

## Literature Review Mechanics<sup>1</sup>

### I. Metadiscourse

In literature reviews, Metadiscourse is when the writer either refers to what they are doing in that moment or at another part of the text. This tool is used to increase clarity and coherence by providing the reader with added guidance and explanation about the evolution and location of textual elements. It is typically the only time the first person is used in a literature review. It is used in three ways:

- A. **Future Projections:** “In this section, I will discuss...”; “This part will describe...”.<sup>2</sup>
- B. **Present Orientations:** “At this point, the reader may recognize...”.<sup>3</sup>
- C. **Recapitulations:** “The main purpose of this review has been...”; “Thus far, the review has outlined...”.<sup>4</sup>

Metadiscourse is routinely used in literature reviews in the introductory section when the author presents a map of the entire review, in the conclusion when the authors summarize key points, and throughout the text as a linking element to tie together different sections of the review.

### II. Integral & Non-Integral Citations

Interacting with other scholars’ literature is one of the main characteristics of a literature review, so it is logical that citations play a key role. The three main elements of citational patterns in reviews are integral vs. non-integral, verb tense, and reporting verb type.

A. **Integral** citations are **author prominent**. In active construction, they typically include only one or two authors/studies; in passive construction, they sometimes include more. In either form, they are used when you want to focus on the researcher more than the research. Since one of the major ways an author can present their perspective toward literature in a review is which studies they choose to dedicate more time to, this citation structure is useful when you want to highlight individual studies as a way to position your own view or research within the whole. Examples: “Muehlbach and Walsh (1995) examined the effects of...”; “According to Jay et al. (2006), about 25 percent...”; “...have been extensively studied by Ikamata (2007).”<sup>5</sup>

B. **Non-integral** citations are **research prominent**. A slightly more common form of citation across all disciplines. Helpful when discussing patterns across a research area.

Examples: “Research has illustrated that...”; Research indicates that...”.<sup>6</sup>

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<sup>1</sup> Adapted from Telling a Research Story: Writing a Literature Review by Christine B. Feak & John M. Swales. The University of Michigan, 2009.

<sup>2</sup> *Ibid.*, 39.

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*, 40.

<sup>5</sup> *Ibid.*, 46.

<sup>6</sup> *Ibid.*

### III. Verb Tense

As many as two-thirds of all citations fall into one of the three categories discussed below. Even so, most reviews also contain all three of patterns because the variety adds style. There are also patterns within disciplines that correlate with certain reporting verbs. The strongest overall pattern is that verbs relaying an argument, claim or suggestion are usually formed in the present tense, while verbs expressing findings and showing are written in the past.

A. **Past**—Reference to a single study (often an integral reference): “Arslan (2007) *investigated* the...”; “Biodiesel *was shown* to...”.<sup>7</sup>

B. **Present Perfect**—Reference to an area of inquiry (usually non-integral): “There *have been* several investigations...”; “Many researchers *have investigated*...”.<sup>8</sup>

C. **Present**—Reference to generally accepted knowledge of the field: “The scarcity of known petroleum reserves *is making* renewable...”.<sup>9</sup>

### IV. Reporting Verbs

Studies have shown that a small number of verbs tend to make up the majority of reporting verbs used

**TABLE 5. High-Frequency Reporting Verbs**

Discipline	Verbs and Frequency						
	Rank	1	2	3	4	5	6
<u>Harder Sciences</u>							
Biology		<i>describe</i>	<i>find</i>	<i>report</i>	<i>show</i>	<i>suggest</i>	<i>observe</i>
Physics		<i>develop</i>	<i>report</i>	<i>study</i>	<i>find</i>	<i>expand</i>	
Electrical							
Engineering		<i>propose</i>	<i>use</i>	<i>describe</i>	<i>show</i>	<i>publish</i>	<i>develop</i>
Mechanical							
Engineering		<i>describe</i>	<i>show</i>	<i>report</i>	<i>discuss</i>	<i>give</i>	<i>develop</i>
Epidemiology		<i>find</i>	<i>describe</i>	<i>suggest</i>	<i>report</i>	<i>examine</i>	<i>show</i>
Nursing		<i>find</i>	<i>suggest</i>	<i>report</i>	<i>identify</i>	<i>indicate</i>	<i>show</i>
Medicine		<i>show</i>	<i>report</i>	<i>demonstrate</i>	<i>observe</i>	<i>find</i>	<i>suggest</i>
<u>Softer Sciences</u>							
Marketing		<i>suggest</i>	<i>argue</i>	<i>find</i>	<i>demonstrate</i>	<i>propose</i>	<i>show</i>
Applied Linguistics		<i>suggest</i>	<i>argue</i>	<i>show</i>	<i>explain</i>	<i>find</i>	<i>point out</i>
Psychology		<i>find</i>	<i>show</i>	<i>suggest</i>	<i>report</i>	<i>demonstrate</i>	<i>focus</i>
Sociology		<i>argue</i>	<i>suggest</i>	<i>describe</i>	<i>note</i>	<i>analyze</i>	<i>discuss</i>
Education		<i>find</i>	<i>suggest</i>	<i>note</i>	<i>report</i>	<i>demonstrate</i>	<i>provide</i>
Philosophy		<i>say</i>	<i>suggest</i>	<i>argue</i>	<i>claim</i>	<i>point out</i>	<i>think</i>

Source: Based on Swales, J.M., and C.B. Feak. (2004). *Academic Writing for Graduate Students: Essential Skills and Tasks*, 2d ed. Ann Arbor: University of Michigan Press.

in a specific discipline. These verbs vary across disciplines. Even though these patterns are included here for reference, keep in mind that a key element of style is that a variety of vocabulary and sentence construction makes writing more dynamic and interesting. Table 5 is also from Feak & Swales.<sup>10</sup>

<sup>7</sup> *Ibid.*, 52.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*, 55.