

The University of Victoria, School of Nursing (SON) is becoming a Joanna Briggs Collaborating Centre that promotes and supports the synthesis, transfer and utilization of evidence. Questions have arisen concerning the role of systematic reviews in doctoral dissertations. These guidelines provide direction for responding to the following questions: does a systematic review, in whole or in part, meet the criteria for a dissertation at the SON? Where and how might a systematic review fit within doctoral work?

A literature review is often required as a precursor to (or part of) graduate work to inform further research activities and identify other types of reviews that are commonly referred to in the literature (e.g., Aggarwal, Jones, Young & Sutton, 2005; Mallidou, 2014). Traditionally, literature reviews completed (including those done for PhD dissertations) have varied in terms of the rigor and transparency of the process of searching, appraising, and synthesizing the literature. There are concerns as to what literature might have not been accessed, and issues of selection bias related to literature chosen for a particular review. However, there are theoretical and epistemological underpinnings to various methods of review, which may be helpful to attend to when choosing a particular literature review method for their

A *systematic review*, a specific type of review that is often undertaken during their studies. A systematic review is defined here as an evidence-based synthesis of primary research which has similar methodological rigor as a primary

The continual proliferation of primary research literature necessitates ways to synthesize a vast array of literature in order to provide comprehensive knowledge for both theoretical development and for practitioners and policy-makers (Joanna Briggs Institute, 2014; Mallidou, 2014; Cochrane Collaboration, 2014). Research synthesis also contributes to knowledge translation, as identified by the CIHR (2014). Various evidence-informed initiatives have stimulated the creation of various systematic review groups, including the Joanna Briggs Institute (2014), the Cochrane Collaboration (2014), the EPPI-Centre (2014) and the Campbell Collaboration (2014), who provide guidance, education, and support for those engaging in systematically synthesizing literature. In the context of evidence-informed initiatives, systematic reviews contribute to development of policy and best practice documents for practitioners.

The following benefits and limitations of utilizing systematic reviews for PhD dissertation work have been identified by students and faculty (Clark, personal communication, 23 November 2014; Daigneault, Jacob, & Ouimet, 2012; Minnie, van der Walt, Klopfer, & Cummings, 2010; Perry & Hammond, 2002; Sambunjak & Puljak, 2010) :

- Assists student to:

- Gain a comprehensive understanding of current literature on a topic and in identifying literature gaps
 - Retain ability to engage in original research
 - Develop process-related and methodological expertise related to synthesis of primary studies
 - Develop networks of mentoring and research partnerships
 - Contribute to the global body of knowledge with publication of review
 - Foster acquisition of critical analytical skills in identifying strengths and limitations of various research designs
 - Can be incorporated into both a traditional and paper-based dissertation (i.e. chapter 1 of a dissertation)
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- Questions of independent work (if SR is the complete dissertation) since systematic reviews tend to be conducted by a team
 - The supervisory committee needs to work closely to determine whether the majority of the SR work is primarily done by the student. This includes ensuring that the student is the primary author of the review and implements the majority of the steps in a SR.
 - Questions of whether a systematic review builds substantially on nursing knowledge for a dissertation in nursing
 - Issue of disserR

- To support the PhD student, at least one committee member should be experienced and/or certified in the applicable SR methodology in which the student is engaging (i.e. JBI, Cochrane or another recognized approach to meta-analysis or meta-synthesis).
- A SR requires a research team that consists of a librarian and two reviewers (e.g. one faculty and doctoral student).
- For SRs that include a meta-analysis (not all SRs will include a meta-analysis) it may be helpful to also have a statistician on the team.
- A pre-requisite course, training, or certification in systematic reviews should be completed by the student prior to engaging in a systematic review
- Previous student work and experiences, including primary research or literature reviews (narrative, scoping, or critical/discursive reviews for example) conducted at the Master's level could also inform future plans for a systematic review at the doctoral level.

The systematic review landscape continues to evolve, and it may be helpful for students who are considering undertaking this type of review to discuss potential benefits and limitations with their committee. Conducting a systematic review is a recognized research (c)1((ar)7(c)1(hC.)Tjld(ri)3(c)Tl=0.00 hfTc f

References

- Aromataris, E., & Pearson, A. (2014). The systematic review: An overview: Synthesizing evidence to inform nursing practice. *American Journal of Nursing*, 114(3), 53-58.
- Campbell Collaboration. (2014). *What is a systematic review?* Retrieved from http://www.campbellcollaboration.org/what_is_a_systematic_review/index.php
- Canadian Institutes of Health Research. (2014). *More about knowledge translation at CIHR*. Retrieved from <http://www.cihr-irsc.gc.ca/e/39033.html>
- Cochrane Collaboration. (2014). *The Cochrane collaboration: Cochrane reviews*. Retrieved from <http://www.cochra>

M. Saimbert (Eds.), *Comprehensive systematic review for advanced nursing practice* (pp. 13-31). New York: Springer.

Sambunjak, S., & Puljak, L. (2010). Cochrane systematic review as a PhD thesis: An alternative with numerous advantages. *Biochemia Medica*, *20*(3), 319-326. Retrieved from <http://dx.doi.org/10.11613/BM.2010.041>

Sandelowski, M., & Barroso, J. (2007). *Handbook for synthesizing qualitative research*. New York: Springer.

Young, L., & MacKinnon, K.A. (n.d.). *Developing capacity for evidence-informed practice: The Joanna Briggs Institute comes to Victoria*. Victoria, BC: University of Victoria School of Nursing.