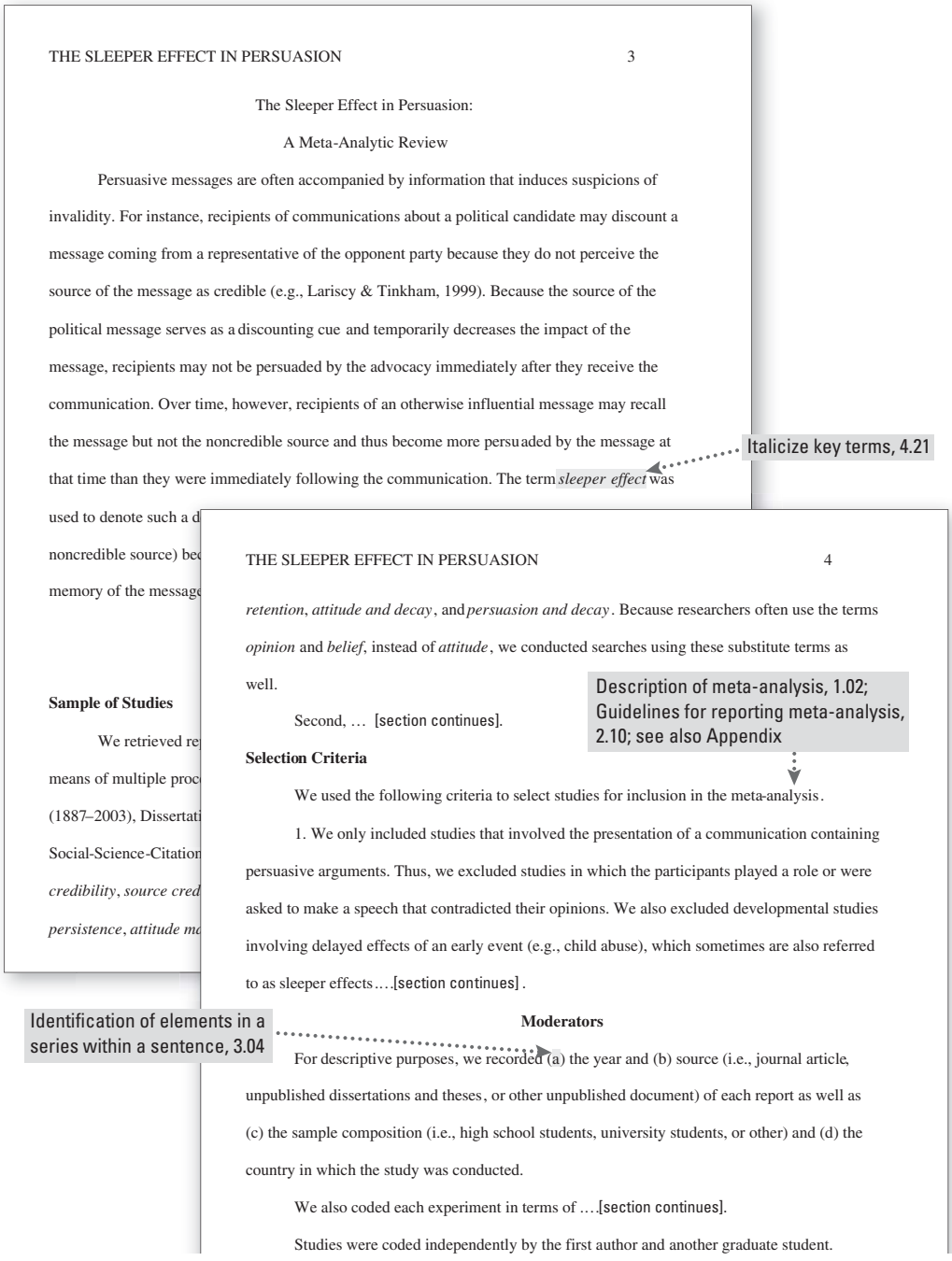
Figure 2.3. Sample Meta-Analysis (The numbers refer to numbered sections in the *Publication Manual*. This abridged manuscript illustrates the organizational structure characteristic of reports of meta-analyses. Of course, a complete meta-analysis would include a title page, an abstract page, and so forth.)



THE SLEEPER EFFECT IN PERSUASION 3

The Sleeper Effect in Persuasion:

A Meta-Analytic Review

Persuasive messages are often accompanied by information that induces suspicions of invalidity. For instance, recipients of communications about a political candidate may discount a message coming from a representative of the opponent party because they do not perceive the source of the message as credible (e.g., Lariscy & Tinkham, 1999). Because the source of the political message serves as a discounting cue and temporarily decreases the impact of the message, recipients may not be persuaded by the advocacy immediately after they receive the communication. Over time, however, recipients of an otherwise influential message may recall the message but not the noncredible source and thus become more persuaded by the message at that time than they were immediately following the communication. The term *sleeper effect* was used to denote such a d
noncredible source) bec
memory of the message

Italicize key terms, 4.21

THE SLEEPER EFFECT IN PERSUASION 4

retention, *attitude and decay*, and *persuasion and decay*. Because researchers often use the terms *opinion* and *belief*, instead of *attitude*, we conducted searches using these substitute terms as well.

Second, … [section continues].

Description of meta-analysis, 1.02; Guidelines for reporting meta-analysis, 2.10; see also Appendix

Sample of Studies

We retrieved re
means of multiple proc
(1887–2003), Dissertati
Social-Science-Citation
credibility, *source cred*
persistence, *attitude m*

Selection Criteria

We used the following criteria to select studies for inclusion in the meta-analysis.

1. We only included studies that involved the presentation of a communication containing persuasive arguments. Thus, we excluded studies in which the participants played a role or were asked to make a speech that contradicted their opinions. We also excluded developmental studies involving delayed effects of an early event (e.g., child abuse), which sometimes are also referred to as sleeper effects….[section continues].

Identification of elements in a series within a sentence, 3.04

Moderators

For descriptive purposes, we recorded (a) the year and (b) source (i.e., journal article, unpublished dissertations and theses, or other unpublished document) of each report as well as (c) the sample composition (i.e., high school students, university students, or other) and (d) the country in which the study was conducted.

We also coded each experiment in terms of ….[section continues].

Studies were coded independently by the first author and another graduate student.

Paper adapted from "The Sleeper Effect in Persuasion: A Meta-Analytic Review," by G. Kumkale and D. Albarracin, 2004, *Psychological Bulletin, 130*, pp. 143–172. Copyright 2004 by the American Psychological Association.

Figure 2.3. Sample Meta-Analysis (continued)

was satisfactory (Orwin, 1994). We resolved disagreements by discussion and consultation with colleagues. Characteristics of the individual studies included in this review are presented in Table 1. The studies often contained several independent datasets such as different messages and different experiments. The characteristics that distinguish different datasets within a report appear on the second column of the table.

Dependent Measures and Computation of Effect Sizes

We calculated effect sizes for (a) persuasion and (b) recall–recognition of the message content. Calculations were based on the data described in the primary reports as well as available responses of the authors to requests of further information….[section continues].

Analyses of Effect Sizes

There are two n

effects.…[section conti

To benefit from the str

conduct analyses using

The data analys

estimation of overall ef

Sample of Studies and

Descriptive cha

Table 2.…[section cont

Overview of the Aver

A thorough und

condition differences a

Use at least two subheadings in a section, 3.02

place over time.…[section continues].

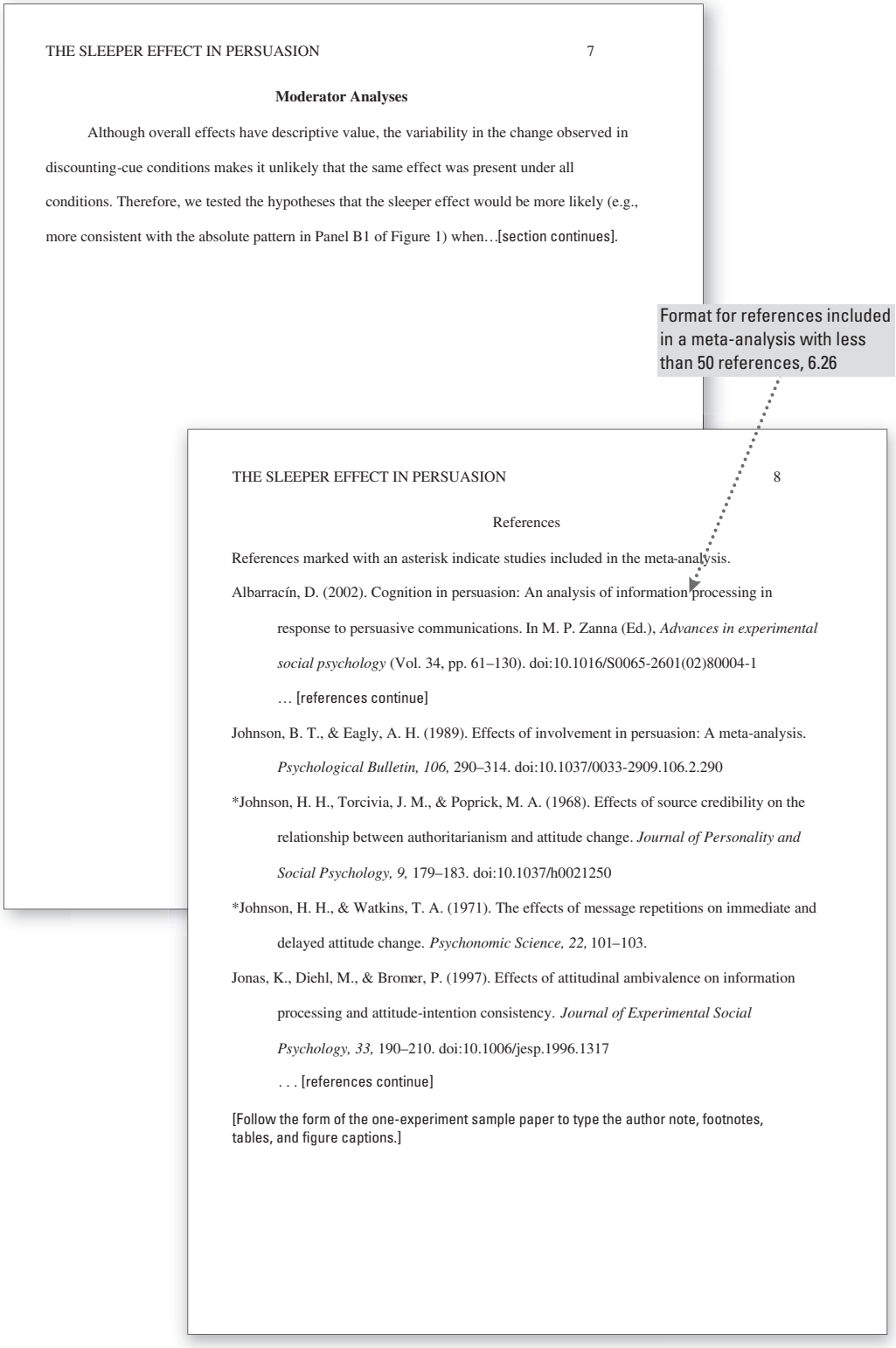
In light of these requirements, we first examined whether discounting cues led to a decrease in agreement with the communication (boomerang effect). Next,….[section continues].

Ruling out a nonpersisting boomerang effect. To determine whether or not a delayed increase in persuasion represents an absolute sleeper effect, one needs to rule out a nonpersisting boomerang effect, which takes place when a message initially backfires but later loses this reverse effect (see Panel A of Figure 1)….[section continues].

Average sleeper effect. Relevant statistics corresponding to average changes in persuasion from the immediate to the delayed posttest appear in Table 4, organized by the different conditions we considered (i.e., acceptance-cue, discounting-cue, no-message control, and message-only control). In Table 4, positive effect sizes indicate increases in persuasion over time, negative effect sizes indicate decay in persuasion, and zero effects denote stability in persuasion. Confidence intervals that do not include zero indicate significant changes over time. The first row of Table 4 shows that recipients of acceptance cues agreed with the message less as time went by (fixed-effects, $d_+ = -0.21$; random-effects, $d_+ = -0.23$). In contrast to the decay in persuasion for recipients of acceptance cues, there was a slight increase in persuasion for recipients of discounting cues over time ($d_+ = 0.08$). It is important to note that change in discounting-cue conditions significantly differed from change in acceptance-cue conditions, (fixed-effects; $B = -0.29, SE = 0.04$), $Q_B(1) = 58.15, p < .0001$; $Q_E(123) = 193.82, p < .0001$….[section continues].

Summary and variability of the overall effect. The overall analyses identified a relative sleeper effect in persuasion, but no absolute sleeper effect. The latter was not surprising, because the sleeper effect was expected to emerge under specific conditions….[section continues].

Figure 2.3. Sample Meta-Analysis (continued)



THE SLEEPER EFFECT IN PERSUASION 7

Moderator Analyses

Although overall effects have descriptive value, the variability in the change observed in discounting-cue conditions makes it unlikely that the same effect was present under all conditions. Therefore, we tested the hypotheses that the sleeper effect would be more likely (e.g., more consistent with the absolute pattern in Panel B1 of Figure 1) when…[section continues].

Format for references included in a meta-analysis with less than 50 references, 6.26

THE SLEEPER EFFECT IN PERSUASION 8

References

References marked with an asterisk indicate studies included in the meta-analysis.

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… [references continue]

Johnson, B. T., & Eagly, A. H. (1989). Effects of involvement in persuasion: A meta-analysis. *Psychological Bulletin, 106,* 290–314. doi:10.1037/0033-2909.106.2.290

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. . . [references continue]

[Follow the form of the one-experiment sample paper to type the author note, footnotes, tables, and figure captions.]