gave me this information and helped me obtain the funding I needed.

The morning of the conference, I think I changed clothes about 10 times. I have given presentations in class—my position as a teacher's aide allowed me to give lectures; however, poster sessions are different. Your material is set up on a poster board. The people at the conference are other psychology students and professors. These

attendees walk around and read the posters that interest them. Hence, you give mini-lectures about your poster to ever-changing groups. It still seems odd to me that I was "teaching" my professors about a topic that they had not previously studied.

The experience of going to GURP was very rewarding. I was able to expand my knowledge in an area that interested me. I was also able to share my findings with others who were interested in the same topic area. This conference allowed me to network with people who are currently at universities that I was researching as potential graduate schools. These conversations helped me to narrow my focus and refine my list of potential universities, as well as giving me very important tips for my applications. This experience gave me a lot of important knowledge for my continued education, allowed me to network, get comfortable in front of crowds, and guide the direction of my future pursuits.

Deborah J. Kemp
Kennesaw State University

The Catalyst for Becoming a Professional Psychologist

When pursuing a career in psychology you will face many challenging tasks. Undergraduates constantly learn new information, take tests, and strive to succeed. One challenge many undergraduates face is giving an oral presentation for the first time. This task can seem overwhelming and intimidating. However, with a few steps and guidelines to help along the way, I believe any willing student can succeed in this task. In the end, all the hard work will pay off when the once unbearable oral presentation turns into a catalyst for a successful undergraduate career in psychology.

I was first given the intense but bearable task of giving an oral presentation my sophomore year in college. I enrolled in an honors section of a research and statistics class and was given the assignment of conducting a literature review to support my research project. This literature review eventually became a presentation to be given orally at an undergraduate psychology conference. Because I had never conducted any research, performed a literature review, or given an oral presentation, this task was most challenging. I picked my oral presentation topic to support my research project on the effect of clothes and misinformation on test scores. The final topic I agreed to present was experimenter effects. I found this topic of specific interest because of its constant threat to all experimental research. I began my literature review by accumulating articles to support the fact that experimenter effects exist; I found myself swimming in a sea of information. I did not know how to condense all this useful information into one cohesive oral presentation. Moreover, my oral presentation was limited to 12 minutes. During this time I had to summarize a vast amount of data and convince the audience that experimenter effects exist and are very important. The task of pulling together all my information and summarizing the data into a short set of PowerPoint slides set the stage for my oral presentation at the 2005 Great Plains Students' Psychology Convention held in Omaha, NE.

I believe the most challenging part of making an oral presentation is speaking to the audience. This comment may sound like simple stage fright, but in reality the hard part is speaking to your audience and not reading your notes or PowerPoint slides. In order to present successfully, the speaker must know the information so that

he/she can explain the topic instead of simply reading to the audience. Some advice from my faculty mentor helped me learn how to explain and not read my paper. She told me to think of presenting orally as teaching, not presenting information. When thinking of an oral presentation as a lecture I was able to have more confidence, because I thought of myself as a teacher. When teaching a subject the lecturer thinks that he/she knows more about the subject matter than the audience. This added confidence helps the presenter speak to the audience instead of reading to them. Presenting/lecturing to my audience took some practice. First I practiced in front of my faculty mentor. By this time I had already read my information numerous times in order to make my PowerPoint slides. All I needed to do was get in front of my professor and talk to her as though I was teaching her about what I had read and learned. I was amazed at how confident I was at knowing my information. The only problem I had was the 12-minute time limit; I went over time. So I had to go home and practice more, so that I could get my time down, while still covering all the relevant information. This task was very similar to my earlier task of condensing information from my literature review to fit into a PowerPoint. I then practiced in front of my peers, and they helped me to see portions of presentation that were not as understandable as the rest of the talk. Then I practiced about five times in front of my peers and faculty mentor and numerous times to myself. With each practice I gained a bit more confidence.

Going to the Great Plains Conference was an intensely enjoyable experience. I spent time with my friends, met new influential individuals, and gained knowledge about my favorite field: psychology. When I first arrived at the conference I needed to prepare for my presentation. I found the room I was to present in, downloaded my PowerPoint slides, and waited for my time to speak. When I first stood in front of my professors, peers, influential professionals, and session judges, I was nervous. I shook at the thought that I could mess up in front of all these people who had a direct bearing on my future in psychology. However, as I began my lecture and did make a mistake, I took a moment to laugh at myself, and that helped me to calm down. I realized that the people in the audience were listening, not judging. The audience is there because they support you; they hope you will succeed. I began to relax, and I taught my audience all I knew about experimenter effects. My first oral presentation was over; I had survived!

I was thrilled when it was announced that I had won the first-place award in my session. In addition to this recognition I made new professional relationships and grew professionally by attending the conference. I believe that you can have just as much success making an oral presentation if you stay organized, practice, and have confidence in yourself. Making an oral presentation can act as a catalyst for a successful career in psychology.

Christine Yates
Emporia State University

In Chapters 4 and 8 you read about Carolyn Licht's research on occupational stress. Here are Carolyn's views on the publication process.

The Dance of the Researcher

The publication process is both a frustrating and exhilarating experience. It takes commitment, perseverance, and discipline to make it to the culminating moment in

which you see your work in print. When that moment happens, all the time and effort expended is forgotten and all you feel like doing is getting up and dancing a jig.

I had my first opportunity to discover the exhilaration associated with conceptualizing, analyzing, and preparing my research for presentation and publication as a sophomore in college. I had never done any formal research of any kind before, having been a ballet dancer for the previous decade of my life, and was a bit overwhelmed when my first assignment for my Experimental Psychology was to create and execute a project from scratch. I decided to pick a subject that was something I and others could easily relate to—occupational stress. If I had known how consuming the research would become over the next few years, I probably would have picked a less "stressful" topic. This school assignment opened my eyes to the limitations, obstacles, and rewards faced by researchers trying to develop a workable hypothesis, gather and analyze data, and present results.

What I found to be the most interesting aspect about the research and publication process, ironically, was how closely it paralleled the work I did in my previous career as a professional ballet dancer. The ultimate goal and satisfaction of both endeavors is the sharing of your labor with others outside of your immediate circle. The journey that must be taken to get to this point is full of frustrations, obstacles, criticisms, and excitement; the cliché "No pain, No gain" seems apropos to characterize the overall process. The "dance" begins with an idea that takes form as the dancer/researcher collects the data (choreography and music/literature review and survey results), begins the rehearsal process, and analyzes all the components to see how they come together. The frustration of realizing that the pieces are not flowing together as smoothly as predicted, such as when you send out 500 surveys and receive only 100 completed ones back, is reminiscent of discovering that you have run out of choreography before the music is over. Ultimately you must return to the drawing board and either collect more data or reconceptualize the original premise of the piece. Eventually, however, a moment arrives in which what once was only an idea in your mind becomes a reality, although the form it takes may be far from what you had originally conceived.

The pride you feel when you have completed the research and submitted it to a journal for publication is similar to the joy you feel when you perform your dance for the first time on stage. You learn quickly, however, as you receive your first critiques from the journal reviewers, that you are still in dress rehearsal and are far from being ready for the final performance. I remember vividly the crushing feeling I got when I opened the large manila envelope containing the four drafts of my "perfect" paper, only to discover the massive number of red marks and comments concerning everything that was wrong and needed to be addressed before my work would even be considered for publication. The fact that many of the various suggestions from the reviewers were contradictory (one loved a section of the paper while another said it should be deleted altogether) only added to my feelings of despair. Gratefully in the midst of all the criticism was also the glimmer of hope, the encouragement I needed to "rehearse" a bit longer, which consisted of a simple checked box on the comment sheets from the reviewers; the box marked was "accepted pending revisions" as opposed to the one next to it that said "rejection." With less work than I had anticipated, the next box to be checked would be the one marked "accepted for publication"; all the effort and energy

exerted no longer seemed at all troublesome as the excitement of the pending publication became the focus of my attention.

When I saw my name in print, the feeling of pride and the boost to my self-esteem was incredible, but as I read my article in the journal, I realized that this was just the first step in what was going to be a lifelong journey in the field of psychology. I looked at my paper and understood that although my results were fascinating, they were limited because of the nature of the question and the research design. I wanted—no, I needed to discover if my findings were true on a larger scope, with a diverse population, in different settings. I knew at that moment what so many researchers before me have learned, that research questions are never definitively answered; rather, they simply raise more questions that stimulate the researcher to continue the journey exploring the path ahead.

Ultimately, this college experimental research assignment resulted in two publications in the *Psi Chi Journal of Undergraduate Research* (Licht, 2000; Licht & Solomon, 2001), a poster presentation at the Eastern Psychological Association's National Convention in Baltimore, an oral presentation at the Honors Colloquium at my college, citations in two textbooks, and, most importantly, it was a substantial contributing factor to my decision to pursue and eventual acceptance into a doctoral program in Clinical Psychology. In addition, I discovered, through my numerous interactions with the editor of the journal, that the publication process is a way to connect with others in the field, and to develop professional relationships and true friendships that become the true rewards of taking this particular journey.

Carolyn Licht
Marymount Manhattan College

We hope that you, too, will have the opportunity to have the experience of presenting your research as Deborah and Christine did and publishing your manuscript like Carolyn. Although there is hard work involved, the payoff is worth it all. We will remind you of the publication opportunities we mentioned in Chapter 1. As we have stressed throughout this book, publishing is not something that is beyond your capabilities. If you never give it a try, you certainly can't succeed. Good luck!

REVIEW SUMMARY

1. The primary goal of scientific writing is clear communication.
2. Goals that aid in clear communication are orderly presentation of ideas, smoothness of expression, economy of expression, and a striving for precision and clarity.
3. To improve your writing style, you should write from an outline, put away your first draft before editing it, and have someone evaluate your writing.
4. You should use active voice whenever possible in writing your research report.
5. *That* should be used only with restrictive clauses, which include information that is essential to the meaning of a sentence. *Which* should be used in nonrestrictive clauses, which add information but are not essential to a sentence's meaning.

6. *Since* should not be used to substitute for *because*, nor should *while* substitute for *although*. Both *since* and *while* should be used only for temporal (time-related) meaning.
7. Psychologists strive to use unbiased language in their writing.
8. APA style includes guidelines on such diverse matters as punctuation, capitalization, quotations, numbers, appendixes, and typing guidelines.
9. The *Publication Manual of the American Psychological Association* (2001) is the stylebook for psychological writing. It contains a wealth of information about the writing process.

Check Your Progress

1. What would be wrong with writing your research paper in the style of Twain, Hemingway, or Faulkner? Be as specific as possible in your answer.

2. What are the three strategies to improve your writing style? As you list each strategy, also tell what you would have to change about your writing style to incorporate the strategy.

3. Which of the following illustrates passive voice?
   a. The experimenter gave the memory test to the participants.
   b. The participants took the personality test after a rest period.
   c. The endurance test was given by the experimenter's assistant.
   d. All of the above.
   e. None of the above.

4. Change each of the following sentences in passive voice to active voice.
   a. An experiment was conducted by Jones (1995).
   b. The participants were seated in desks around the room.
   c. The stimulus items were projected from the rear of the cubicle.
   d. A significant interaction was found.

5. Choose the correct sentence from each pair below. Add punctuation if necessary. Explain your answers.
   a. The experimenter tested the animals which were older first.
      The experimenter tested the animals that were older first.
   b. A room which was a classroom was the testing environment.
      A room that was a classroom was the testing environment.

6. Decide whether each sentence below is correct or incorrect. If it is incorrect, correct it.
   a. Since you are older, you should go first.
   b. Since I began that class, I have learned much about statistics.
   c. While we are watching TV, we can also study.
   d. While you are older than I, I should still go first.

7. Use unbiased language to express each phrase.

Orientals	elderly
mankind	girls and men
mothering	chairman
homosexuals	depressives

8. Correct the following incorrect expressions.

$a + b = c$	trial - by - trial
-1	Enter: Your name

Key Terms

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Looking Ahead

At this point we have reached the end of this text—there is no Chapter 15. We do, however, look ahead to your research career. Perhaps your research career will be nonexistent; you may not be required to design, plan, and conduct an experiment as part of this course or another course. In this case we hope you have learned something about research that will make you a critical consumer of research information in the future. Perhaps your research career will entail only one study—the one you conduct for this course. We believe this book will prove helpful for you in that endeavor. Finally, perhaps some of you now envision an ongoing research career for yourselves. We hope this book has opened your eyes to the powerful possibilities of experimental research in psychology and that you are eager to follow that path in the future.

Regardless of what your future plans regarding research are, we hope we have made you think, challenged you to work, helped you contemplate conducting research, and perhaps entertained and amused you a little along the way. All of you will be faced with research in some fashion in your future. We wish you luck as you begin your journey.