

The Literature Review and Reading a Research Article

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Research may be something that is very familiar to some of us. To others, such as myself, the thought of having to do research makes me itch, twitch and often times I'm sure that I break out in hives. The Nursing wave of the future is Evidence-Based Practice. To get there, we must do at least some level of research. I decided that I would start at the beginning. After you come up with a question, what comes next? How do I proceed? What information is out there on the subject? Once I find the information, what do I do with it? Here is a simplified view of what is next; the literature review and then on to reading the research article.

The Literature Review-

The literature review is a very important part of the research process. By doing a literature review or literature search, you get a better understanding of what has been researched on the topic that you are interested. But, you also will learn what "holes" may be out there or what other research may need to be done.

There are multiple ways to perform a lit review. You could begin by looking through books and articles or you can use the Internet. As always, you can use different search engines that are out there like *Google*. "Googling" a topic will get you a very broad view of information on your topic. If you are interested in finding information on a topic that is based in nursing research, you may want to use a different search engine. Two of note are CINAHL and MEDLINE, the most important being the CINAHL database. The CINAHL database covers material dating from 1992 to the present and contains more than 420,000 records. (Polit & Tatano Beck, 2004) This database can be accessed on-line at www.cinahl.com or by CD-ROM. MEDLINE covers more than 4,300 journals and contains more than 11 million records. (Polit & Tatano Beck, 2004) MEDLINE can be accessed via CD-ROM or for free through the following websites:

PubMed (<http://www.ncbi.nlm.nih.gov/PubMed>) or

Infotrieve (<http://www4.infotrieve.com/newmedline/search.asp>)

I would like to suggest that if you are not computer savvy or have not done this type of search before, use your resources. Go to your librarian or learning center resource person for help; they are there for you.

Now that you have successfully accessed a site to begin your lit search, what is next? You need to choose the topics that you would like to search. Think broadly about key words that may be related to your topic or used in describing your topic of choice. Be aware that you may end up with more articles than you know what to do this. If you use the CINAHL database once you have your list you can begin to narrow it down based on subheadings, type of document, journal subsets, publication dates, languages, or participant characteristics. (Polit & Tatano Beck, 2004) By pairing down your list of articles, you will hopefully be able to get down to a manageable number of articles that are most pertinent to the topic you are investigating. The next step is reading the research article.

Reading a Research Article-

Research articles are set up in the same format: abstract, introduction, methods, results, and discussion.

The Abstract – The abstract is basically a concise description of the article that you are about to read. It is approximately 100 to 200 words in length and it generally discusses why the study was done, how it was designed, what methods were used, what the researcher found, and what the implications of their findings were. When you do your lit search you will generally have access to abstracts, which you will then base your decision on whether or not you want to read the entire article.

The Introduction – The introduction section of the research article should give you background information on the problem being studied. It should tell you why this problem is important. It should talk about the concepts or variables under study. It should also include the research question or hypothesis being studied. Another part of the introduction is the author's literature review, which includes current knowledge on the subject, and how this research fits in.

Methods – The method section describes how the researcher answered the question under study. This will be very specific and in great detail. It will explain to you who were included in their sample population. It should include their inclusion criteria as well as the demographic data of the sample. It should also include the participation rate of the sample so that you can determine if the sample was representative. The actual method of data collection should also be included in this section; this is important in case you were interested in replicating the study, also important in detecting flaws in the data collection. It should include the variables of the study, the validity and reliability of the data collection tool that was used. This section should also include at least a small discussion on informed consent if human subjects are used.

Results – The results section is probably the section that scares us the most. For most of us, I think that the statistical portion of this section is way out of our comfort zone. In the results section you should expect to find a very detailed summary of the findings related to the research question. Here you will find your statistics and the mean (the middle) score for the results of your data collection tool as well as the range of scores. The confidence interval or your level of significance will be found here as well as the type of statistical test used. When considering your level of significance you want the probability (p) to be between 0.05 and 0.001 indicating a highly reliable result. What this means for you is that 5 times out of 100 (0.05) or 1 time out of 1000 (0.001) would you expect your results to be random. In other words, most of the time you will get the same results using a different sample population.

Discussion – In the discussion section the author should discuss with you the results of the study and what they mean. This section should also describe how the results are important to your practice. The reader of the article will also find any limitations of the study that the author found and took into consideration when interpreting the data.

As most of our practice moves towards Evidence-Based Practice, we, as nurses, will be called upon to do research. That may include a literature review that will back up a current practice, or it may include actual nursing research. This discussion was intended as a starting point for those of us that research is not an everyday part of our practice. One of the important tips that I found while doing this project is PRACTICE. Practice reading research articles. One way that you can do this is reading your JOPAN then going on the ASPAN website (www.aspan.org) and joining the journal club. Research is not going away so we might as well take the opportunities provided us and embrace it.

References

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