# **Using Quotations in Scientific Writing**

Unlike other styles of writing, scientific writing rarely includes direct quotations. Why?

- Quotations usually detract from the point you want to communicate.
- Quotations do not reflect original thinking.

Inexperienced writers may be tempted to quote, especially when they don't understand the content. However, the writer who understands her subject can always find a way to paraphrase from a research article without losing the intended meaning – and paraphrasing shows that the writer knows what she is talking about.

For details on paraphrasing without plagiarizing, see the UW Statement of Academic Responsibility (https://depts.washington.edu/grading/.../AcademicResponsibility.pdf).

## Inappropriate Use of Quotations in Scientific Writing

1. To report findings from published research in research proposals, reports, evidence-based critiques, and *literature reviews*. With these types of scientific writing, the main goal is to summarize and synthesize a body of research in a particular area. Quoting specific findings is not an effective way to summarize or synthesize.

#### **Incorrect use of quotations:**

Academic motivation has been identified as an important variable when examining first-year student success; however, results of previous research are inconsistent (Allen, 1999; French & Oakes, 2003). While Prus, Hatcher, Hope, and Grabiel (1995) found that "student motivation and persistence were significantly correlated," (p. 18) Allen (1999) reported that "student motivation and persistence were positively correlated only for the subset of first-year students of color" (p. 477).

#### **Correct paraphrases:**

(a) Academic motivation has been identified as an important variable when examining first-year student success; however, results of previous research are inconsistent (Allen, 1999; French & Oakes, 2003). While Prus, Hatcher, Hope, and Grabiel (1995) found a significant positive correlation between student motivation and persistence, Allen (1999) found that the positive relationship only existed for students of color.

(b) While Prus, Hatcher, Hope, and Gabriel (1995) found that greater student motivation predicted greater persistence, Allen (1999) replicated this relationship only among students of color.

**2.** To provide a definition of a theory or construct. Although it's not strictly wrong to quote a definition at length, this is seldom done in scientific literature. Paraphrasing is preferred because it reflects the writer's command of the subject.

From Brewin's (2014) recent theory paper discussing different types of memory related to posttraumatic stress disorder:

Avoid: Sensory memory or *iconic memory* is defined by Long (1980) as "a persistence effect in the form of a rapidly decaying image or icon following the termination of a brief stimulus" (p. 787).

**Better:** The term *sensory memory*, or *iconic memory*, generally refers to a short-term memory store that briefly retains sensory traces. According to Long (1980), these traces exist as an image that quickly disappears after some type of brief visual stimulus is presented.

### 3. Operational definitions and variable names do not need to be put into quotes.

**Example:** Bert and Ernie (2014) found that **bullying behavior** [*variable name*], operationalized as **the frequency of verbal taunts occurring during recess** [*operational definition*], positively predicted future incarceration.

(Bold font is added for emphasis in this example. Don't use bold font for variable names or definitions in a paper.)

#### Appropriate Use of Quotations in Scientific Writing

One of the few reasons to quote from a research article is to give historical context for a particular theory or construct. For example:

**1.** To quote a seminal historical article directly relevant to your topic. In some instances, it is both more useful and appropriate to quote an original article, if the original article provides a unique perspective that is difficult to convey through paraphrasing or summarizing.

"A focus of interest for those studying emotion and memory has been the level of recall for the circumstances in which individuals learned of shocking events such as the assassination of a prominent public figure. These were termed *flashbulb memories* (R. Brown & Kulik, 1977), because they possessed 'a primary, live quality that is almost perceptual. Indeed, [a flashbulb memory] is very like a photograph that indiscriminately preserves the scene in which each of us found himself when the flashbulb was fired' (p. 74). This account of flashbulb memory followed an existing notion..."

Brewin, C.R. (2014). Episodic memory, perceptual memory, and their interaction: Foundations for a theory of posttraumatic stress disorder. *Psychological Bulletin, 140,* 69-97.

**2.** To quote an item from a questionnaire or measure. When describing particular instruments or measures in a method section of an empirical paper, it can be helpful to give a specific example of an individual item. Note that no page number is necessary when quoting an item from a questionnaire.

"The College Self-Efficacy Inventory (CSEI). This inventory measures college students' confidence in their ability to complete specific college-related tasks. [...] Sample items for which students are asked to rate their confidence include 'Make new friends at college' and 'Ask a question in class."

Reynolds, A.L. & Weigand, M.J. (2010). The relationships among academic attitudes, psychological attitudes, and the first-semester academic achievement of first-year college students. *Journal of Student Affairs Research and Practice*, 47, 173-193.

**3.** To open a paper with a historical or political quote. Sometimes, quotes by historical or political figures can be useful in setting up the central issue of a paper. This use of quotes is more common in review articles and book chapters than in primary research articles.

"Sigmund Freud conceived the first model of the ideal therapist stance, likening the therapist to a blank screen. 'The therapist should be opaque to his patients and, like a mirror, should show them nothing but what is shown to him' (Freud 1912/1958, p. 118)."

Henretty, J.R. & Levitt, H.M. (2010). The role of therapist self-disclosure in psychotherapy: A qualitative review. *Clinical Psychology Review*, 30, 63-77.