Metasynthesis: Issues to Consider for Online Doctoral Dissertations (Literature Review)

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Although research regarding online education is very limited (Chipere, 2015), available research provides strong evidence that there are reasons to be concerned about the failure of online doctoral students to complete their degrees (Johnson, 2015). Diaz (2002) and Storrings (2005) showed that the dropout rate for online doctoral students could be as high as 50-60%. There has been very limited research more recently specifically for online doctoral student dropout rates but there are a number of research articles (summarized in Welkley, 2018) supporting that the dropout rate (60%) for online doctoral students is the same or higher than the very high dropout rate (50%) for doctoral students in all programs (Baltes & Brown, 2018). This is certainly an issue for concern given that data shows that the average dropout rate for all doctoral students averages between 40%-50% (Council of Graduate Schools and Educational Testing Services, 2010; Cassuto, 2013; DiPietro, 2012; Ehrenberg, Zuckerman, Groen, & Brucker, 2009; Marshall, Klocko, & Davidson, 2017). Regardless of whether the dropout rate for online doctoral students is no higher than that for students in other doctoral programs, the high dropout rate still represents a problem that needs to be addressed.

Over the past recent decade, universities have taken steps to address the persistently low completion rate of doctoral students (Bagaka, Badillo, Bransteter, & Rispinto, 2015; Lovitts, 2008; Spronken-Smith, Claire, & Quigg, 2018). These measures have included increased program support, concentrated research training, and increased oversight and feedback by faculty and dissertation committees - particularly dissertation chairpersons (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008). Additionally, committee members have been identified as having the important role of providing a form of support. This support can help contribute to a more uniform review system, which helps increase dissertation completion and subsequent graduation rates (Bagaka et al., 2015; Hattie & Timperley, 2007; Hwang et al., 2015; Lovitts, 2008). With uniform expectations, committees make it clearer what students need to do in order to be ready for dissertation approval and subsequent graduation (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008).

One significant contributor to the high dropout rate for doctoral students is complexities involved with the dissertation process (Cassuto, 2013; DiPietro, 2012; Marshall, Klocko, & Davidson, 2017; Spaulding & Rockinson-Szapkiw, 2012; Storrings, 2005). Dissertations represent the completion of the doctoral education process and mark the completion of the students' doctoral journey. They represent the final step before students receive the highest degree possible in their field. Advancing to the stage of an independent researcher is key for doctoral students, but this stage has shown to be the most challenging for students (Lovitts, 2008; Luse, Mennecke, & Townsend, 2012).

Explaining why doctoral degrees emphasize research is beyond the scope of this paper. Research has often been a way of showing that an individual entering a professional field has the ability to understand objective investigations of important questions, regardless of whether that individual will primarily be conducting that sort of investigation once obtaining their degree (Luse et al., 2012). Therefore, the research training and practices learned during the dissertation process are the beginning of research competency growth for doctoral students. Professionals are expected to demonstrate their competence and preparedness for academic positions by showing that they fully understand the research processes and practices (Gelso, 2006). This is typical, because

individuals who obtain their doctorates will either enter an academic field, or a professional situation where they will be expected to make informed and educated decisions based on research findings (Gelso, 2006; Luse et al., 2012). Regardless of whether a student plans to conduct research after graduation, the expectations that the person enters the field fully prepared with the needed knowledge, skills and capacity to understand what goes into effectively obtaining and using quality research (Luse et al., 2012).

Completion of the dissertation is an important component in the doctoral training process (Lovitts, 2005). Therefore, the critical transition to becoming an independent practitioner and/or researcher requires students to move from consumers of knowledge to capable producers of knowledge (Etzkowitz, Kemelgor, & Uzzi, 2000; Lovitts, 2001). Research required during the dissertation process allows the student to understand how the research process works, and what goes into research that is important to the student's discipline (Lovitts, 2005). The dissertation process also equips the student to make an original contribution to her or his chosen field of study. Students are required to apply their understanding to the level whereby they can produce original research and scholarship to advance knowledge in their discipline (Lovitts, 2005). Regardless of whether or not they plan on producing additional research after graduation, they are expected to show that they can produce acceptable research.

Concerns about the low doctoral completion rates and an even higher rate of online students have led researchers to investigate and identify barriers to the dissertations completion (Bagak et al., 2015; Lovitts, 2008; Spronken-Smith, Claire, & Quigg, 2018). Researchers have identified some contributing factors, but a gap in specific guidance for students regarding their selection of research methods and germaneness of dissertation goals remains. There are a variety of approaches to research, and different approaches can be used to address specific needs of different students looking to complete their dissertation (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008). By helping students identify pros and cons of different research methods, committee members can help students identify challenges, best-fit approaches for their research, and ways of dealing with challenges. By doing so, they could help contribute to higher retention and doctoral completion rates (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008).

Marston, Gopaul, and Kenney (2019) addressed the use of one approach to researching important topics - meta-analysis - as a way of helping students complete quality dissertation work and eliminating some of the obstacles faced when completing a dissertation. These obstacles include the need to collect data, and the process of finding individuals to participate in their studies (Marston et al., 2019). Other obstacles that can stand in the way of completing research, which can be avoided by using meta-analysis, include obtaining laboratory space and buying assessment instruments. As Marston et al. (2019) demonstrated, meta-analysis helps answer specific research questions by gathering information from a number of other studies. Meta-analysis facilitates a very structured way of answering specific research questions by analyzing data studies already conducted in the field and using that aggregate data and statistical analyses as a way of addressing research hypotheses. Therefore, meta-analysis allows students to answer unique research questions without having to conduct novel studies (Marston et al., 2019).

In the present article, the authors address another research approach that also allows students to address important topics without collecting separate data or finding research subjects. This approach, called metasynthesis, is similar to meta-analysis. It involves combining the results of previous studies in a structured way that allows for drawing conclusions across multiple studies. Met-synthesis differs from meta-analysis by analyzing qualitative research studies, rather than quantitative research studies (Marston et al., 2019).

In the present article, the authors address another research method that also allows students to address important topics but in a way that does not require collecting separate data and does not require finding research subjects. This approach, called metasynthesis, is similar to meta-analysis in that it involves combining the results of previous studies in a structured way that allows for drawing conclusions across relevant studies. Where metasynthesis differs is that it is a process for analyzing qualitative research studies, rather than the quantitative research used in meta-analysis.

This article will address the benefits and challenges of metasynthesis. It will outline challenges that students should be aware of before choosing this method. Additionally, it will outline methods of addressing those challenges in metasynthesis used for dissertation research, in an attempt to help students, make informed decisions about their dissertation research.

Review of Literature

Benefits of Meta-analysis and Its Relation to Metasynthesis

Meta-analysis addresses grouped results from *quantitative* studies, while metasynthesis analyzes grouped results from *qualitative* studies (Abdullah, 2018; Quintana, 2015). According to Quintana (2015), meta-analysis is a "statistical integration of evidence from multiple studies that address a common research question" (p. 1549). Meta-analysis is beneficial to traditional doctoral students and even more beneficial for online doctoral students (Quintana, 2015). A significant benefit of meta-analysis is that it allows the doctoral student to make a unique contribution to a research area without requiring steps like recruiting subjects, administering tests or interviews, and collecting data. This can be particularly beneficial for students who might have limited access to resources like laboratory space, and testing equipment needed for completing these steps (Quintana, 2015).

Conversely, metasynthesis requires a different process, but it can offer the same benefits as meta-analysis in terms of dissertation research (Lachal, Revah-Levy, Orri, M., & Moro, 2017). Metasynthesis integrates and synthesizes the results of various qualitative studies, and then reinterprets the data from those studies (Lachal et al., 2017). Therefore, metasynthesis involves very thorough reviews of relevant literature and specific steps for analyzing and generalizing the results of that research. Subsequently, the use of metasynthesis allows dissertation students a beneficial way to address unique and important research questions in ways that avoid certain obstacles that may present themselves when completing other types of dissertation research (Lachal et al., 2017).

Further, metasynthesis and meta-analysis provide approaches that can be particularly

beneficial for online students (Quintana, 2015; Sjoberg, 2014). For example, online doctoral students may often need help in finding a dissertation approach that does not require collection of data, finding subjects, obtaining research lab space or buying equipment. These needs are common for online students, but also present a challenge to traditional students (Sjoberg, 2014). This article will primarily focus on the needs of online doctoral students, but the use of metasynthesis may also be an alternative for students in more traditional programs.

Metasynthesis: Steps and Issues to Consider

There are six main steps to metasynthesis (Sandelowski & Barroso, 2007), and each of these steps will be discussed in detail through this section (See Table 1).

Table 1
Steps to Metasynthesis

Philosophical positioning of metasynthesis
Exhaustive literature review
Quality appraisal of each article
Classifying and "meta-summarizing" findings from each article
Combine findings from articles into themes and topics
Synthesizing together information from all the articles reviewed

Philosophical Positioning

Metasynthesis starts with a summary of the research question, and the specific issues it addresses. This step provides the guidance for what sorts of studies will be included, and how each study will be reviewed. Students conducting meta-syntheses need to ask specific research questions, and decide what specific topics relate to these research questions. This represents the overarching philosophical position of the paper. Determining the philosophical position of a metasynthesis also includes consideration of the types of studies that will be included.

The main purpose of metasynthesis is the development of a model or theory that explains findings from groups of similar qualitative studies (Stern & Harris, 1985). Therefore, students must be clear about the criteria established for study selection, as well as the topics addressed by those studies. Students will likely begin with an initial review of research articles to ascertain the nature of common research questions and topics included in the body of literature they are studying. There is little purpose in trying to move forward with a metasynthesis if a student does not have at least some sense that there is a statistically significant amount of studies that address the topic.

Walsh and Downe (2005) presented examples of research topics that reflected philosophical positions appropriate for metasynthesis. Their examples included "caring from the perspective of the client," "transformational literature," "perceived meanings of medicine and their effect on medicine-taking," and "midwifery care." Reviewing these topics can give one the sense

of how the goal is to be specific, but not too detailed in terms of what is being addressed (Walsh & Downe, 2005).

While this process sounds straightforward, it can be quite difficult. Clarity in topic selection is essential (Sandelowski & Barroso, 2007). Ascertaining whether or not a group of articles address the same relevant research question can be challenging. Topics of articles included in metasynthesis can often be very general, making it difficult for researchers to focus on a specific research question.

Exhaustive Literature Review

Since metasynthesis does not involve the collection of novel data, the literature review provides the source of information used for the research (Sandelowski & Barroso, 2007). There is a need to review all potential sources of research to ensure that every study that fits into the student's metasynthesis research topic is found. The student will start with the research topic, and then look for any qualitative study that would fit under this topic.

A literature review for a metasynthesis is conducted through database searches and manual searches of journals. This means that students not only search online databases but would also go to each journal with qualitative studies to search for relevant studies missed in the database search. For example, Ooi, Ong, Jacob & Khan (2016) conducted a metasynthesis on raising children with autism. In their metasynthesis, they found that six databases contributed a sufficient number of qualitative articles to support an effective metasynthesis. Those databases were: PubMed, EMBASE, PsychInfo, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, and Database of Abstracts of Reviews of Effects (Ooi et al., 2016).

Comprehensive literature reviews for meta-syntheses include backward citation surveying (Sandelowski & Barroso, 2007). Backward searching involves the use of search engines to find articles, and then using the references listed in the relevant articles to find other articles to use as part of the metasynthesis. Authors typically list references at the end of an article, and students doing comprehensive literature reviews can use those lists to find other articles relevant to the topic. When a student begins to see many of the same references at the end of different articles, they can assume with a reasonable level of certainty that most of the relevant references have been located and/or reviewed. It is also useful to consider that the qualitative sections of quantitative and mixed-method research studies can support a metasynthesis (Strobel & Van Barneveld, 2009).

What researchers need to do at this step is clearly define the problem being formulated, decide on the target phenomenon to be studied, and establish criteria for including and excluding articles (Sandelowski & Barroso, 2007). This can be difficult because authors do not always make clear what grouping their article belongs in and do not always show directly how their articles may fit in with other author's works.

Quality Appraisal of Each Article

In this step of metasynthesis, each of the articles is evaluated for individual and comparative quality (Sandelowski & Barroso, 2007). They are also evaluated for how they fit in with the position set up for the metasynthesis. Quality assessment addresses both the quality of the research study itself, and the degree to which it fits in the research topic being addressed. There are different checklists available for assessing quality of research being considered for metasynthesis (Sandelowski & Barroso, 2007). These methods of measuring quality of research include assessment methods summarized in Blaxter (1996), Secker, Wimbush, Watson and Milburn (1995), Kirk, Miller and Miller (1986) and Walsh and Downe (2006).

Further, Lazazzara, Tims and De Gennaro (2019) aptly outlined eleven steps to determine if a study should be included in a metasynthesis (See Table 2).

Table 2
11 Study Criteria for Inclusion in A Metasynthesis

A qualitative research design with data collected from focus groups, interviews, observations, ethnographic reviews, or narrative approaches
The main theme of the study was related to job crafting
The use of primary data
Clearly stated research questions
Appropriate and justified qualitative approach related to research questions
Clear description of the study context
Clear description of the role of the researcher
Clear description of the sampling method
Clear description of the data collection
Clear description of the method of analysis
Consistent with our research question, we only included studies that focused on the process related to job crafting instead of just one aspect (Lazazzara et al., 2019).

When addressing the issue of quality, it can be particularly difficult to determine if one study fits along with other studies. There is often quite a lot of subjectivity to the topic being addressed and how the issues are being addressed (Sandelowski & Barroso, 2007).

Classifying and "Meta-Summarizing" Findings from Each Article

Meta-summarizing is the process by which the student extracts findings from the research articles and from the abstracts if the articles are not available (Sandelowski & Barroso, 2007). This can be complicated, because there is not a definitive rule for how best to determine what findings are the most important. There certainly are general conclusions that the authors present at the end of articles, but these are not the only important pieces of information from article (Sandelowski & Barroso, 2007).

One of the first steps in meta-summarizing articles is to determine what type of qualitative research design is used. In a metasynthesis of postpartum depression, Beck (2002) showed an example of what qualitative research categories articles might fall into. They looked at research articles that followed one of the following qualitative research designs: Phenomenology, Grounded Theory, Feminist Research, Case Study and Ethnography. Determining which design each study fits could be as simple as reading what the authors write or determining fit may take analysis based on how the research approach is described (Beck, 2002).

Noblit and Hare (1988) provided a series of steps that are often used in metasynthesis to identify themes in articles, and then determine how themes are related across studies. There are multiple steps to what they called the "meta-ethnography method" which emphasizes reading each article multiple times. Each time the investigators read articles, they looked for metaphors, themes, concepts, and relationships (Noblit & Hare, 1988).

In their metasynthesis, Schulman, Green, Jaser, Park and Whittemore (2016) provide specific techniques used to meta-summarize important factors in the articles they reviewed:

- Record information from each article on study design, sample characteristics and factors relevant to the topic being studied (in this case, self-management of chronic illness).
- Standard texts in the field were used to identify what themes the authors were likely to find in the articles. This was the starting place for identifying themes, concepts, metaphors and relationships between variables the authors were likely to find. This was not the definitive list, but it was deemed the starting point.
- Each article was read multiple times by each of the study's authors.
- Any mention of themes, concepts, metaphors and relationships found in the articles was tracked, along with specifics about what wording led to identification of these factors.

This process of meta-synthesizing can be one of the more complex steps of the meta synthesis, due to the fact that it typically requires more than one person reviewing the articles. The expectation is that multiple individuals will review the articles, and each reviewer will decide what themes, concepts, metaphors and/or relationships between variables are present (Lazazzara, Tims & De Gennaro, 2020). Reviewers will include detailed quotes to support their choice of what factors are present in each article (e.g. Nolte, Downing, Temane & Hastings-Tolsma, 2017). Once each researcher has reviewed each article, the researchers gather as a group and, based in large part on the quotes that each used to support their choices, reach agreements on what factors are present in each of the studies (Lazazzara et al., 2017; Nolte et al., 2017).

Lazazzara et al. (2020) provided an example of the open-coding approach to meta-summarizing. Each of the authors read through all of the articles and provided a code for each insight provided by the articles. These could be specific themes reflected throughout the discussion and results sections, metaphors used to explain concepts addressed in the articles, relationships that were made between variables, and/or concepts that were evident in those sections. Each of these factors were given a code, and then the reviewers would provide quotes to support the factors they identified. These authors were also focused on the different settings in which primary studies were conducted. They initially coded each primary study for the descriptive

characteristics (e.g., setting, sample, data sources), then developed a list of the codes they used (Lazazzara et al., 2017).

Combining Findings from Article into Themes and Topics

In this step, the authors combine articles in findings under different themes and topics that are used to summarize the material across different qualitative studies (Sandelowski & Barroso, 2007). Authors of meta-syntheses often move forward in making novel interpretations about findings from the different articles that possibly were not addressed in the original articles themselves (Sandelowski & Barroso, 2007).

There are several instruments that can be particularly useful for measuring the quality of qualitative studies and helping to decide how best to analyze different themes and topics across different studies (Sandelowski & Barroso, 2007). For example, checklists that assist with this include the Critical Appraisal Skills Program and the Joanna Briggs Institute Qualitative and Review instrument. A third example is a checklist developed by the National Institute for Health and Clinical Excellence for Qualitative Studies. These are all effective instruments for rating qualitative studies used in meta-analyses (Sandelowski & Barroso, 2007).

One question that can be addressed at this step is whether the participants' own voices were adequately represented when material was included in the qualitative research reports (Sandelowski & Barroso, 2007). If the participants' own words were used, then the student conducting a meta-analysis needs to decide how to synthesize what the participants reported.

Katsakou and Pistrang (2018) provide a good example of identifying themes in metasynthesis. In their metasynthesis of clients' experiences of psychotherapy when being treated for borderline personality disorder, they identified 10 themes. Then, they grouped the 10 themes into three more general domains. Their first domain was called "areas of change," and found that clients make changes in four main areas: developing self-acceptance and self-confidence; controlling difficult thoughts and emotions; practicing new ways of relating to others; and implementing practical changes and developing hope. Their second domain was called "helpful and unhelpful treatment characteristics." The main areas they identified here were highlight treatment elements that either supported or hindered recovery: safety and containment; being cared for and respected; and focusing on change. The third domain, "the nature of change," refers to clients' views of change as an open-ended journey, and a series of achievements and setbacks (Katsakou, & Pistrang, 2018).

Synthesizing All Information from All Articles Reviewed

When completing this final step, the student conducts an "extraction of grouping and abstraction of test findings into numbers and statement sets" (Sandelowski, Barroso, & Voils, 2007, p. 103). This process involves counting the frequency of different themes and specific types of tasks that are included in the research reports. Meta-summaries can involve applied content analysis and text interpretation. Other steps that could be involved in meta-summaries include structural analysis and critical interpretations. Each of these processes involves identifying

different themes that are found throughout the articles that are reviewed (Sandelowski & Barroso, 2007).

This final step is similar to the previous steps, except that the extraction of themes is more focused on practical or generalizable conclusions that can be gathered from the results (Sandelowski & Barroso, 2007). Notice that the meta-analysis in the previous section presented groupings of different themes reflected in the analyzed literature. Compare that to these more practical conclusions that were gathered from a metasynthesis of LGBQ resilience conducted by Bartoș and Langdridge (2019):

- Family and peers, are often sources of resilience and hardship at the same time;
- Many LGBQ people experience hardship early in their lives, and thus cannot 'bounce back' to a previous positive state;
- Extant psychological understandings of resilience are too individualistic for a field that needs to focus more on communities and relationships;
- There is a need to consider relational and community creativity, innovation and growth in understanding LGBQ resilience and not just the capacity of an individual to sustain themselves in the face of adversity;

It could be argued that this final step of metasynthesis represents one major appeal of the approach for doctoral students (Sandelowski & Barroso, 2007). Given the use of qualitative research, an approach that emphasizes detailed and personalized information from respondents, metasynthesis often allows for more practical conclusions to be drawn across studies. This step also provides a way to strengthen the benefits offered by qualitative research in general (Sandelowski, Docherty, & Emden, 1997). Students who are not necessarily considering a research career may find this opportunity to draw practical conclusions, gathered across many studies and involving detailed study of many individuals, useful in their professional careers (Sandelowski et al., 1997).

Discussion

Specific guidance for doctoral candidates regarding their selection of research methods and the appropriateness of that research to their dissertation goals is needed to ensure the dissertation process is not aborted by students. Researchers agreed that identifying certain pros and cons of different methodologies such as metasynthesis serves to forewarn candidates of the challenges that could potentially decrease doctoral completion rates (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008). Therefore, this article addressed the benefits and drawbacks of metasynthesis to ensure students make an informed selection in the early stages of their dissertation process. For example, it is important for dissertation students to be prepared to accurately evaluate whether or not metasynthesis is appropriate for their specific field of study, topic, timeline and goals.

When is Meta Synthesis Appropriate and Beneficial?

Metasynthesis gives dissertation students a way to avoid certain obstacles that may appear with other types of dissertation research (Lachal et al., 2017). Some examples of appropriate metasynthesis topics are demonstrated in the articles below:

- Chenail, R. J., St. George, S., Wulff, D., Duffy, M., Wilson Scott, K., & Tomm, K. (2012). Clients' relational conceptions of conjoint couple and family therapy quality: A grounded formal theory. *Journal of Marital and Family Therapy, 38*(1), 241-264.
- Erwin, E. J., Brotherson, M. J., & Summers, J. A. (2011). Understanding Qualitative Metasynthesis: Issues and Opportunities in Early Childhood Intervention Research. *Journal of Early Intervention, 33*(3), 186–200.
- Lachal et al. (2017). Metasynthesis: An Original Method to Synthesize Qualitative Literature in Psychiatry. *Frontiers in psychiatry, 8*, 269. https://doi.org/10.3389/fpsyt.2017.00269
- Walsh, D., & Downe, S. (2005). Meta-synthesis method for qualitative research: a literature review. *Journal of advanced nursing, 50*(2), 204-211.Walsh and Downe (2005) presented examples of research topics appropriate for metasynthesis. Their examples included "caring from the perspective of the client," "transformational literature," "perceived meanings of medicine and their effect on medicine-taking" and "midwifery care."

It has been shown that metasynthesis can be beneficial for students who have specific research questions within their discipline, as it allows for a collective way of examining that unique topic (Sandelowski & Barrosos, 2007). It allows for the integration of those findings into a layout that is readily available and comprehensible. Additionally, with the increased value and demand for evidence-based practice, students in certain disciplines may find it appropriate and advantageous to use meta synthesis as it aligns qualitative research and research synthesis (Sandelowski & Barrosos, 2007).

If the student's goal is to eventually publish their study's findings, they may find it beneficial to conduct a metasynthesis. By using a metasynthesis approach, the student will be able to combine information resulting in a higher statistical power and more robust results compared to the use of a single study (Greenland, & O' Rourke, 2008; Walker, Hernandez, Kattan, 2008). Other benefits include:

- Increased generalizability. This will help students produce studies with results that can be applied to a larger population, increasing the likelihood of their study obtaining publication offers from competitive journals (if that is the student's long-term goal for dissemination) (Greenland & O'Rourke, 2018; Walker et al., 2008).
- Besides the increased statistical power (versus individual studies), there will be improved estimations of the size of the effect (Greenland & O'Rourke, 2018; Walker et al., 2008).
- Credibility of their study can be enhanced since discrepancy of results across studies can be quantified and analyzed (Greenland & O'Rourke, 2018; Walker et al., 2008).

Meta-syntheses can provide a suitable balance of the researcher's input of subjectivity along with the objective structure through a scientific approach to data analysis that accumulates into the final work (Lachal et al., 2017). This method also has the potential to bring an additional level of "comprehension and interpretation that brings original insights" which in certain disciplines, such as psychiatry, can result in immediate therapeutic positive implication (Lachal et al., 2017, p. 269).

When is Meta Synthesis Not Appropriate or Beneficial?

If the student is working within a limited timeframe, using a metasynthesis approach may not be appropriate due to the exhaustive literature review process. Students will discover that extensive time and effort are required to review all potential sources of research. An exhaustive review must be conducted to ensure that every study within the scope of the metasynthesis's topic is studied. Student must be prepared to allocate large portions of time to synthesize extensive bodies of qualitative research in order to create new findings and knowledge (Jensen, 1996).

Metasynthesis will not be appropriate for a student whose topic is not specific, or in situations where the topic is specific but too detailed in terms of what is being addressed (Lachal et al., 2017). This all sounds straightforward, but it can actually be quite difficult. Topics such as "caring from the perspective of the client," "transformational literature," "perceived meanings of medicine and their effect on medicine-taking" and "midwifery care" are examples of topics that are specific, but not too detailed in their goals (Walsh & Downe, 2005).

Students should be forewarned, that while trying to make their studies unique, they will need to address whether a large group of articles are actually addressing the same topic, which can become challenging (Lachal et al., 2017). For instance, the student will need to clearly define the problem being formulated, decide on the target phenomenon to be studied, and establish criteria for including and excluding articles (Sandelowski & Barroso, 2007). This process can become laborious since authors do not always clearly indicate the category their article belongs in, and they do not always show directly how their articles may fit in with other authors' works. Consequently, students may become frustrated with the metasynthesis process later on; if they are not initially clear about the topic chosen and its appropriateness for metasynthesis.

This article provided procedural steps to inform student researchers about how to plan and implement metasynthesis research. However, students should be forewarned that these steps can be complicated because there is not an absolute process. Several researchers have acknowledged the difficulty and challenges that continue to disrupt researchers who attempt metasynthesis (Paterson, Thorne, et al., 2001; Sandelowski & Barroso, 2007; Webb & Roe, 2007).

When considering metasynthesis as a dissertation method, students should understand in advance that the aggregation of many small research studies does not necessarily predict the findings of a single large study (LeLorier, Grégoire, Benhaddad, Lapierre, Derderian, 1997). Students should be cautioned that while they may conduct a robust metasynthesis, they may find that similar to a meta-analysis, they cannot change or alter a weak design or bias that may exist in the initial small studies (Slavin,1986).

Conclusion

Several researchers have examined reasons and factors that may lead to the low doctoral completion rates and an even higher rate of online students and the barriers to the dissertations completion (Bagak et al., 2015; Lovitts, 2008; Spronken-Smith et al., 2018). While several factors were identified, there remains a gap in current literature of specific guidance for students regarding their selection methods and the appropriateness to their dissertation goals.

In the present article, the authors highlighted the potential benefits provided by metasynthesis and identified how students could decide if metasynthesis may be appropriate for their dissertation studies. Likewise, by identifying the cons of metasynthesis, this article sought to forewarn students of the potential challenges and provide some guidance for deciding if metasynthesis may not be appropriate for their study or goals. All of this information could be useful for helping students make informed decisions about how to approach their dissertation research and help them finds ways of addressing important research topics without needing to collect separate data. Having this approach as a dissertation option could potentially increase the rates of doctoral completion (Bagaka et al., 2015; Hwang et al., 2015; Lovitts, 2008).

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