ESP 178 Applied Research Methods

Research Proposal Stage 2: Literature Review

Due: 2/7 (11:59pm)
Length: 750-1,000 words (use double-spacing)
Grade: 10% of total course grade

Purpose: Gain experience in looking for and reviewing research articles on a selected topic and assessing their relevance to the research question.

Deliverable: Submit your assignment via Canvas
Your write-up should include your report on your search (Task 2), the annotated bibliography (Task 3), and your refined research question and conceptual model (Task 4).

Grading:
We will grade your assignment based on:
- The appropriateness of your search,
- the coverage of your search, and
- the quality of your annotation and organization (hint: key aspects of research design, validity issues, etc. relevant to your question).
- Also, are the refined research question and conceptual model clear improvements over your first draft?

Background: One of the first things a researcher does when developing a research proposal is a literature review. The purpose of the literature review is to assess what is known and what remains to be answered with respect to the research question. The literature review process consists of finding existing studies related to the research question and evaluating them with respect to both research design and findings. The researcher can then build on existing studies in designing her own study but also ensure that she is making a new contribution to the literature.

Task 1: Find 4 to 6 articles
Sometimes the goal of a literature review is to find every academic article published on a particular topic – to assess the breadth of the field. Other times the goal is to find a small number of articles that are directly relevant to the research question and of relatively high quality. In this assignment, you are to do the latter: find 4 to 6 relevant, peer-reviewed, and high-quality articles. See Appendix A for tips on how to find articles, plus don’t forget to check the articles in the reader.

When reading the articles think about the following:

Is it relevant? Think broadly here – you may find useful articles on topics that are different from but parallel to yours. If you can’t find an article that uses the same behavior you’re using as a dependent variable (aka response variable), look for articles on sort of similar behaviors or more general versions of that behavior. For example, say you’re studying factors that influence who fishes recreationally and who doesn’t. If you can’t find studies on fishing, you might find studies on outdoor recreation more generally. Some other examples:
<table>
<thead>
<tr>
<th>Specific Dependent Variable</th>
<th>General Version of Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of organic food</td>
<td>Purchase of green products</td>
</tr>
<tr>
<td>Use of canvas shopping bags</td>
<td>Green behaviors – recycling, energy conservation, etc.</td>
</tr>
<tr>
<td>Knowledge of air quality problem</td>
<td>Knowledge of environmental problems</td>
</tr>
</tbody>
</table>

You are looking for articles that can help you:

- Decide what independent variables (aka predictor or explanatory variables) and control variables are relevant for your behavior. For example, a study might show that environmental awareness, income, and gender are all associated with the type of outdoor recreation a person chooses.
- Think about ways of measuring your dependent or independent variables. For example, an article might explain how they created an index for environmental behavior or for environmental awareness.
- Think about how to design your study, including type of study (experimental, longitudinal, cross-sectional), sampling technique, data collection method, etc.

**Note:** Not being able to find articles on your exact topic is a good thing! That means that no one has already done your study.

**Is it peer-reviewed?** Although the search process for a literature review can be similar to the search process for your background research, the goals are different. For the literature review you are looking for academic articles in peer-review journals – like the ones in your reader. The peer-review qualifier is important: it is the review of one’s research by one’s peers that provides at least a modicum of quality control. You can generally tell a peer-review journal by its title (e.g. it has “journal” in its title somewhere), but if you are not sure, then check the webpage or the inside of the front or back cover to see if the publishers describe a process for reviewing papers. You may come across several kinds of academic articles: research articles, literature review articles, and theoretical articles. Research articles, which give an overview of research design and results of a particular study, are of the greatest interest, but the others can be helpful, too.

**Is it high quality?** Quality can be difficult. The quality of an academic journal article is often measured by the number of times that other articles cite it, something you can check through the Web of Science (see Appendix A). However, this approach does not work well for relatively recent articles that simply haven’t had enough time yet to be cited. Most important, however, are the merits of the research itself and the quality of the research design. By the end of the quarter, you’ll be in a better position to judge this for yourself. In the meantime, do your best to sort out the stronger articles from the weaker ones.

**Task 2: Write a short report on your literature search**

It is important that researchers document the steps they went through in carrying out a literature search, to provide confidence that all relevant articles have been found and so that others can replicate the same process. Write one paragraph in which you report the databases you searched and the search terms you used. Provide a summary of which searches (i.e. combination of database and search terms) yielded the articles that you chose to include in your bibliography. Also, explain which searches did **NOT** prove fruitful.
Task 3: Write an annotated bibliography
For the articles that you choose, write an annotated bibliography. An annotated bibliography gives the full citation for the article (see Appendix B) and then provides a brief summary of key points of the article. For each article, in your own words: (i) summarize its main argument, question, or hypothesis (ii) describe the basic research design, including variables, units of analysis, treatment of time, (iii) summarize the methods of data acquisition, (iv) summarize key findings, and (v) explain what you learn from this study that is relevant to your own study (hint: look at the questions about relevancy, above). On this last point, be specific! Don’t just say “It helped me understand what factors influence behavior.” Tell me which factors you learned about and how you will use that knowledge in your own study! Each article summary should be about 150-200 words. Posted in the “Files” folder on Canvas are appendices from the Schutt book that will be helpful: Appendix A has an annotated bibliography, while Appendix B and Appendix C in Schutt give helpful tips on questions to ask about a research article and how to read a research article.

Task 4: Refine research question and conceptual model
In addition to the literature review, I’d like you to take another crack at your research question and conceptual model. After doing your research and thinking about my comments on your first assignment, do the following:

1. In one sentence, state your research question or hypothesis
2. Draw a diagram of your conceptual model, showing independent and dependent variables; indicate which of your independent variables you will treat as control variables. You must include a diagram! Hand-drawn is still OK at this point, though you will want to prepare a polished version for your final proposal.

Note: Be sure that your question and your model match!!

Appendix A: How to find articles and information:
Google Scholar is a pretty darn useful tool these days and is a good place to start. But the library is still a primary source for academic research, and I would like you to try these, too. The library’s website links you to several important databases that enable you to search for books or articles on your specific topic. These databases include electronic versions of a large share of academic articles – but not all of them. If the database does not provide you with “full text,” then go to the Harvest UC Davis Catalog and search for the journal the article is in. With luck, it will be available either electronically or in old-fashioned print in the library. To access full text of articles on-line through the library, you need to be using an on-campus computer or, if you are using an off-campus computer, use the VPN or “Connect From Off Campus” options under “Quick Links” on the library website.

UCD Library Electronic Databases to try (accessed through the “Databases A to Z page: http://www.lib.ucdavis.edu/ul/research/databases/ ):
- PAIS International Database – indexes all types of materials in the area of public affairs
- Web of Science Core Collection – multidisciplinary database that links articles by citations; if you find one good article, you can use this database to search for later articles that cite this article or to find all articles by the same author.
- TRID (Transportation Research International Documentation) – the best place to go for transportation research, including academic articles and research reports

A really useful trick: If you find a really good article, especially a recent one, take a look at the articles it cites. Be sure to consider what the article says about the articles it cites, though – you want to focus on the ones they talk about in positive terms! For newer articles that cite your reference, use Google Scholar (click on “cited by...”) or the Web of Science (click on the number that follows “Times Cited” on the right side of the screen). Google Scholar also has a “related articles” option that can be useful.

Books, research reports, and government reports are also acceptable sources but often harder to use than a succinct article. They also generally go through a more limited peer-review process (if any) than academic articles, so that quality may be more of an issue. Books are most easily found through the Harvest UC Davis Catalog; you’ll have to go to the library to get them. Research reports and government reports may turn up in some of the electronic databases (e.g. PAIS or TRID) but are often most easily found through a Google search (regular Google, not Google Scholar). Google searches are a good way to find background information on your topic, but you have to use this tool carefully, as discussed in the previous assignment.

Appendix B: A few words about citations

Citation format is getting more complicated as more materials become available on-line. The author-date format is used most widely in planning journals (i.e. (author year) in the text, with a list of references at the end of the paper) but other formats are acceptable if used correctly and consistently. My general rule of thumb is that you need to provide enough information that the reader could find the item herself. For things like government reports, this includes the agency, the report number, the date, and, if possible, a phone number or email address for the agency. I suggest using the Chicago, APA, or MLA manuals of style, available through the library (http://guides.lib.ucdavis.edu/citations).

Note: Some guidelines say to include the full URL and date of access for journal articles. In the circles I run in, this is not necessary for peer-review journal articles. You DO want to include this information when you are citing a website or a report that is available through a website.