THE GRADUATE SCHOOL

Advancing graduate education.
Enhancing the graduate student experience.
How to Write a Literature Review

Graduate School Office of Writing Initiatives
Imagine that you enter a parlor. You come late. When you arrive, others have long preceded you, and they are engaged in a heated discussion, too heated for them to pause and tell you exactly what it is about. In fact, the discussion had already begun long before any of them got there, so that no one present is qualified to retrace for you all the steps that had gone before. You listen for a while, until you decide that you have caught the tenor of the argument; then you put in your oar. Someone answers; you answer him; another comes to your defense; another aligns himself against you, to either the embarrassment or gratification of your opponent, depending on the quality of your ally’s assistance. However, the discussion is interminable. The hour grows late, you must depart. And you do depart, with the discussion still vigorously in progress.

-- Kenneth Burke, Philosophy of Literary Forms (1941)
What is a Literature Review?

■ Where does a good literature review begin? With a research question
■ Scholar before Researcher
■ Helps you discover – and move toward filling – the gap in research
■ Establishes your credibility
What is a Literature Review?

In generic terms, a good literature review

- Synthesizes previously published knowledge about an issue or practice
- Help readers by providing that synthesis
- Establish grounds for existing knowledge to be extended
- Makes an argument
What Can Go Wrong?

- Search can fail to be systematic or comprehensive enough
- Search and review may focus on the wrong sources
- The writing can lack a sense of purpose
- The review can be a collection of sources without a clear sense of synthesis
What Can Go Wrong, cont.

- Writers may assume too much familiarity with the sources
- Writers may fail to distinguish fact from opinion
- Writers may offer generalizations that are unsupported by the sources
- Poor organization can make reading a struggle
A Literature Review is a Story

- A research story
- Stories have settings (context)
- Stories lead audiences where the author wants them to go (with some room for their own adventure)
- Your character: the talented scholar who engaged the fierce articles and tamed them to make them reveal their burning question
Should my literature review... 

- focus only on very recent publications?
- ignore work not in your immediate discipline?
- be organized chronologically?
- begin with a historical overview of my field

... depends on your situation
Types of Literature Reviews

“Generally speaking, literature reviews will have one of the three types of focuses (Cooper, 1984). Reviews may be integrative (summarizing past research based on overall conclusions of the past research), theoretical (identifying and critiquing the ability of different theories to explain a phenomenon), or methodological (highlighting different methodological approaches used in past research and the contributions of each type of research) in focus.”

Types of Literature Reviews

- Narrative – author selects and synthesizes past research
- Systematic – follows a strict methodology in selections included
- Meta-analysis – gathers data from a number of studies, combines and re-analyzes
- Focused – limited to single aspect
Organizing Your Review

- A theoretical framework?
- By sample size/number of cases?
- By applications stressed?
- By types of study?
- By source (region) of study?
- By discipline?
- By chronology?
- By issue or aspect?
## Organizing Your Review

<table>
<thead>
<tr>
<th>Year</th>
<th>Theory</th>
<th>Sample Size</th>
<th>Model Used</th>
<th>Country</th>
<th>Type of Study</th>
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<tbody>
<tr>
<td>Study 1</td>
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<td>Study 2</td>
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<td>Study 4</td>
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Organizing Your Review

- **Identify** the studies (and each study may, in turn, consist of many findings)
- **Categorizes** the findings of those studies (and findings are defined as the relationship between two or more variables)
- Recognizes the **threats** to validity that those studies note
Organizing with Stasis Theory

- **Fact**
  - Questions of fact/conjecture/existence
  - Does it/a problem exist? Did it happen? What caused it?

- **Definition**
  - Questions of definition/essence/categorization
  - How do we define this? What category of thing is it?

- **Quality**
  - Questions of value/quality
  - Is it good or bad? How do we judge the effect/impact?

- **Action**
  - Questions of action/policy
  - What shall we do about this? What policies should we enact?

Jurisdiction: who decides?
Organizing with Stasis Theory

Jurisdiction: who decides?

Fact
- Questions of fact/conjecture/existence
  - Does it/a problem exist? Did it happen?

Definition
- Questions of definition/essence/categorization
  - How do we define this? What category of thing is it?

Cause
- What caused it? What are its effects?

Quality
- Questions of value/quality
  - Is it good or bad? How do we judge the effect/impact?

Action
- Questions of action/policy
  - What shall we do about this? What policies should we enact?
Sucralose is a synthetic organochlorine sweetener (OC) that is a common ingredient in the world’s food supply. Sucralose interacts with chemosensors in the alimentary tract that play a role in sweet taste sensation and hormone secretion. In rats, sucralose ingestion was shown to increase the expression of the efflux transporter P-glycoprotein (P-gp) and two cytochrome P-450 (CYP) isozymes in the intestine. P-gp and CYP are key components of the presystemic detoxification system involved in first-pass drug metabolism. The effect of sucralose on first-pass drug metabolism in humans, however, has not yet been determined.
In rats, sucralose alters the microbial composition in the gastrointestinal tract (GIT), with relatively greater reduction in beneficial bacteria. Although early studies asserted that sucralose passes through the GIT unchanged, subsequent analysis suggested that some of the ingested sweetener is metabolized in the GIT, as indicated by multiple peaks found in thin-layer radiochromatographic profiles of methanolic fecal extracts after oral sucralose administration. The identity and safety profile of these putative sucralose metabolites are not known at this time. Sucralose and one of its hydrolysis products were found to be mutagenic at elevated concentrations in several testing methods. Cooking with sucralose at high temperatures was reported to generate chloropropanols, a potentially toxic class of compounds. Both human and rodent studies demonstrated that sucralose may alter glucose, insulin, and glucagon-like peptide 1 (GLP-1) levels. Taken together, these findings indicate that sucralose is not a biologically inert compound.
“Although sucralose is used globally in reduced-calorie and diet foods and beverages, issues regarding its biological effects and, therefore, its health profile have raised concerns. These issues include the following:”
Organized with Stasis Theory

1. Effects of sucralose on glucose transport and other parameters involved in body weight regulation.

2. Effects of sucralose on presystemic detoxification mechanisms and impact on bioavailability of therapeutic drugs.

Organized with Stasis Theory

4. Effect of sucralose on the number and relative proportions of different intestinal bacterial types.

5. Potential toxicity from habitual sucralose ingestion.

“Each of these five issues is addressed in more detail in this review.”
FINAL COMMENTS AND CONCLUSIONS

Although sucralose is utilized globally as a sweetener in thousands of food and beverage products, further scientific research is warranted in several areas due to the following potentially significant findings:

. . . .

Given the fact that sucralose (Abou-Donia et al., 2008) and certain foods and herbs interact with drug-metabolizing enzymes and transporters (Nowack et al., 2009; Zhou and Lai, 2008), guidelines need to be developed for the appropriate use and labeling of food ingredients based on their pharmacokinetic parameters and biological activity to ensure the safety of the food supply for all segments of the population. (425)
# Organizing Your Review

<table>
<thead>
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How to Begin a Literature Review

- Rhetorical Situation

- The rhetorical situation is the context of a rhetorical event that consists of an issue, an audience, and a set of constraints (purpose, genre, exigence, etc.)
How to Begin a Literature Review

- Who is your audience?
- What are the constraints?
How to Begin a Literature Review

- Exigence
  - Answers the question *why does this matter?*
  - Creates a need for what follows
  - “imperfection marked by urgency” (Lloyd Bitzer)
  - The beginning of argumentation
How to Begin a Literature Review

- **Narratio**
  - Statement of the case
  - Tell the story of the issue
  - Contextualizes your research question
    - How broad of an issue
    - Who is concerned with the issue (disciplines, scholars, publics)
  - Frames your issue
Let’s look at an example

Employment interviews are a popular selection technique from many viewpoints. In organizations around the world, employment interviews continue to be one of the most frequently used methods to assess candidates for employment (Ryan, McFarland, Baron, & Page, 1999; Wilk & Cappelli, 2003). Among organizational decision-makers, interviews have been found to be the assessment method most preferred by supervisors (Lievens, Highhouse, & De Corte, 2005) and human resources (HR) practitioners (Topor, Colarelli, & Han, 2007). Moreover, applicants perceive interviews as fair as compared to other selection procedures (e.g., Hausknecht, Day, & Thomas, 2004) and applicants expect interviews as part of a selection process (e.g., Lievens, De Corte, & Brysse, 2003). In fact, from an applicant's perspective, obtaining a job interview is fundamental to job search success (Saks, 2006).
The employment interview has also been a popular topic among researchers for almost 100 years and is still garnering considerable research interest. Notably, numerous meta-analyses have revealed that “structured” interviews can display relatively high levels of validity without the adverse impact typically found with cognitive ability tests (Conway, Jako, & Goodman, 1995; Huffcutt & Arthur, 1994; Huffcutt & Roth, 1998; McDaniel, Whetzel, Schmidt, & Maurer, 1994; Wiesner & Cronshaw, 1988; Wright, Lichtenfels, & Pursell, 1989). While we have learned much about the employment interview, current research activity suggests that more remains to be uncovered. In the last six years since Posthuma, Morgeson and Campion's (2002) comprehensive review of the employment interview literature, over 100 new articles have appeared in journals and books examining the interview.
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1. Goals and focus of review

Given the broad coverage of issues over the last six years, I do not try to provide an exhaustive review of the selection interview method. Instead, I present a selective and qualitative review of published research since roughly 2002. Readers are directed to previous reviews for work conducted prior to this timeframe (e.g., Posthuma et al., 2002, Moscoso, 2000). With this approach in mind, my goals in writing this review are threefold: (a) to provide the reader with a sense of the current status of research on the employment interview, (b) to examine advances made in our knowledge and note areas to be improved, and (c) to stimulate future research and understanding of employment interviews. Although the interview can be used for a variety of purposes, my review focuses on the use of interviews for selection.
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1. Goals and focus of review

Given the broad coverage of issues over the last [period of time] I do not try to provide an exhaustive review of the [thing I am discussing]. Instead, I present a selective and qualitative review of published research since roughly [some point in the past]. Readers are directed to previous reviews for work conducted prior to this timeframe (e.g., Source, Source, Source). With this approach in mind, my goals in writing this review are threefold: (a) to provide the reader with a sense of the current status of research on the [thing I am discussing], (b) to examine advances made in our knowledge and note areas to be improved, and (c) to stimulate future research and understanding of [thing I am discussing]. Although the [specific element I am not discussing] is [important because . . . ], my review focuses on the [other specific thing].
Helping Your Audience Read

- Reader Expectations
  Information is interpreted more easily and more uniformly if it is placed where most readers expect to find it. . . . Readers have relatively fixed expectations about where in the structure of prose they will encounter particular items of substance. If writers can become consciously aware of these locations, they can better control the degrees of recognition and emphasis a reader will give to the various pieces of information being presented. Good writers are intuitively aware of these expectations; that is why their prose has what we call “shape.”

Gopen & Swan, “The Science of Scientific Writing”
Helping Your Audience Read

- Reader Expectations:

  Readers expect a grammatical subject to be followed immediately by the verb.
1. Goals and focus of review

Given the broad coverage of issues over the last six years, I do not try to provide an exhaustive review of the selection interview method. Instead, I present a selective and qualitative review of published research since roughly 2002. Readers are directed to previous reviews for work conducted prior to this timeframe (e.g., Posthuma et al., 2002, Moscoso, 2000). With this approach in mind, my goals in writing this review are threefold: (a) to provide the reader with a sense of the current status of research on the employment interview, (b) to examine advances made in our knowledge and note areas to be improved, and (c) to stimulate future research and understanding of employment interviews. Although the interview can be used for a variety of purposes, my review focuses on the use of interviews for selection.
Helping Your Audience Read

Readers Expectations:

Information to be emphasized should appear at points of syntactic closer (ends of clauses; ends of sentences; ends of paragraphs). Readers expect topic positions to offer linkage (looking back) and context (looking forward) (known-new contract).
Helping Your Audience Read

### Choosing a Verb Tense

<table>
<thead>
<tr>
<th>Simple Past</th>
<th>Reference to a single study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Smith discovered…</td>
</tr>
<tr>
<td></td>
<td>Tan et al found…</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Present Perfect</th>
<th>Reference to an area of study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Microbiologists have discovered…</td>
</tr>
<tr>
<td></td>
<td>Studies in nutrition have found…</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Simple Present</th>
<th>Reference to generally accepted knowledge of the field</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>The speech signal is continuous, but it is perceived as a sequence of discrete segments.</td>
</tr>
</tbody>
</table>
Helping Your Audience Read

- **Metadiscourse:** Elements in a written text that refer to the text itself, not to the subject matter.
  - The longer the text, the more metadiscourse.
  - The more complex the material, the more metadiscourse.
  - It’s common at the beginnings and ends of sections, chapters, etc.
Helping Your Audience Read

- **Metadiscourse:**
  
  Can be superfluous:
  
  “In my opinion. . . .”
  
  “I would like to take this opportunity to. . . .”
Helping Your Audience Read

- Metadiscourse:
  But can also **GUIDE** the reader, and in a literature review, especially helpful to help the reader understand connections.
In addressing the goals of this paper, I took a number of steps to identify research studies on employment interviews published in the last six years. Keyword searches (i.e., interview, employment interview, selection interview) of the PsycINFO, ABI-inform, and Google Scholar databases were conducted. In addition, PsycINFO searches by name of all authors in this review's reference section were performed. Manual article-by-article searches of all journals listed in the references were performed since 2002. Finally, the reference sections of all articles were examined for additional relevant published articles. From this search, I found that researchers have predominantly focused on the interview itself, and on the interviewer indirectly, in an effort to understand how adding interview process structure affects the reliability and validity of interviewer judgments as well as the underlying constructs assessed within the framework of the employment interview. Because the employment interview is an interactional social process between the interviewer and applicant, recent studies have also explored the characteristics and behaviors of applicants and interviewers. This paper is organized around the overarching themes of reliability, validity and construct breadth, within a social framework.