

## Review

## The behaviours of nurses that increase student accountability for learning in clinical practice: An integrative review

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## ABSTRACT

**Objective:** To identify nurses' behaviours that promote student accountability for learning in clinical practice.**Background:** Health care services are experiencing significant strain in meeting clinical education requirements of increasing numbers of nursing students enrolled in undergraduate nursing programs. Internationally, the transition to university based education for nurses has seen the emergence of issues for busy clinicians trying to manage increasing workloads with responsibility for student learning. An understanding of what types of supervisor behaviours promote student accountability for learning, may support clinicians to more effectively manage their dual roles of clinical care and student support.**Design:** An integrative approach was adopted for this review.**Data sources:** A search of the Cumulative Index of Nursing and Allied Health Literature, Pubmed, Scopus and Embase was undertaken, limited to articles published between 2000 and March 2017.**Review methods:** Whitemore and Knafls' (2005) framework for conducting integrative reviews was used to ensure a methodological and rigorous approach.**Results:** Nine studies were considered. Behaviours emerged in relation to four themes including: belongingness associated with a genuine partnership; empowerment and increasing student self-efficacy; trust linked to increasing and staged independence; and balancing clinical and educational requirements.**Conclusion:** Behaviours of nurses significantly influence students' accountability for learning and accordingly, their ability to be adequately prepared for professional nursing practice. Understanding behaviours that impact on students' approach to clinical placement can guide nurses in their approach to facilitating student learning, in particular, behaviours that increase student responsibility and independence over the continuum of clinical education.

## 1. Introduction

The clinical learning environment is an essential element of education for students enrolled in undergraduate nursing programs. While much of the theory component is learnt in the classroom, the clinical environment provides the opportunity for knowledge and skills to be integrated and applied in the context of patient care (Flott and Linden, 2016; Levett-Jones and Lathlean, 2008). This experience is profound, in that it not only has the ability to contribute to student performance in health care practice but it also has the capacity to develop a professional nursing identity.

Internationally, regulatory authorities require Registered Nurses to

be accountable for ongoing learning and professional development for themselves and others. Specifically, the concept of student accountability for learning in clinical practice has not been explored in the literature. The Oxford Dictionary (2018) defines accountability as “the fact or condition of being accountable; responsibility”. Identifying nursing behaviours that can advance student accountability for learning is necessary to position graduates to meet the professional expectations of lifelong learning, and incorporate the demonstration of critical thinking skills and the application of evidenced based care in their practice (Henderson et al., 2012).

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## 2. Background

Internationally, the shift to higher education for nurses has been a gradual process. Initially North America began moving away from hospital based apprenticeship models in the 1960s, however in Australia, this process was only completed in 1993 followed by the United Kingdom in the mid 1990s (Elliott and Wall, 2008), with these transitions completed by the year 2000. While there have been undeniable and significant achievements in moving nursing training to higher education, (Bennett, 1995) this change has brought a decrease in nursing student exposure to work based learning.

In response to expected nursing shortages, there have been increased enrolments of students in university programs (Universities Australia as cited in Sevenhuysen et al., 2015). Consequently, hospitals and health care services are experiencing significant strain to provide the clinical practice requirement component of these courses (Hall et al., 2012; Sevenhuysen et al., 2015). Adding to this burden is the lack of training or potential willingness of staff to undertake the supervisory role given increasing patient acuity and associated workloads, prevalent in contemporary health care service settings (Zilembo and Monterosso, 2008; Hall et al., 2012). With these educational and organisational changes, the need for students to maximise their clinical learning opportunities and be accountable for and drive their own learning is paramount. How clinicians can support student accountability for learning has not been extensively explored.

During clinical nursing placements, students work with other nurses as part of teams, on a shift-by-shift basis, over a period of time. In the literature, the relationship is often described as clinical supervision and is interchangeable with other terms such as mentor or preceptor (Manninen et al., 2015). There is a growing body of research evidence to suggest that facilitating a quality clinical learning experience is largely influenced by the characteristics of the clinical supervisor working directly with the student (Zilembo and Monterosso, 2008; Babenko-Mould et al., 2012; Levett-Jones and Lathlean, 2008). This important role, which facilitates the development of future nurses, may be arbitrarily assigned to nurses with little preparation or capacity (Henderson and Eaton, 2013). Jansson and Ene (2016) argue that the clinical supervisor role and its' associated responsibilities, needs to be clearly defined within a formalised support structure. While clinical supervisors are undoubtedly important in influencing student learning, there is also an expectation from tertiary education providers that students themselves are actively engaged in their learning and accountable for meeting their learning outcomes (Chipchase et al., 2012).

Similar to national regulatory requirements in other countries, the Australian Registered Nurse Standards for Practice (Nursing and Midwifery Board of Australia [NMB], 2016) embeds concepts of responsibility and accountability in its framework, through reference to critical thinking, reflective practice, and a lifelong learning approach to continuing educational development. Clinical supervisors need to move from didactic modes of teaching (Stevens and Brenner, 2009) to models that encourage students to be active and accountable in their learning to support professional development. Accordingly, supervisor behaviours should encourage students to question, in particular, taken-for-granted assumptions in routine practices (Henderson et al., 2005). Ultimately, effective facilitation of students' clinical learning cultivates qualities expected of them as a professional nurse.

Clinical supervisor behaviours, which increase undergraduate nursing student accountability for learning in clinical practice environments, is an under researched phenomenon. Existing published work relates to clinical teaching strategies specifically and their effect on student engagement in learning (D'Souza et al., 2013) or their impact on student approaches to learning (Tiwari et al., 2006). Additionally other work examines nursing leadership qualities of staff involved in student learning (Walker, 2011; Zilembo and Monterosso, 2008). However, there is no literature specific to nursing behaviours that impact undergraduate student accountability or responsibility for learning

in clinical settings. What is known is that students who are engaged in their clinical learning are able to create more meaningful experiences, access quality and effective education and, furthermore, develop critical thinking capacities (D'Souza et al., 2013). The challenge is to better understand how nurses who supervise students can enable this engagement and ultimately encourage students to account for their learning.

## 3. Methods

### 3.1. Aim

This integrative review identified nurses' behaviours that increase student accountability for learning in clinical practice.

### 3.2. Design

An integrative literature review was conducted. An integrative approach supports the inclusion of a variety of research designs and perspectives to more fully comprehend the phenomenon of interest and provides a transparent methodological approach to increase the rigour of the review (Whittemore and Knafl, 2005). The stages include: problem identification, literature search, data evaluation, data analysis and, finally, presentation (Whittemore and Knafl, 2005).

### 3.3. Problem identification

As described in the background, the problem is understanding what nurse behaviours can be adopted to increase student accountability during supervised clinical placements.

### 3.4. Literature search

A systematic search of the literature was conducted on 9 March 2017 with librarian assistance. The search incorporated four electronic databases: CINAHL (Cumulative Index to Nursing and Allied Health Literature), Pubmed, Scopus and Embase. Initially the review set out to broadly examine the behaviours of supervisors that increase health professional student accountability for learning in clinical practice. However, due to a lack of literature on this subject in other health disciplines, the research question was revised to be inclusive of nursing students specifically. An extensive number of search terms were included in a total of four individual searches, acknowledging the multitude of potential synonyms for the terminology used in clinical supervision and the ambiguous nature of the phenomenon. These searches were then combined in a fifth search using the 'search history' feature.

Limiters of 'journal article' including 'article in press' were applied. Publication dates of 2000 to 2017 were applied to the search. These dates were selected to capture published articles related to university-based nursing programs and students. The search process incorporated search mode 'Boolean/phrase' and search field 'abstract'. Articles were limited to English language. Identified articles then underwent a manual search of their reference list as well as citation tracking supported through Google Scholar, which identified a further two articles of interest. Three different methods for searching the literature enhanced the rigour, particularly given limitations related to the multitude of potential search terms (Whittemore and Knafl, 2005). A point of saturation was reached as articles were repeatedly identified.

The search process identified 1265 articles in total, however this was reduced to 349 following removal of duplicates. Following the process of scanning titles and when necessary abstracts of these articles, 300 papers were subsequently removed. Forty nine articles were read in entirety and subjected to inclusion and exclusion factors (refer Table 1).

The inclusion and exclusion table clearly defines the target population, variables, related concepts and literature to be included, which clarifies the reviews' purpose (Whittemore and Knafl, 2005). No single



**Table 1**  
Inclusion and exclusion factors.

Inclusion factors	Exclusion factors
<p>Articles that:</p> <ul style="list-style-type: none"> <li>Relate to undergraduate nursing students.</li> <li>Relate to nurses/supervisors' attitude or behaviours.</li> <li>Articles related to learning in the clinical practice environment.</li> <li>Are primary research based.</li> <li>Discuss students' accountability or responsibility or engagement or commitment or self-efficacy or motivation for learning or active learning in clinical practice environments.</li> </ul>	<p>Articles that:</p> <ul style="list-style-type: none"> <li>Relate to nursing graduates or postgraduate nursing students.</li> <li>Relate to health professionals in general or other health disciplines.</li> <li>Relate to university based learning or learning in a classroom setting.</li> <li>Are systematic reviews, literature reviews, discussion papers, unpublished studies or grey literature.</li> <li>Provide only teaching frameworks or models for clinical placement that make students more accountable for their learning.</li> </ul>

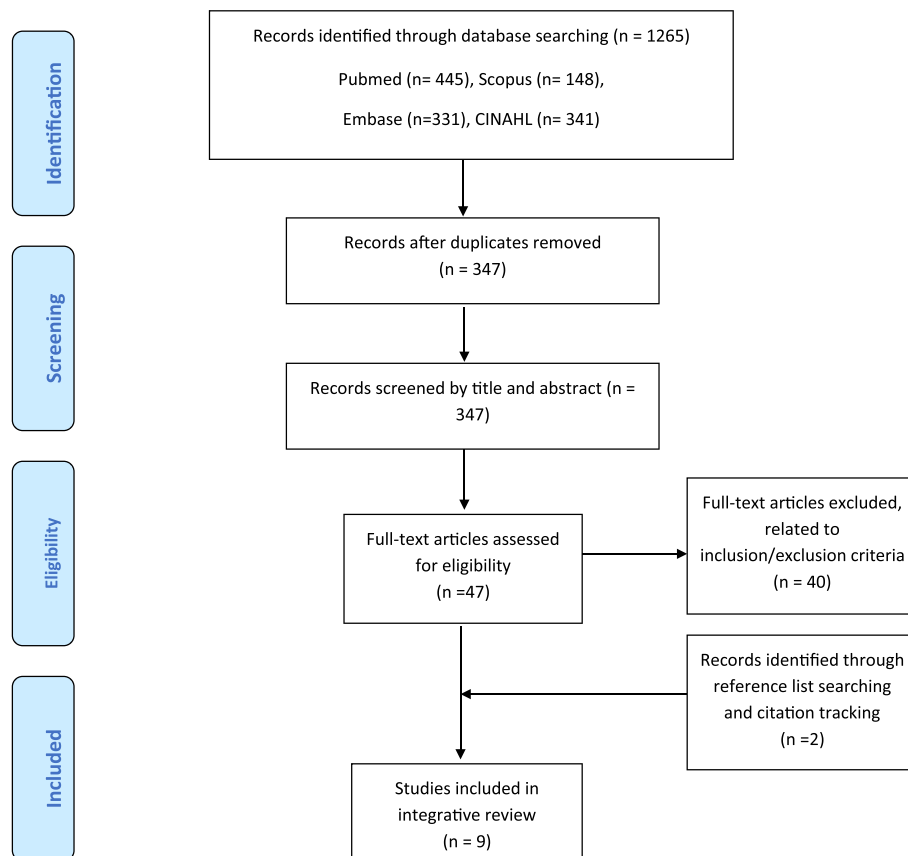
particular factor resulted in articles repeatedly being excluded. Rather it was a composite of factors that prevented articles from meeting the inclusion criteria. Graduate and postgraduate nurses were excluded as they have successfully completed their nursing qualification and therefore they should already be responsible and accountable for their continuing learning.

Articles that did not describe nurses' behaviour and only discussed clinical placement models or teaching strategies that could make students more accountable for their learning were excluded. Restricting the review to only nurse behaviours that encourage students' accountability for learning, provided clarity and purpose (Whittemore and Knafl, 2005). Without this parameter, the review risked becoming too broad to apply in practice. As the term 'accountability for learning' could be seen as quite an ambiguous concept, relative terms of 'responsibility' or 'engagement' or 'commitment' or 'self-efficacy' or 'motivation for learning' or 'active learning' related to clinical practice environments was necessary. This diagram, depicted in Fig. 1, demonstrates the process of selection.

### 3.5. Data evaluation

There is no gold standard for determining data quality when comparing diverse research designs in an integrative review (Whittemore and Knafl, 2005). This review considers studies that include quantitative, qualitative and mixed methods approaches to data collection. To address this challenge, the Mixed Method Appraisal Tool (MMAT: Pluye et al., 2011) was used to evaluate and describe the methodological quality for each of the included studies. This tool was not used to rationalize excluded studies but rather consider research quality. Through MMAT, a quality score was attributed to each article, with one asterisk (\*) denoting the lowest value and ranging to four asterisks (\*\*\*\*) for the highest value.

Two articles included in the review reported a mixed method approach to their research design. Of these articles, Levett-Jones and Lathlean (2008) only reports on qualitative data. The second article, by Jansson and Ene (2016), reported both qualitative and quantitative data, however, only qualitative data was appropriate to address the research question posed in this review, therefore, only qualitative data



**Fig. 1.** - Flow chart of yield.

Adapted from: Moher, Liberati, Tetzlaff, and Altman, The PRISMA Group (2009).



was appraised.

### 3.6. Data analysis

A Microsoft Excel template was used to record applicable information about each study, and to facilitate study comparison. The data tabled included: study title, reference and origin, the objective/aim, methodology/design, participants, method, results and the key findings relative relevant to the review. Detailed notes in the key findings section recorded the richness of relevant data.

The final set of articles were subjected to an inductive, and iterative, process to identify patterns, themes or relationships to facilitate data comparison and data visualisation (Whittemore and Knafl, 2005). According to Whittemore and Knafl (2005) unbiased and methodical interpretation is challenging, with a high potential for error. To mediate this, initially the first author independently extracted data and then compared and contrasted emerging themes with the second author. All authors were involved in the subsequent synthesis of the data.

## 4. Results

### 4.1. Presentation

Of the nine empirical research studies included in the review, eight provided qualitative evidence (see Table 2). Included in these eight studies was a mixed methods article design, where only qualitative data was applicable (Levett-Jones and Lathlean, 2008). The final ninth study, a quantitative design methodology, was fundamentally descriptive, so the results were readily comparable (Babenko-Mould et al., 2012).

Three of the articles included a unique theoretical framework to guide their research (Babenko-Mould et al., 2012; Liljedahl et al., 2016; Greer, 2010). One article used a relative framework of quality indicators to describe nursing students' clinical education (Jansson and Ene, 2016). Bradbury-Jones et al. (2011) used hermeneutic phenomenology as the underpinning philosophical approach while Manninen et al. (2015) applied an ethnographic approach. Hellstrom-Hyson et al. (2012), Levett-Jones and Lathlean (2008) and Matthew-Maich et al. (2015) did not suggest any theoretical or philosophical framework in their design.

Quality appraisal applying the MMAT identified two articles of exemplary quality, attaining a maximum of four asterisks (Manninen et al., 2015; Matthew-Maich et al., 2015). They were well considered and demonstrated data triangulation. Four of the nine articles scored three asterisks, two of these acknowledged the potential influence of the researcher (Hellstrom-Hyson et al., 2012; Levett-Jones and Lathlean, 2008). The final three articles rated two asterisks, due to limitations associated with the relationship of findings to either participants or the setting (Greer, 2010; Jansson and Ene, 2016; Liljedahl et al., 2016).

Data collection methods used in some articles included a questionnaire or survey format ( $n = 4$ ) with one of these also incorporating focus groups. Three studies included either structured ( $n = 1$ ) or semi-structured ( $n = 2$ ) interviews, while the remaining two studies employed field observations and follow up interviews either individually or as a group. Geographical distribution of the studies varied. Four articles originated from Sweden, two articles from Canada, one article from the United States of America and another from the United Kingdom. The final article was a cross-national study across the United Kingdom and Australia.

Participants in eight of the studies were primarily undergraduate nursing students. One study specifically reported findings from nurse educators (Greer, 2010). Of the eight studies including nursing student participants, three of these also involved additional participants including clinical teachers (Babenko-Mould et al., 2012), clinical supervisors and clinical managers (Liljedahl et al., 2016) and clinical

supervisors and patients (Manninen et al., 2015). While the inclusion criteria dictated nursing students were undergraduate, one study incorporated students (31 of a total of 269 students) that were attending clinical placement while completing a specialist nursing program which led to a master's degree (Jansson and Ene, 2016). These students were included because their status as undergraduate or post-graduate student was not specified.

Student nurses were reported as either second or third year students ( $n = 4$ ), or in various semesters or years (Jansson and Ene, 2016; Matthew-Maich et al., 2015), or part of a longitudinal study over three years (Bradbury-Jones et al., 2011). In one article, there was no year level indicated (Liljedahl et al., 2016).

While clinical placements were conducted in a variety of settings, it is worthwhile noting that two of the studies, which originate from Sweden, relate to clinical placement on a dedicated student ward or clinical education wards. These wards commonly involve students working at a greater level of independence and often required to work in pairs (Manninen et al., 2015; Hellstrom-Hyson et al., 2012).

Following the inductive and iterative analysis process, four themes became apparent: belongingness associated with genuine partnerships; empowerment and increasing student self-efficacy; trust linked to increasing and staged independence; and balancing clinical and educational requirements. A summary of the nursing behaviours that encourage or discourage students to assume accountability and independence on clinical placement are found in Table 3.

### 4.2. Belongingness associated with genuine partnerships

Belongingness influences student's capacity and motivation for clinical learning however is dependent on a partnership between the teacher and learner. Levett-Jones and Lathlean (2008) in their cross-national study of third year student nurses, established that nurses working alongside students in clinical practice had the most significant impact on students' sense of belonging and learning. This sense of belongingness influenced student's capacity and motivation for clinical learning. Levett-Jones and Lathlean (2008) identified nursing behaviours central to student belongingness included: being friendly, enthusiastic, welcoming, inclusive, accepting, acknowledging, receptive, valuing, supportive of learning, providing a feeling of security and having positive interpersonal relationships. These behaviours led to students feeling more confident to advocate for their own learning, and be more self-directed and empowered (Levett-Jones and Lathlean, 2008). These concepts resonate with the research of Bradbury-Jones et al. (2011) in relation to students needing to feel valued and practice within a supported environment to become empowered.

Liljedahl et al. (2016) challenge this notion of belongingness utilizing Billett's (2001) concept of 'workplace participatory practice' as a theoretical framework. In their study, nurses succeeded in establishing a sense of belongingness for students which resulted in increased student responsibility and motivation for learning (Liljedahl et al., 2016), confirming the findings presented by Levett-Jones and Lathlean (2008). However, this responsibility often overwhelmed students (Liljedahl et al., 2016). Some students were reluctant to compromise their own values related to patient care to assume a sense of belonging, suggesting belongingness is dependent on the workplace and also students' willingness to engage in it (Liljedahl et al., 2016).

Liljedahl et al. (2016) suggest that belongingness in itself is not a precursor to accountability for learning; it requires a specific relationship between student and teacher. Both the learner and teacher are responsible for establishing a sound partnership where both parties are accountable for learning. Partnerships facilitate the sharing of ideas, reflection and collaboration which provides an environment for the student to safely challenge the educator (Greer, 2010). Self-efficacy can assist students to feel confident to safely question their supervisors and work as partners. Partnership is important for student accountability for learning.



**Table 2**  
Data extraction outcomes.

Authors, country of origin	Objective	Methods	Participants	Key findings relative to review	Quality Score
Babenko-Mould, Y., Iwasiw, C. L., Andrusyszyn, M. A., Laschinger, H. K. S., & Weston, W. (2012), Canada	To examine empowerment, teachers' use of empowering teaching behaviours, nurses' practice behaviours, and students' confidence for practice in acute care settings.	Quantitative, cross-sectional survey design with an integrated theoretical perspective.	Clinical teachers (n = 64) and 2nd year baccalaureate nursing students (n = 352), from 7 different program sites in Ontario, Canada. These programs all offered acute care courses in the 2nd year. Total 416 participants.	1. Nursing students who perceived their teacher as using empowering behaviour were more likely to feel empowered and confident to practice. 2. Students' own perceptions of their teachers' empowering behaviours influence their confidence and self-efficacy for practice. Empowering behaviours acknowledged in the survey include: <ul style="list-style-type: none"> <li>• Express confidence in others.</li> <li>• Foster opportunities to participate in decision-making.</li> <li>• Provide autonomy from bureaucratic constraints.</li> <li>• Enhance meaningfulness of work.</li> <li>• Facilitate goal accomplishment.</li> </ul>	***
Bradbury-Jones et al. (2011), United Kingdom	To explore the empowerment of nursing students in clinical practice.	Qualitative longitudinal study involving in-depth, semi-structured interviews. Hermeneutic phenomenology used as the underpinning philosophical approach to the study.	1st year nursing students (n = 13) using purposive sampling. Students must have completed at least one clinical placement.	1. Behaviours that value students as a learner, team member and person are important factors in the empowerment of nursing students, which will foster a sense of self control and self-efficacy in clinical practice. 2. Strategies to promote empowerment of nursing students in clinical practice need to address their sense of value. 3. Empowering behaviours included: <ul style="list-style-type: none"> <li>• Allow students to work independently, take responsibility and make clinical decisions.</li> <li>• Facilitate students to meaningfully contribute to nursing care and making them feel appreciated.</li> <li>• Treat students with respect, for example introducing them by name, empowers students.</li> </ul> 4. Disempowering behaviours included lack of: <ul style="list-style-type: none"> <li>• Opportunity to learn</li> <li>• Encouragement</li> <li>• Responsibility</li> </ul>	***
Greer, A. G. (2010), United States of America.	To describe the learner-centred characteristics of nurse educators who report using contemporary pedagogy.	Qualitative research design. Secondary/supplementary analysis of data from a previous study.	Members of Sigma Theta Tau International, who identified themselves as nurse educators. (n = 694) from America, Canada, Europe, Asia.	1. Behaviours that contribute to learner-centredness in relation to: <ul style="list-style-type: none"> <li>• Power – empowering students, valuing students, acceptance them as individuals, genuine concern and trust.</li> <li>• Role of the teacher – enthusiasm, belief in students, partnership, adaptability, creativity and positive self-perception.</li> <li>• Responsibility of the learner – promoting partnerships and allowing students to challenge educators, facilitate sharing of ideas and encouraging reflection in a collaborative manner, role modelling these same behaviours.</li> </ul>	**
Hellstrom-Hyson, E., Martensson, G., & Kristofferson, M. L. (2012), Sweden.	To describe how nursing students engaged in their clinical practice experienced in two models of supervision: student wards and traditional supervision.	A descriptive design with a qualitative approach was used.	Convenience sample of nursing students (n = 8) in their final semester of a 3 year program, on clinical placement in a surgical	1. Behaviours of the supervising nurse that contribute to assuming responsibility include: <ul style="list-style-type: none"> <li>• Provide the opportunity to have responsibility/independence and permission to</li> </ul>	***

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Table 2 (continued)

Authors, country of origin	Objective	Methods	Participants	Key findings relative to review	Quality Score
Jansson, I., & Ene, K. W. (2016), Sweden.	To describe nursing students' clinical education based on quality indicators and experience of what facilitators or barriers to learning.	Cross-sectional design with quantitative and qualitative data from evaluations of student clinical learning. Only qualitative data was collected for the quality indicator <i>learning</i> .	Students from semester 2, 4, 6 and specialist program (n = 269)	<p>department. None had previous experience on a student ward.</p> <p>practice.</p> <ul style="list-style-type: none"> <li>• Be supportive</li> <li>• Acknowledge and confirm students' proposed care plan.</li> <li>• Encourage students to take their own initiative.</li> <li>• Allow students to have control.</li> <li>• Trust the student.</li> </ul> <p>2. Factors that impede responsibility:</p> <ul style="list-style-type: none"> <li>• Exclude students.</li> </ul> <p>1. Behaviours that facilitated learning related to independence and responsibility:</p> <ul style="list-style-type: none"> <li>• Preceptors who allowed students to be independent and take responsibility.</li> <li>• Promoting confidence by allowing students to do just enough on their own.</li> <li>• Keeping track of students' ability and the level they were at.</li> <li>• Good preparation/instructions prior to practical work.</li> <li>• Gradual increase in responsibility.</li> </ul>	**
Levet-Jones, T., & Lathlean, J. (2008), United Kingdom and Australia.	To explore nursing students experience of belongingness while on clinical placement with a particular focus on the relationship between belongingness and learning.	The article reports on selected findings from the qualitative phase of a mixed-method, cross-national study.	3rd year nursing students (n = 18) from two universities in Australia and one in the United Kingdom, which all had different characteristics and structures of placement.	<p>1. Positive behaviours of nursing staff related to students' motivation to learn: friendly, welcoming, including them as part of the team, accepting, valuing, supportive of their learning, making them feel secure and wanted, committed to their professional development, acknowledging, positive attitude toward students, receptive.</p> <p>2. Negative behaviours were suggested as alienating and lacking acceptance of students.</p> <p>3. Positive behaviours of nursing staff related to students' self-directed learning: providing a feeling of security and acceptance, empower and enable students learning, making students feel that they belong promotes their confidence to advocate for their own learning and feel safe to do so.</p> <p>4. Behaviours that reduce anxiety: a barrier to learning for students: Acceptance, positive interpersonal relationships, enthusiastic, welcoming and supportive.</p> <p>5. Behaviours that provide students confidence to ask questions which contributed to clinical thinking included: welcoming and supportive.</p> <p>1. The study reported students were offered responsibility and invited into the community of practice on the ward giving a sense of belongingness. Such behaviours included: being accepted, actively included in ward traditions and introduced to routines. These behaviours led to ambitious attempts of students to manage the role of a professional nurse.</p> <p>2. Supervisor behaviours enabled students to be</p>	***
Liljedahl, M., Björck, E., Kalen, S., Ponzer, S., & Bolander Laksov, K. (2016), Sweden.	To explore the interdependence between affordances and engagement in clinical learning environments.	An ethnography-inspired qualitative study.	55h of observation and interviews with nursing students (n = 5), supervisors (n = 3), clinical education manager (n = 1) and clinical managers (n = 1).	<p>1. The study reported students were offered responsibility and invited into the community of practice on the ward giving a sense of belongingness. Such behaviours included: being accepted, actively included in ward traditions and introduced to routines. These behaviours led to ambitious attempts of students to manage the role of a professional nurse.</p> <p>2. Supervisor behaviours enabled students to be</p>	**

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Table 2 (continued)

Authors, country of origin	Objective	Methods	Participants	Key findings relative to review	Quality Score
Manninen, K., Henriksson, E. W., Scheja, M., & Silén, C. (2015), Sweden.	To explore supervisors' approach to students' learning at a clinical education ward where students are encouraged to independently take care of patients.	Ethnographic approach focusing on supervisors' perspective using observations and interviews.	5 supervisors who worked in a clinical education ward (Infectious diseases unit) at a university hospital. Ten patients and eleven students (six in their final year and five in their 2nd year) participated in the observations.	entrusted to provide care and given responsibility to act independently, while supervisors demonstrated full responsibility for patients by being available to students and making them feel safe. Students recognised this responsibility allowed them to build relationships with patients that motivated their learning further. However they were often overwhelmed by the responsibility. 3. Students' hesitance to adapt to the existing reality might be an indication of their critical and reflective approach to learning. **** 1. Allowing the student independence requires: • Supervisors to be informed of students' learning outcomes and their backgrounds as individuals and as a group. The behaviours required include: • Trust in the students' abilities to perform care and their capacity to organise the work with support, provide advice and acknowledgement, reflect together and provide continuous constructive feedback so students feel confident and comfortable. • Supervisors need to step back and allow students to make decisions without taking over. 2. Supervisors need to ensure students feel confident in asking for help and support and that they receive the support they need. They need to assess this by collecting information by observing and listening to students and talking to patients and team members. **** 1. Effective teachers were: • Passionate and positive in their approach with students about nursing, teaching, the clinical area and the curriculum the program was embedded in which in turn motivated and inspired them to learn and work harder. 2. Effective teachers: • Actively and intentionally prepared students for success by <i>not allowing slackers</i> and that they "have [the] backbone to stand up to students when needed". In other words they hold them accountable for their own learning. 3. Effective teachers: • Were able to find the right balance between support and challenge for students at different stages of their development.	
Matthew-Maich, N., Martin, L., Ackerman-Rainville, R., Hammond, C., Palma, A., Sheremet, D., & Stone, R. (2015), Canada.	To explore baccalaureate nursing student perceptions of what makes an effective nurse educator in the clinical practice setting and the influence of effective teaching on student experiences.	A qualitative descriptive survey design.	Undergraduate nursing students (n = 511) enrolled in all 4 years of the baccalaureate program with a minimum of 6 months in the programme.		



**Table 3**

Summary of the nursing behaviours that encourage or discourage students to assume responsibility and independence on clinical placement.

Belongingness associated with genuine partnerships
<ul style="list-style-type: none"> <li>• Provide a sense of belongingness by being friendly, enthusiastic and welcoming, particularly in initial clinical placements.</li> <li>• Value and respect the student as a learner, a team member and as a person.</li> <li>• Allow students to meaningfully contribute to nursing care.</li> <li>• Allow students to participate in decision-making or where appropriate, step back to allow them to lead clinical decision-making.</li> <li>• Acknowledge and confirm the student's proposed care as required.</li> </ul>
Empowerment and increasing student self-efficacy
<ul style="list-style-type: none"> <li>• Seek to be informed of students' learning objectives and abilities, provide a suitable time and place to listen to students to discuss their abilities.</li> <li>• Encourage students to take initiative and have control.</li> <li>• Gradually allow students to take more responsibility and work independently.</li> <li>• Empower students by expressing confidence in them and by facilitating their goal accomplishment.</li> </ul>
Trust linked to increasing and staged independence
<ul style="list-style-type: none"> <li>• Seek feedback from other staff or patients to assess their level of ability.</li> <li>• Partner with students to establish appropriate learning activities, which support and challenge their level of experience while ensuring patient safety</li> <li>• Encourage student questioning, reflection and critical thinking in a culture that supports students to safely challenge supervisors and workplace practices.</li> <li>• Provide continuous constructive feedback to promote confidence.</li> </ul>
Balancing clinical and educational requirements
<ul style="list-style-type: none"> <li>• Provide opportunities and permission for appropriate student led practice.</li> <li>• Entrust students with appropriate tasks or suitable patient loads.</li> <li>• Have courage to stand up to students when needed to hold them accountable.</li> </ul>
Behaviours that discourage students to assume responsibility and independence
<ul style="list-style-type: none"> <li>• Make assumptions about students' abilities.</li> <li>• Take control over patient care and do not provide opportunities to learn.</li> <li>• Allocate students only repetitive tasks such as bed making.</li> <li>• Exclude students from usual workplace culture and traditions and make them feel alienated.</li> <li>• Allocate responsibility beyond the students' capabilities, so they feel overwhelmed.</li> </ul>

#### 4.3. Empowerment and increasing student self-efficacy

Nursing behaviours that foster student empowerment can enhance and promote nursing students' self-efficacy in clinical learning practice. This has been established in two studies (Babenko-Mould et al., 2012; Bradbury-Jones et al., 2011). Bradbury-Jones et al. (2011) propose that nursing students' empowerment is strongly influenced by nurses' behaviours that value the student as a learner, team member and person. These behaviours included treating students with respect, voicing appreciation for their contributions, facilitating them to make clinical decisions, and assisting them to meaningfully contribute to nursing care (Bradbury-Jones et al., 2011). While this study involved a relatively small purposive sample of nursing students ( $n = 13$ ), they were all in the first year of the program. Given they were novice nursing students, a comparison with Matthew-Maich et al. (2015) work with novice nursing students suggests that students early in their nursing program require greater nurturing and support from their clinical supervisors.

According to Babenko-Mould et al. (2012), nursing students found their clinical educators to be supportive in clinical decision-making and promote meaningful learning opportunities, which contributed to meeting their learning objectives for clinical practice. In their quantitative research of students ( $n = 352$ ) and their clinical teachers ( $n = 64$ ), they found that nursing students who perceived their clinical teacher as using empowering behaviour were more likely to feel empowered and this in turn increased their confidence and self-efficacy for practice (Babenko-Mould et al., 2012). They also identified that empowerment of students proved to be the greatest mechanism impacting student self-efficacy for clinical practice (Babenko-Mould et al., 2012).

Greer (2010) argues that although students need to feel valued to experience empowerment, there is also a necessary element of trust. This resounding concept of trust was also identified by Liljedahl et al. (2016) as essential in nursing supervisors increasing student

responsibility, and therefore increased access to learning opportunities.

#### 4.4. Trust linked to increasing and staged independence

Supervising nurses require up to date knowledge of their students' ability to promote a gradual increase in student independence. In one study, student wards gave nursing students the opportunity and ability to be responsible and independent compared to traditional clinical placement (Hellstrom-Hyson et al., 2012). This small study of eight Swedish final year nursing students described nursing behaviours that contribute to students assuming responsibility for learning which included: being given the opportunity to have responsibility/independence and permission to practice, supportiveness, acknowledging and confirming planned care, encouraging students to take initiative, allowing students to have control and importantly having trust in students which then leads to increased self-confidence (Hellstrom-Hyson et al., 2012).

Manninen et al. (2015) discussed similar findings in their exploration of Swedish nursing supervisors' approach to student learning in a clinical education ward. This small, yet thorough, study included qualitative data collected from second and third year students as well as supervisors and patients. A significant theme in the findings was allowing student independence. Student independence was reliant on supervisors being informed of students' backgrounds as individuals and as a group, and knowledge of their learning objectives (Manninen et al., 2015). Supervisors assessed situations by collecting information through observing and listening to students and talking to patients and team members (Manninen et al., 2015). By stepping back to allow students to make clinical decisions, nurses demonstrate trust (Manninen et al., 2015).

These findings were also consistent with Jansson and Ene (2016) who described students' experience of what facilitated or hindered clinical learning. In this study of mixed year levels of student nurses ( $n = 269$ ), students gaining responsibility and independence were significant aspects of facilitating effective clinical learning (Jansson and Ene, 2016). Similar to Manninen et al. (2015) Jansson and Ene (2016) propose that supervisors keep track of students' ability and progression to successfully promote student independence and learning. Specifically, this study identified the importance of gradually allowing students to take more responsibility and work independently, which was related to increased student confidence (Jansson and Ene, 2016).

Matthew-Maich et al. (2015) argue that effective teachers acknowledge the stage of student progression and provide a measured approach to finding the right balance between support and challenge for the student (Matthew-Maich et al., 2015). Further, they suggest that first and second year students require nurturing, support and guidance, while third and fourth year students need teachers who challenge them and encourage independent learning (Matthew-Maich et al., 2015).

#### 4.5. Balancing clinical and educational requirements

Clinical supervision of nursing students requires supervisors to balance patient needs with the students' educational needs, which is challenging. Babenko-Mould et al. (2012) recognised that creating opportunities for students to participate in clinical decision-making is important in preparing them for professional practice. While Manninen et al. (2015) acknowledge the importance of student clinical decision-making, they argue supervisors have a responsibility to maintain patient safety, which may create a pedagogical challenge in balancing the need for student independence. Time limitations were also cited as a challenge in providing adequate clinical learning opportunities to facilitate student independence in patient care (Manninen et al., 2015).

Other challenges or negative behaviours identified in the studies included: lack of opportunity to learn, responsibility or encouragement (Bradbury-Jones et al., 2011); excluding students resulting in their loss of control and confidence (Hellstrom-Hyson et al., 2012) or alienating



students and not accepting them (Levett-Jones and Lathlean, 2008). All of these behaviours diminish students' likelihood to attain independence in patient care, and thereby reducing accountability for their own clinical learning.

## 5. Discussion

Internationally, the increasing numbers of students in practice settings, related to the recognition of the importance of learning in practice, has resulted in the continual presence of students across diverse clinical settings. For clinical nurses, balancing clinical and educational requirements is a challenge. However, there has been little investigation into how to reduce the demands associated with assisting clinical learning, and more specifically strategies that facilitate student independence. Through this review, there is emerging evidence that those nurse behaviours known to encourage students to assume greater responsibility and independence in clinical practice are also those likely to hold them more accountable for their learning. While it is important that students are given access and opportunity for responsibility and independence in clinical practice, there appears to be specific nursing behaviours that can support this journey to independence and associated accountability for learning.

A trajectory of increasing responsibility provides a framework for supporting nursing students' increased accountability for learning. Students in their earlier years of study require more nurturing and support from their nursing supervisors (Matthew-Maich et al., 2015) and a sense of feeling valued on clinical placement (Bradbury-Jones et al., 2011). These behaviours contribute to student's self-efficacy and feeling empowered (Babenko-Mould et al., 2012). Nursing behaviours conveying belongingness are important in third year nursing student accountability (Levett-Jones and Lathlean, 2008). Interestingly student accountability in third year resulted in feeling more self-directed and confident to advocate for their learning. A likely outcome expected for students nearing course completion.

Billett (2002) describes this gradual trajectory of learning and participating in the workplace as requiring access to tasks sequenced by "increasing criticality and accountability over time" (p. 32). The findings from this study suggest that nurses have a key role in facilitating students along this continuum. Importantly, clinical supervisors need to make ongoing decisions of how much responsibility to bestow on students. A critical factor in this decision is supervising nurses' ability to trust the student to provide patient care.

Students assuming responsibility and independence in clinical practice are reliant on a partnership of shared responsibility for learning by supervisor and student (Greer, 2010). For supervisors to facilitate student independence at any level of practice and have trust in their abilities, they need to be informed and confident of the students' abilities (Jansson and Ene, 2016; Manninen et al., 2015; Matthew-Maich et al., 2015). The lack of national consistency in nursing curriculum design and increasing numbers of educational stakeholders result in increased confusion for supervisors (Grealish and Smale, 2011).

In the absence of reforms to clinical education for undergraduate nurses, nursing behaviours that advance acceptance, inclusion, develop partnerships, empower, build self-efficacy, create trust associated with the safe staging of activities, have the capacity to significantly influence students' accountability for learning. The culminations of these practices offer an environment where students feel confident to question work practices, and afford the opportunity to cultivate critical thinking skills and the sound application of evidenced based practice, the very qualities intended by contemporary nursing education.

### 5.1. Limitations of the review

There were several limitations identified within the integrative review. Firstly, the ambiguous nature of the term 'accountability for learning' for lack of a better definition, led to difficulties in sourcing

relevant articles. This was addressed through an extensive list of search terms. Secondly the review recognised variances between year levels of student nurses. Still, not all articles specified the year level of student nurses and one study potentially reported on postgraduate student nurses, though this cannot be confirmed. Given the paucity of research on this topic a heterogeneous group of nursing students was described. Reference to student year levels was specified in the results to acknowledge this inconsistency.

## 6. Conclusion

Contemporary nursing courses are designed to advance student accountability for their learning. Advancing accountability not only promotes learning and empowers students to take responsibility for their learning, it also prepares them for life-long learning that is required to maintain quality professional practice and registration.

### 6.1. Recommendations for practice

Specific nurse behaviours articulated in this review make a significant contribution to the body of knowledge useful in advancing the student in their journey to independence and associated accountability. It is vital that clinical supervisors are prepared for their role and have a more focused and transparent approach to understanding nursing student capabilities in clinical placement. With such knowledge they will be better able to demonstrate trust in student abilities and enable them more responsibility and independence in their clinical practice. A greater awareness of the behaviours of nurses that contribute to student accountability for learning in clinical placement by current clinical nurse supervisors will ensure future nurses are more adequately prepared to meet professional nursing expectations.

### 6.2. Recommendations for research

The findings of this review suggest that further research into how nurses can support students to develop accountability in learning is required. As health services continue to expand in response to rising chronic disease in our communities, the need for nurses will also continue to expand. While we understand the importance of belongingness for student learning in clinical placement, the relationship between belongingness and accountability in learning requires further investigation. Given the demands on health services, further research into specific strategies that can be used by clinicians to support students to be accountable learners in practice is urgently required.

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