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Title

Nursing students' perceptions and experiences of reflective practice: A qualitative meta-synthesis

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Keywords: Nursing student, Undergraduate, Nursing education, Reflective practice, Perceptions

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Conflict of Interest

The authors declare that they have no conflict of interest.

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Abstract

Reflective practice is a vital component of nursing education. It allows for the integration of core theoretical knowledge and the clinical experience. Despite a small and growing body of literature exploring the nursing students' perceptions and experiences of this process, a review of the qualitative literature has not been published. The purpose of this meta-synthesis is to examine the qualitative data of nursing students' perceptions and experiences of reflective practice. This meta-synthesis provides a model that suggests quality reflection results in an improvement in practice. Students perceive that quality reflection occurs when all facets of this model have been met. This encompasses an understanding of knowledge including, learning and the barriers and enablers to knowledge, as well as self-discovery including, facing emotions and personal growth. Understanding these experiences and perceptions will permit further understanding of the motivations and factors that influence the quality of reflective practice.

Keywords: Nursing student, Undergraduate, Nursing education, Reflective practice, Perceptions

1. Introduction

The skill of reflective practice enables learning from experiences and integrating theoretical knowledge. Reflective practice requires a questioning mind, for the participant to critically think and to make the connections between the theory and practice. The preliminary development work conducted by Schon (1987) proposed that reflection allows for the integration of theoretical, practical and experiential learnings in professional development (Dewey, 1933; Schon, 1983; Schon, 1987). Often reflection occurs 'in practice', where the learnings that occur are the subject of the

participants reflection (Higgins, 2011). Reflection 'on practice' occurs following a lived experience and encourages the learning from such experiences (Ireland, 2008). However it is the shift between reflection 'in practice' to 'on practice' where the connections between the theory and practice are cemented and the greatest development as a professional takes place. Within the scope of nursing education, reflective practice holds value and is considered a competency for continual professional development. Hence its teachings in nursing curricula are vital to the integrity and future of the nursing profession (Bowling et al., 2018; Vaughan, 2017).

2. Background

It is well known in many nursing schools that a gap between the integration of theory and practice exists (Corlett, 2000; Zieber & Wojtowicz, 2020). Reflective practice in nursing curricula is particularly important where practice is complex and dynamic. While some research has progressed on the use of reflective practice within nursing education, its focus is predominantly around simulation and laboratory based teaching pedagogies (Adamson & Dewar, 2015; Ganzer & Zauderer, 2013; Lavoie et al., 2013). Effective models and guides for reflective practice in nursing education have also been developed. Such examples include, the McGill University Health Centre Reflective Practice program (Smith et al., 2018), the Blended Reflective Inquiry Educators Framework (Donohoe, 2019) and the Lasater Clinical Judgement Rubric (Lasater & Nielsen, 2009). While such models and tools provide more effective means of reflective practice, many still report on the time-consuming, anxiety heightening and highly supported nature of reflective practice (Elliott, 2017; Ganzer & Zauderer, 2013; Glaze, 2001; McMullan, 2006). Despite this, students continue to report on the positive outcomes for their learning from the process of reflective practice (Contreras et al., 2020; Langley & Brown, 2010).

Reflective practice is also considered a vital professional skill in nursing practice (Asselin, 2011; O'Neill et al., 2019; Thompson & Burns, 2008). The importance of skill development in nursing

education is vital as it promotes self-awareness and develops best practice (Dolphin, 2013; Waldo & Hermanns, 2009; Vaughan, 2017). Given the disconnect between the theoretical and practical in nursing education that has been reported in the literature, (Barbagallo, 2019; Da Cunha, Dos Santos et al., 2017; Edwards, 2014) it is vital that this skill is maintained, developed and strengthened into the future of nursing education.

3. Purpose

The purpose of this meta-synthesis was to examine the literature on reflective practice from the perspectives and experiences of nursing students. This has implications on the use of reflective practice and how it documents student learning and growth. The aim of this meta-synthesis is to examine the perceptions and experiences of the nursing students' use of reflective practice. In doing so asking the literature, what do nursing students perceive and experience as important characteristics of reflective practice?

4. Methods

The methodology of this meta-synthesis aims to systematically identify and categorize a set of similar qualitative studies on reflective practice in nursing education in order to further understand them (Sandelowski et al., 2007; Sandelowski & Barroso, 2003). This meta-synthesis followed the seven phases of conducting a meta-ethnography (Cahill et al., 2018). In this process a systematic search and summary of the articles is completed in order to build linkages between them. The method used here conforms to the framework of Joanna Briggs Institute, for systematic reviews of qualitative evidence (Aromataris & Munn, 2020). The approach encompassed an exploration of evidence regarding the perceptions and experiences of nursing students' use of reflective practice. Emergent themes are then established around the characteristics of the articles included in the

analysis. The synthesis aims to bring together the qualitative findings on the phenomena of student perceptions of reflective practice in nursing in order to facilitate knowledge development in the role of reflective practice in nurse education. As discussed by both Jensen and Allen (1996) and Thomas and Harden (2008) it is important to maintain rigor throughout each of the stages of the analysis. In addition to the systematic approach, the Matrix method, was utilised to summarise and guide the synthesis of the literature (Goldman & Schmalz, 2004).

4.1 Inclusion criteria

The systematic approach of this meta-synthesis considered nursing students both at undergraduate or graduate level and at any stage within their respective nursing programs. This may include pre and/or post registration student nurses. The phenomena of interest included the student experiences and perceptions of reflective practice in any setting where reflective practice has taken place. Studies were only included if they focused on qualitative data.

4.2 Search Strategy

This meta-synthesis encompassed a ten-year period from 2009 to 2019 and was conducted in February of 2019. The search included the use of Google Scholar, MEDLINE (PubMed), PsycINFO, Health Source and CINAHL databases. The original search terms included *Qualitative, Student, Nurs*, Reflect* AND Perception OR Attitude OR Perspective OR Opinion*. This search resulted in a yield of 2233 articles (Figure 1). Reference lists, hand searches of relevant journals and grey literature were also searched resulting in an additional 8 articles. The search was further refined to the inclusion criteria of original research articles available in the English language, published in peer reviewed journals, full text and the removal of duplicates which yielded a total of 281 articles. Further exclusion criteria were employed by review of abstracts and titles; studies not involving

undergraduate or graduate nursing students, theoretical articles, reflections, quantitative studies, review, and concept articles were excluded. Following a review of titles and abstracts, 252 articles were excluded as they did not meet the above stated criteria for inclusion. A total of 29 articles were examined and read in full and upon closer review an additional 15 articles were excluded based on the content, resulting in 14 eligible full text articles reviewed. A review of the articles was independently conducted by a fellow researcher in order allow debate and discussion of the uncertainty of any articles included and/or excluded.

4.3 Study Selection and Quality Assessment

Full text sources (n=14) were screened by 2 independent reviewers in order to ensure inclusion criteria of the articles and reduce bias. Any disagreement between reviewers was discussed and a consensus achieved. A total of 10 articles met eligibility criteria of; (1) included undergraduate or graduate nursing students at any stage of their respective programs; (2) described their experiences or perceptions of reflective practice in any setting; and (3) were of a qualitative design. Where sources examined data of mixed participant populations (e.g. academic staff), data pertaining only to undergraduate or graduate nursing students was extracted. These articles were appraised using the Critical Appraisal Skill Program (CASP) for qualitative research (Critical Appraisal Skills Program, 2006). A cut off score of <77% was used to exclude articles, resulting in 4 articles being excluded and a total of 10 articles included in the final analysis with CASP scores $\geq 78\%$. In addition, as some journals do not require ethical standards reporting, all included articles were screened for ethical standards as per the CASP tool (Question 7: Have ethical issues been taken into consideration?) (Critical Appraisal Skills Program, 2006). All 10 articles met this criteria and no articles were excluded based upon this. To reduce any bias, a review of the articles (n=10) was independently conducted by a fellow researcher in order allow debate and discussion of the uncertainty of the inclusion and/or

quality of any articles included. Any disagreement between reviewers of the quality of the sources was discussed and a consensus achieved. Table 1 provides a summary of these key sources.

4.4 Data Extraction and Analysis

The original qualitative data pertinent to the perceptions and experiences of students' use of reflective practice was extracted and transcribed into a Microsoft Word document (Microsoft, Redmond, WA) and independently analyzed by reading it repeatedly and by identifying and coding the themes. The data was analyzed using an inductive thematic analysis informed by Clarke and Braun (2017). This process included familiarisation with the findings of each study that led to the identification the themes. A review of the themes was independently conducted by a fellow researcher in order allow debate and discussion. The themes were compared and contrasted until agreement was achieved.

Figure 1. Identification and selection of articles.

Table 1. Literature matrix.

	Authors	Origin	Purpose	Sample	Data Source	Key Findings
1	Stirling (2015)	UK	To explore the perceptions of post-registration student nurses and their tutors of the use of reflection.	6 students 3 tutors	Thematic analysis of focus group interviews.	While recognising the benefits to reflection students highlighted the barriers to it and made suggestions to improve the use in education.
2	Graue, Rasmussen, Iversen & Dunning (2015)	Norway	Explore advanced level nursing students' translation of new knowledge into clinical practice.	34 students	Phenomenological analysis of narrative self-reported reflections.	Evidence-based knowledge and reflective practice improves patient-nurse relationships as well as improved clinical decision making, overall confidence and pride.
3	Asselin (2011)	USA	To explore the meaning and experiences of reflective practice in senior nursing students.	10 students	Descriptive phenomenology of participant interviews.	Structured reflective journaling improves development to practice. The skills of reflective practice need to be taught prior to placement.
4	Rees (2013)	UK	Explore final year nursing students' learning through reflection.	10 students	Phenomenological analysis of participant interviews.	Students acknowledge the emotional challenges of nursing.
5	Williams, Gerardi, Gill & Soucy (2009)	USA	To explore what nursing students learn about themselves via reflective journaling.	16 students	Thematic analysis of reflective journals.	Students gained higher level of self-awareness and become more genuinely caring in nature with their interactions with patients.
6	Maten-Speksnijder, Grypdonck, Pool & Streumer (2012)	Netherlands	Explore how nursing students learn via reflective case studies.	77 students	Analysis of reflective case studies written by the students.	Students are able to learn and develop their role as nurse practitioners using this method of reflection.
7	Bulman, Lathlean & Gobbi (2012)	UK	Understand the perceptions of reflective practice in nursing education from students and teachers.	11 students 9 teachers	Ethnographic analysis involved observation of teaching and learning and participant interviews.	Students and teachers described reflective practice as 'being' rather than 'thinking' or 'doing' highlighting its strength as a tool for personal expression.
8	Fey, Scrandis, Daniels & Haut (2014)	USA	To identify aspects of debriefing processes that nursing students perceive to improve learning.	28 students	Phenomenological analysis of Focus groups.	Debriefing as a reflective conversation along with establishing a safe environment and drawing on multiple perspectives enable effective sessions.
9	Dahl & Eriksen (2016)	Norway	To understand the nursing teachers and students experiences of the 'THINK' reflective process.	28 students 7 teachers	Thematic analysis of focus group interviews.	Reflective practice supports professional development of students.
10	Coleman & Willis (2015)	UK	To explore nursing students perspectives of reflective writing and the use of poetry to do so.	10 students	Thematic analysis of focus group interviews.	Poetry offers freedom of expression, satisfaction with the process and a more personal connection with patients that a formal written reflection does not.

5. Results

5.1 Article Characteristics

The peer-reviewed articles meeting the criteria of the meta-synthesis were published between 2009 and 2016, with the majority of the articles published in 2015 (n = 3). Undergraduate nursing programs from predominantly the United Kingdom (n = 4) and the United States (n = 3) were included, however articles exploring nursing programs from Norway, and the Netherlands were also included. Data were collected by narratives/journals (n = 3), interviews (n = 3), and focus groups (n = 4).

5.2 Themes Identified

Using an inductive thematic analysis informed by Clarke and Braun (2017), familiarisation with the findings of each study led to the identification the themes. By systematically reviewing these 10 articles, the key perceptions of nursing students on the use of reflective practice broadly fell into two major categories: knowledge and self-discovery. The theme of knowledge includes learning and the barriers/enablers of the reflective process, while self-discovery includes the emotion involved in the process of reflection and the growth this subsequently affords the student. Table 2 provides a summary of these emerging key themes. The themes are depicted in the conceptual model in Figure 2, developed from the meta-synthesis.

Table 2. Summary of key emerging themes.

Core Theme	Sub-Themes	Key concepts	Reference
Knowledge	Learning	Becoming aware	Williams et al (2009)
		Competencies	Maten-Speksnijder et al (2012)
		Preconceived notions	Asselin (2011)
		Personal limitations	Graue et al (2015)
		Exploring personal values	Stirling (2015)
		Insight	
		Expanding perspectives of practice	
		Identify leaning needs, improve practice	
		Personal – Patient view points	
	Barriers & Enablers	Negative experiences	Stirling (2015)
		Daunting, intimidating, challenging	Coleman & Willis (2015)
		Burdensome	Asselin (2011)
		Preparation	Dahl & Eriksen (2016)
		Emotional safety	Fey et al (2014)
		Lack of time	
		Freedom of reflective models	
		Support	
		Weighing in the choices	
Self-Discovery	Emotions	Facing and feeling emotions	Williams et al (2019)
		Sharing emotions	Asselin (2011)
		Understanding emotions	Rees (2013)
		Emotional detachment	Maten-Speksnijder et al (2012)
		Dispersing emotions, letting go	
	Growth	Making sense of it all	Asselin (2011)
		Improved practice	Rees (2013)
		Change in perceptions of professional practice	Graue et al (2015)
		Development of personal care and emotional intelligence	Dahl & Eriksen (2012)
			Bulman et al (2012)
		Sense of self, awareness	
		Acknowledging growth

Figure 2. Conceptual model of student perceptions of a quality reflection.

5.3 Knowledge

The theme of knowledge encompasses two respective sub-themes; learning as well as the barriers and enablers that students perceive to affect their learning through the process of reflective practice.

5.3.1 Learning

Student learning from reflective practice is perhaps the key theme educators wish to promote from the experiential process. It is within this theme that students identify their competencies, limitations, values, gain insight and expand their perspectives within the scope of their practice (Asselin, 2011; Graue et al., 2015; Maten-Speksnijder et al., 2012; Stirling, 2015; Williams et al., 2009). As an outcome of these processes students are able to identify their own learning needs and hence improve practice and patient outcomes. Students are also able to learn from their lived experiences and understand patient needs by understanding their view points and their abilities as a nurse to provide care: "I learn more about myself and my own attitude and perhaps the attitudes of others" [student] (Stirling, 2015, p. 40). The importance of reflective practice and the value placed upon its power by students as a learning tool is also evident: "As nurses, we have these crazy situations that happen all the time, and there's never any reflection.....It's just like we go on to the next day, the door is shut" (Asselin, 2011, p. 131). Furthermore student data from the same article goes on to explore the ability of students to retain higher levels of knowledge enabling the identification of learning needs and hence improvements to practice: "The reflective' s [sic] allowed me to retain more information and have really taught me how to learn from my work and life experiences with the knowledge that I've gained from the course...It takes the white elephant(s) out of the closet and allows them to be introduced" (Asselin, 2011, p. 131). This was also supported by diabetes specialist nurses reporting increased self-confidence: "The knowledge I have gained definitely makes me more self-confident as a diabetes specialist nurse" (Graue et al., 2015, p. 6). Finally, the process of reflection also permits the opportunity for the student to identify personal

limitations and preconceived notions and hence explore personal values and gain insight from this: “I used to think so much of it (mental illness) was personal choice and laziness” [student] (Williams et al., 2009, p. 40).

5.3.2 Barriers and Enablers

Also as a sub-theme are the barriers and enablers to student reflection practices. As to be expected from this theme a predominance around the barriers to reflective practice is common, yet little surrounding the enablers to effective practice exists. One of the key barriers to reflective practice is the ability for students to recognize and be able to deal with ‘negative’ experiences: “It made me realise how much stuff I have repressed over the years” [student] (Asselin, 2011, p. 130). Of particular concern is the fear and anxiety students may face when they wish to utilise a ‘negative’ experience as a reflective point for learning and personal growth: “We think it’s hindering when someone from the clinical placement is present, we are afraid of saying something negative and being judged” [student] (Dahl & Eriksen, 2016, p. 404). This particularly highlights the need for an environment of safety surrounding reflection, particularly in group de-briefing style sessions where students are weighing in on what experiences to share.

Students also reported mixed feelings towards reflective models, (eg. Gibbs, Kolb, Johns etc.) and their freedom of choice when it comes to the structure of their reflection and to have the support of their peers and educators. For example, one such study reports about de-briefing sessions: “She goes through it piece by piece in a way that helps us get as much as possible out of the experience. If she just opened it up to us we’d forget about a lot of stuff. She cued us and questioned us about possible consequences” (Fey et al., 2014, p. 254). Other students argue that structure in reflection is vital: “You have to have more structure to your reflection because it can inform others....and improve clinical practice” (Coleman & Willis, 2015, p. 909). This is further supported by the statement: “The reflection guide helps to articulate experiences, and then it is easier to understand

afterwards” (Dahl & Eriksen, 2016, p. 403). In contrast a student participant also comments on the ability to select a mode or reflection that is best suited to their own learning needs: “....it’s sort of like pick the one that either fits the way you learn” (Coleman & Willis, 2015, p. 909).

The impact of time allowed for reflection is of significance within the literature. It is here students often report there is no time to complete reflections, yet the desire to draw closure from the experience is needed: ‘It was a good way to find closure to something that didn’t have any at the time” (Asselin, 2011, p. 131). Students also recognized the inability of clinical placements to provide sufficient time for reflection: “It’s a product world not one that is interested in developing the individual. Organisations would not allow the time for reflection” (Stirling, 2015, p. 41). It’s also of note that students recognize the time constraints placed upon them and how this hinders reflective practice, yet they also understand how this hinders the ability of educators to provide guidance and feedback within the clinical environment: “When those at the clinical placement finally have time to provide input, opinions and thoughts I learn a lot, it is of great value” (Dahl & Eriksen, 2016, p. 404).

5.4 Self-Discovery

The second major theme, self-discovery is encompassed by two major sub-themes; the emotional rollercoaster that reflective practice takes the student upon and the subsequent personal growth which results from the process.

5.4.1 Emotions

The sub-theme of emotions encompasses the student facing, sharing and understanding their emotions in order to recognize emotional detachment and to let go enabling reflective practice to occur. Initially students recognize that they must face and confront the emotions they are feeling. For example one student recounts their experiences in a mental health clinical placement: “I have been too critical and judgemental toward people with mental health disorder” (Williams et al., 2009,

p. 39). Another shares feelings of anger that need to be expressed such that reflection on the situation can take place: "I was angry because I was not taken seriously; in my opinion the patient was in a bad condition and now he had to wake up himself to take his medicine during the night, it was too heavy for such an old man" (Maten-Speksnijder et al., 2012, p. 567).

In addition to students facing and feeling their emotions, they also reported on the need for emotional detachment, or the ability to place distance between the emotional aspects of the experience and the reflection upon that experience. One such example reported that distance and the ability to share amongst peers is helpful: "Being honest with yourself and...trying to distance yourself from the picture a little bit and look at it without emotions attached is helpful, and that's where reflecting with colleagues that you trust can be helpful" (Asselin, 2011, p. 130). Similarly the same report also includes data on the trust factor involved when sharing emotions with peers and educators: "It's about trust. I trust that you'll be honest and I'm okay with the feedback. I have to trust you in order to be able to write those things, because I probably wouldn't if I didn't" (Asselin, 2011, pp. 129-130).

The ability to understand one's emotions also plays a pivotal role in reflective practice. In particular the ability of students to understand the emotions of their patients was difficult: "I just think 'if that was me', I just try and put myself in their position and try and understand what they go through, but I can't really" (Rees, 2013, p. 50). Leading on from this understanding of emotions is the ability to let go and move on from the emotions of the experience: "I don't think it's a good idea to keep absorbing all the time, you've got to be able to sort of think about it afterwards, and reflect on it afterwards, decide how to deal with it next time it arises" (Rees, 2011, p. 50). Similarly, another reports on the ability to recognize the emotions and observed the learning and move on and let go: "I felt terrible for days...mostly for the family of this gentleman and the grandchildren who were going to deeply miss their grandpa...What occurred was out of my hands. It should not have taken so long to get him to the OR (operating room)" (Asselin, 2011, p. 129).

5.4.2 Growth

Making sense of it all and acknowledging personal and/or professional growth as well as improvements to practice are important in true reflective practice. Students report on the benefits of reflective practice in understanding 'self' and as a result the improvements to practice that can be made by such an understanding: "RCLs (reflective learning contracts) have just given me such an opportunity to learn about me as a person, which has allowed me to develop my nursing practice as a result....Instead of being this little caged bird...I have been allowed to...expand as a result" (Bulman et al., 2012, p. 10). This value upon reflection also highlights the personal care nature of the process, letting go of the emotion and growing from the experience and process: "Reflection becomes a technique that is part of the person, the questions sit well, and we basically become more reflected" (Dahl & Eriksen, 2015, p. 404).

Understanding improvement to personal practice is also key within this theme of growth. It is here students can recognize how their practices have changed or improved through the process of reflection: "I learnt that the nurse patient relationship (is) quite unique for each patient" (Rees, 2013, p. 51). This is particularly so amongst student perceptions around communication as well as perceptions of professional practice: "If you have no real sense about how you come across to people or how things affect you; the relationships in the work place are going to be difficult. I am not sure nursing is the type of job that you can just be a sort of a doer in" (Bulman et al., 2012, p. 11).

The final aspect of growth encompasses the ability to make sense of everything. This includes the ability to understand possible errors and mistakes that occur and by reflecting upon such experiences work through the pain and/or guilt and then recognize growth and improved practice. Students report how difficult it can be to recognize and admit such pain and guilt: "You have to be willing to admit that you're wrong and that you made a mistake or you could have done it better" (Asselin, 2011, p. 130). The same student continues to discuss this further: "Could it have been better? Probably. That's hard, and it's painful because sometimes you don't have a good outcome

and that can feel terrible, especially if you're feeling responsibility for it which I don't know any nurse that doesn't" (Asselin, 2011, p. 130). However it is from these reflections that enable realizations of broader improvements to practice that can also be made: "The things you are excited about as a nurse, also at the organizational level, are possible to increase focus on, start discussing and checking databases for research and guidelines and perhaps change via a common effort" (Graue et al., 2015, p. 6).

6. Discussion

This qualitative meta-synthesis was conducted to develop a broader understanding of student perceptions and experiences of reflective practice in the hope that this understanding could be utilized to inform curricula. Thus this meta-synthesis aims to ascertain a new understanding of these perceptions and experiences and provides the opportunity to explore this phenomenon in further depth, and hence lead to a better theoretical understanding. The exploration of literature in this meta-synthesis has led to the development of two main themes relating to what students express facilitates quality reflective practice for nursing students; Knowledge and Self-discovery. These two key themes encompass the sub-themes of; learning, barriers and enablers, emotions, and growth. Each of these core themes together inform the conceptual model of student perceptions as to what constitutes a quality reflection experience and hence a resultant improvement in practice.

While the majority of the literature explored in this meta-synthesis have encompassed the broad themes of knowledge and self-discovery, there was only one report that encompassed all four sub themes (Asselin, 2011). When examining the literature as a body of information it is clear that not all articles observed the same depth of the student experiences of reflective practice. For example, Rees (2013) and Bulman et al (2012) predominantly explore the theme of self-discovery yet not the theme of knowledge. Similarly, the reverse is true where Stirling (2015), Coleman and Willis (2015) and Fey et al (2014) predominantly explore the major theme of knowledge. These discrepancies in

the literature suggest that common understandings of the student experiences of reflective practice in nursing education have not yet been met and established in depth.

Of the literature included in this meta-synthesis, only one paper uses a theoretical framework in which to present their data (Fey et al., 2014). Use of a theoretical model enables the data to be understood under a shared or common view (Fenwick, 2001). Theoretical frameworks that are underpinned by experiential learning and poise the learners' personal understandings through reflection upon their own actions would enable this shared view. For example, Kolb and Kolb (2009) present an experiential framework based upon experience, reflection, conceptualization and experimentation, which enables knowledge to be created. This notion of understanding reflective practice is also supported by Kinsella (2009) that suggests there is a general confusion surrounding the concept of reflective practice particularly in nursing, health and social care professions. Use of these theoretical frameworks would allow a broader understanding of the various factors that students perceive to directly impact quality reflective practice.

This meta-synthesis has identified a number of factors that student's perceive to contribute to a quality reflective experience. These are reflected in the themes identified and conceptual model presented in this meta-synthesis, all of which are consistent with the broader constructivist pedagogy (Guiffrida, 2005; Osterman, 1998; Yilmaz, 2008). Kinsella (2009) suggests that while reflective practice is conceptually clouded, its philosophical underpinnings and hence its epistemological assumptions are not well understood. In earlier work by Kinsella (2006), the author considers Schon's reflective practice theory and states that its constructivist roots lay central to the theory and hence, an understanding of constructivist paradigms may pave a better understanding of reflective practice theory. This is particularly useful in nursing education where a constructivist approach enables knowledge construction and enables the student to progress from an inexperienced to experienced practitioner (Peters, 2000).

The conceptual model presented here supports the work of Kinsella (2006) and Osterman (1998) by embedding the theory of reflective practice into the constructivist philosophy. The constructivist philosophy suggests that knowledge is subjective and varies on the construction by the subject and that this learning only occurs by the subject when they are engaged in individual and social activities that permit self-discovery (Mezirow, 1997). The qualitative data examined in this meta-synthesis and the resultant conceptual model encompass this philosophy by the direct link of knowledge to self-discovery as recognized by the student. Together this provides the opportunity to understand the learning theory behind reflective practice, particularly from the student perspective. This will allow future development and strengthening of reflective practice as a better understanding emerges.

7. Limitations

This meta-synthesis has highlighted the scarcity of research conducted on nursing students' perceptions and experiences of reflective practice. However, the studies included in this meta-synthesis did not explore the participant responses further, for example to understand why they expressed such perceptions and experiences of reflective practice. In addition, this meta-synthesis excluded research not published in languages other than English which may have impacted on the extent and range of the data included.

8. Conclusions

In summary, a theoretical understanding has the potential to provide a common ground on which to inform context and methodologies for future research in the area of nursing students' perspectives and experiences of reflective practice. In this study the conceptual model provides a framework to further explore this body of work under a common understanding of the observed phenomenon. In this light, the model presented here suggests that a quality reflection results in an improvement of

practice. In this light students perceive that quality reflection experience occurs when all facets of this model have been met. This encompasses an understanding of knowledge including, learning and the barriers and enablers to knowledge, as well as self-discovery including, being able to face emotions and allowing personal growth. By understanding and further exploring these perceptions and experiences of reflective practice we may further develop theories that underpin and increase an understanding of motivations and factors that influence the quality of reflective practice.

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