Review

# Development of resilience in nursing students: A systematic qualitative review and thematic synthesis

Kirsten Eika Amsrud[a,*], Anne Lyberg[b], Elisabeth Severinsson[b]

[a] Department of Nursing and Health Sciences and the Centre for Women's, Family and Child Health, Faculty of Health and Social Sciences, University of South-Eastern Norway, P.O. Box 235, N-3603, Kongsberg, Norway
[b] Centre for Women's, Family and Child Health, Faculty of Health and Social Sciences, University of South-Eastern Norway, P.O. Box 235, N-3603, Kongsberg, Norway

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## ABSTRACT

Resilience is a term commonly used to describe the ability to turn adversity into opportunities and learn from demanding situations. There seems to be a need to identify support strategies for developing resilience among nursing students in order to strengthen their professional practice. The aim of this review was to synthesize qualitative research exploring how resilience can be developed in nursing students. The review question was: How can nurse educators support students' development of resilience? Relevant publications were identified by systematic data searches in May 2017 in the following electronic databases: MEDLINE, CINAHL, Scopus, Embase, PubMed, PsycInfo, Webb of Science, ProQuest, Academic and Eric. Eight qualitative research studies in English that explored resilience in the context of nursing education were included. Five descriptive themes emerged: Demonstrating caring relationships, Recognizing resources and power, Acknowledging uncertainty, Reframing burdensome experiences and Adjusting frames for learning. In addition, two overarching analytic themes emerged: An educational culture of trustworthiness and Readiness to care.

In conclusion, a learning culture characterized by trustworthiness appears to be a catalyst for developing resilience in nursing students. A variety of support strategies in nursing education contribute to resilience in nursing students, thus influencing their readiness to care.

## 1. Introduction

There is a worldwide need for nurses, while at the same time a worrying number of nursing students struggle to complete their education (Pitt et al., 2012). The constantly changing and increasingly specialized healthcare system, more knowledgeable patients as well as the tension between demands and resources mean that both nurses and students struggle to maintain a professional standard with which they can identify (Nolte et al., 2017).

There is a need for approaches that not only educate an adequate number of nurses, but also equip them with the skills to handle the complex challenges inherent in daily nursing practice. In this context, resilience appears to be an important asset (Tusaie and Dyer, 2004). Thomas and Asselin (2017) refer to how increased resilience positively impacts on nurses in practice. Stephens (2013a, p. 126) focuses on the opportunities offered by resilience-enhancing interventions to prepare nursing students for their future professional practice.

Many definitions of resilience with slightly different terminologies have appeared in the literature, but no universal definition has been found (Aburn et al., 2016; Greene et al., 2003). A generally accepted definition of resilience in nursing students is also lacking (Thomas and Revell, 2016). The term appears to be a complex and multifaceted construct that requires a holistic approach to professional activity and quality of care (Grant and Kinman, 2013b; Tusaie and Dyer, 2004). Although research linking resilience to occupational settings is still limited in scope, resilience is frequently mentioned in the context of nursing practice. There is growing evidence that resilience is not a static or an inborn feature, but a contextual and dynamic process (Grant and Kinman, 2013a; Aburn et al., 2016). Furthermore, the term resilience is commonly used to describe the ability to turn challenges into opportunities and learn from demanding situations (Richardson, 2002; Delgado et al., 2017).

Despite a wide range of partly different understandings of the term, there seems to be a striking agreement about the adaptive nature of resilience, reflected in several definitions as an ability to react appropriately to adversity and to recover (Grant and Kinman, 2013a; Greene et al., 2003). In a literature review Aburn et al. (2016) refer to many studies linking the understanding of resilience to the ability to 'bounce

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back'. Furthermore, 'bouncing back' is linked to 'recovery', i.e., regaining baseline health or wellbeing after adversity or trauma.

Being a nursing student is often described as stressful (Pulido-Martos et al., 2012; Turner and McCarthy, 2017; Thomas et al., 2012). Based on a series of focus group interviews with final year nursing students, Gibbons et al. (2008) suggest a tripartite categorization of stress; academic, clinical and personal. Practice in the clinical setting has been described as a major source of stress (Gibbons et al., 2009), which may be related to the emotional demands placed on the students by beginning to take responsibility for patient care. Reeve et al. (2013) investigated nursing students' most stressful clinical experiences, revealing anxiety, worry and anger as the top three reported feelings. In addition, they suggest that stress "impacts the student experiences while they are in school and may later impact their lives and journeys as professional nurses" (p. 423). Gibbons et al. (2010) directly relate nursing students' wellbeing to their fitness for the profession and to patient safety. This is an important reminder that developing resilience in nursing students is not only about students' need for support and wellbeing, but also about their capacity to put patients' needs first.

Most of the previous research on nursing students only explored stress as a trigger of distress, but not eustress and wellbeing (Gibbons et al., 2010). However, Richardson (2002) describes how stressors and change can provide growth and increase resilient qualities or protective factors. Broadening the understanding of burdensome experiences by discovering new strength in times of stress is also discussed by Delgado et al. (2017). When conducting an integrative literature review focusing on nurses' resilience and the emotional labour of nursing work Delgado et al. (2017) found that development of resilience was a significant intervention "to build nurses' resources and address effects of emotional dissonance in nursing work" (p. 71). Thomas and Revell (2016) argue that fostering resilience in nursing students is important to prepare them for longevity in today's healthcare system and that it is the responsibility of educational institutions to facilitate it.

According to McGowan and Murray (2016), research relating to resilience and educational interventions to promote resilience in nursing students are sparse.

The aim was to synthesize qualitative research exploring how resilience can be developed in nursing students. The review question was: How can nurse educators support students' development of resilience?

## 2. The review

### 2.1. Design

A systematic review method (Thomas and Harden, 2008) was used to gather existing qualitative knowledge to expand the understanding of developing resilience in nursing students. To the best of our knowledge, no qualitative reviews on the topic had been conducted at the time of our literature search in 2017.

### 2.2. Inclusion criteria

This study is in accordance with the Joanne Briggs Institute (JBI) approach to and guidance for synthesizing evidence of qualitative research methodology (Lockwood et al., 2015). To inform the search for and extraction of data from qualitative studies, the PICo (Participants, phenomenon of Interest and Context) framework (Lockwood et al., 2015) was used. The participants were defined as nursing students, the phenomena of interest were resilience and support and the context was defined as nurse education and conditions for resilience development.

### 2.3. Types of study

Publications were included if the context was nurse education, the target group was nursing students, the topic addressed was resilience and the design was qualitative and/or theoretical. There was no

limitation in terms of the year of publication. Publications were excluded if they were not published in the English language, were related to other groups of students, used quantitative methods, were literature reviews or related strongly to students with special needs.

### 2.4. Search strategy

The search strategy was designed in collaboration with a specialized Liberian. Systematic data searches (collection) were conducted in May 2017 in the following electronic databases: Medline, Cumulative Index to Nursing and Allied Health Literature (CINAHL) Scopus, Embase, PubMed, PsycInfo, Webb of Science, ProQuest (British Nursing Index, Health Research Premium Collection, Social Science Premium Collection), Academic and Eric.

The search words used in combination or separately were; Resilience, Resilience building, Capacity building, Relationship, Nursing students, Safe care, Patient safety, Professional practice, Nursing education, Communication and Relational competence.

### 2.5. Search outcome

The search identified a total of 1127 potentially relevant publications. The search process is presented in Fig. 1. Titles and abstracts were screened against the inclusion and exclusion criteria to ensure that all relevant articles were captured. A total of 1021 publications were duplicates (n = 418) or articles that did not meet the inclusion criteria (n = 497) and duly excluded. The remaining full text articles were then assessed for eligibility and an additional 99 were excluded, in particular those that mainly concerned students with special needs, e.g., students with dyslexia, those with a different ethnic origin to their fellow students, or students other than nursing students. The search outcome was seven studies, one of which was a doctoral thesis. Due to the low number of articles that met the inclusion criteria, we decided to include the latter, which was the only doctoral thesis we found that used qualitative interviews as a data collection method (Carroll, 2011).

Furthermore, a Google Scholar search was performed using the term "development of resilience in nursing students". One evaluation study comprising a qualitative interpretation of students' self-reported written experiences of handling demanding caring situations was detected (Adam and Taylor, 2014). Consequently, the final result was eight articles for review as shown in Fig. 1.
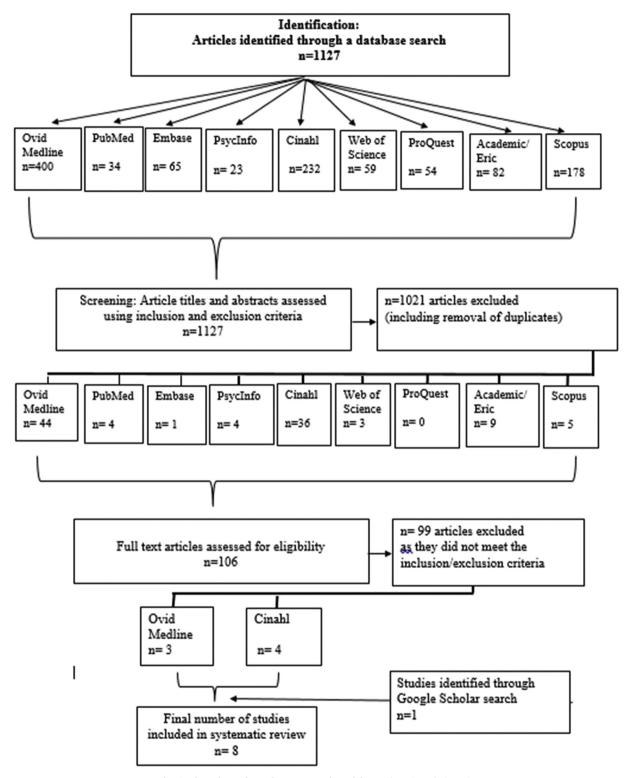
### 2.6. Quality appraisal

The methodological quality of the eight included studies was assessed by two authors (K.E.A. and A.L.). Initially the authors worked independently in accordance with The Joanna Briggs Critical Appraisal Tools for methodological quality assessment (Lockwood et al., 2015), after which they discussed and reached agreement on their assessment. No studies were excluded due to low quality (Appendix 1).

Despite the fact that the research method was weakly presented in one of the studies (Adam and Taylor, 2014) we decided to include this article because of its contribution to our review question.

### 2.7. Thematic synthesis

According to Thomas and Harden (2008), thematic synthesis draws on primary qualitative research and other established methods. Data extraction started by carefully reading and reflecting together on the content and the findings in the included studies. The synthesis took the form of the three stages described by Thomas and Harden (2008). The process moved back and forth and some stages overlapped a certain degree. In the first stage the authors used line-by- line coding and organised what they regarded as key components for developing resilience in nursing students. The second stage involved organizing and abstracting the key components into descriptive themes. The

**Fig. 1.** Flow chart of search strategy. Adapted from Liberati et al. (2009).

descriptive themes were based on an independent review of the studies by the authors, followed by meetings for reflection, during which they discussed the themes to ensure that they reflected the included studies.

In the final stage, the authors used the descriptive themes in the interpretation of a new thematic synthesis that went beyond the original studies. A process of discussing and analysing the similarities and differences of the descriptive themes was undertaken. The authors identified patterns bearing deeper meanings and revealing new insights, first separately and then jointly. Two analytic themes emerged in

the process, which constituted a higher level of abstraction. The three authors, who are experienced nurse educators and researchers with a background as registered mental health nurses, used their experience of qualitative interpretation to identify the themes of the synthesis.

The very few disagreements that occurred were resolved by consensus, which can be linked to the concept of trustworthiness presented by Elo et al. (2014).

**Table 1**
Description of the included qualitative articles, their characteristics and results that contribute to the knowledge of developing resilience in nursing students.

| References/Country | Aim | Method Participants/sample Data collection | Results | Presence of key aspects in the articles contributing to the five descriptive themes | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 |
| Adam and Taylor (2014), United Kingdom | An overview of the development and evaluation of a teaching approach. | Evaluation study. A group of second year students n=30. Content of formative reflections | Students can develop coping strategies and increased resilience. Through teaching and learning strategies they realized that they have the power to react differently in challenging caring situations. Important elements were more consistent self-care, setting more realistic expectations and healthier boundaries. | x | x | x | x | x |
| Carroll (2011), California | To explore the lived experiences of nursing students in order to discover the role, if any, of the construct of resiliency in promoting their academic success. | Doctoral thesis. Second year nursing students n=10. In-depth individual interviews. Phenomenological approach. | The findings indicated that the intrinsic and extrinsic factors noted in the extant literature that are associated with resiliency in other populations were largely applicable to the nursing students in the study. The themes of perseverance and support arose frequently in the data analysis. | x | x | | x | |
| Curtis (2014), United Kingdom | To explore student nurse socialization in compassionate practice. | Empirical study. In-depth individual interviews n=19. Grounded theory | Student nurse education and support require further development to enable students to make sense of the emotional requirements for compassionate practice. Students need to develop resilience, wisdom and moral courage. | x | | x | x | |
| Froneman et al. (2016), South Africa | To explore and describe nursing students' view on the basic elements required for an effective educator-student relationship to strengthen their resilience and the educator-student relationship. | Empirical study. World café n=40. Content analysis | Nurse educators should strengthen the resilience of nursing students by being a role model and forming strong, caring and supportive relationships with students. Understanding the importance of effective relationships will impact on the students' nursing career. | x | | x | x | |
| Hodges et al. (2005), USA | To highlight how the science of nursing education would benefit from using Parse's human science theory as a framework for guiding educational practice and promoting professional resilience and career longevity. | Theoretical study | Faculty can help students by reframing experiences as opportunities to build professional resilience and overcome adversity. Students can learn that they can change an incompetent self-image into that of someone who is resilient and who can and will prevail. | | | x | x | x |
| Jackson et al. (2011), Australia | To explore nursing students' experiences of negative behaviors in the clinical environment to identify the strategies they used to manage and resist such behaviors. | Empirical study. Text analysis from open-ended questions in a survey n = 231. Qualitative content analysis | The students' workplace experiences provide an understanding of organisational aggression and conflict management. Students demonstrated resistance and resilience by their capacity for action that reaffirmed their identity and self-worth, enabling them to carve out safer and more productive workspaces for themselves and their colleagues. | | x | | x | |
| Reyes et al. (2015a), Canada | To explore nursing students' understanding and enactment of resilience. | Empirical study. In-depth individual interviews n = 38. Grounded theory | Study findings provide important evidence for understanding the phenomenon of resilience as a dynamic, contextual process that can be learnt and developed, rather than a static trait or personality characteristic. | | x | | | |
| Roxburgh (2014), United Kingdom | To explore undergraduate nurses' perceptions of two experienced practice learning models: the hub and spoke model and the classical rotational model. | Empirical study. Focus group interviews n=10. Qualitative analysis | The student nurses found the hub and spoke model valid in their first year, but stated that the rotational model can be valid in the second year. This supports earlier findings that student nurses require a structured and supportive first year learning environment to enable the development of resilience for subsequent years. | | | | | x |

Themes: 1: Demonstrating caring relationships 2: Recognizing resources and power, 3: Acknowledging uncertainty, 4: Reframing burdensome experiences, and 5: Adjusting frames for learning.

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## 2.8. Ethical considerations

As this is a systematic review of published primary studies no ethical approval was required. However, the ethical approval in the included empirical qualitative studies was assessed.

## 3. Results

Five descriptive themes emerged in the analysis: Demonstrating caring relationships; Recognizing resources and power; Acknowledging uncertainty; Reframing burdensome experiences and Adjusting frames for learning. In addition, two overarching synthesis themes emerged: An educational culture of trustworthiness and Readiness to care.

The included articles and their contribution to the results are presented in Table 1.

### 3.1. Demonstrating caring relationships

The theme 'Demonstrating caring relationships' highlights the importance of nurse educators forming a strong, caring and supportive relationships with students to underpin their learning process and development of resilience (Adam and Taylor, 2014; Carroll, 2011; Curtis, 2014; Froneman et al., 2016). Froneman et al. (2016) refer to students' voices, outlining how nurse educators can strengthen the resilience of nursing students by being a role model. By engaging and providing feedback in a caring, respectful manner, educators can model positive learning processes for students and demonstrate trustworthiness. Furthermore, these authors emphasise that the quality of the relationship between educators and students will impact on the students' nursing career. Adam and Taylor (2014) imply that modelling caring attitudes should be a central part of the educational process, concretised as e.g., educators making conscious choices about simple things such as their use of words in emails or the tone of their feedback. In Carroll's (2011) study, support appears to be a main theme in the students' understanding of resilience. In this context, support is described as being inspired to believe in their ability to transcend the negative effects of adverse events. Most of the participating nursing students explicitly reported that the care and support they received from others, including educators, were crucial to their success. Curtis (2014) mentions nursing students who emphasised that accessing support was essential for managing their emotions and coping with distressing events in clinical placements.

### 3.2. Recognizing resources and power

This theme reflects nursing students' capacity to endure in adverse circumstances and the importance of nurse educators improving the students' awareness of this capacity (Adam and Taylor, 2014; Carroll, 2011; Jackson et al., 2011; Reyes et al., 2015a). Jackson et al. (2011) explored nursing students' experiences of organisational aggression and negative behaviours in their clinical placement, which revealed their capacity to resist and reaffirm their identity and self-worth in spite of the difficulties. Adam and Taylor (2014) report students' power to react differently in highly emotional caring situations. By opening up about their demanding experiences, they were able to create possibilities for growth. This dynamic, contextual process is recognized by Reyes et al. (2015a) as enactment of resilience, described as a process that can be learnt from and supported by nurse educators. In the study, some of the nursing students described using a strategy of 'pushing through' to withstand challenges in their academic life. When interviewing nursing students to explore the role of resilience in relation to academic success, Carroll (2011) reported 'perseverance' as one of the main themes. Perseverance can be understood as steadfastness in doing something despite difficulty or delay in achieving success.

### 3.3. Acknowledging uncertainty

This theme highlights nursing students' experiences of uncertainty and vulnerability as they progress towards their future role (Adam and Taylor, 2014; Curtis, 2014; Froneman et al., 2016; Hodges et al., 2005). Curtis (2014) reveals students' concerns about uncertain boundaries for emotional engagement and 'balancing right' in their emotional labour. Focusing on this is a necessity the ability to make patient care the main priority in nursing. Hodges et al. (2005) argue that by acknowledging and honouring the students' struggle, a kind of 'survivors' pride' will grow, contributing to the development of resilience. This is described as most important when students falter in their struggle to learn nursing. In their evaluation of a teaching and learning strategy, Adam and Taylor (2014, p.1243) report that students feel emotionally depleted and powerless, making them 'unable to stand their ground'. An educational approach that acknowledges these feelings makes the students feel safe, which is crucial for learning from this demanding position. Froneman et al. (2016) reveals nursing students' need of educator-student interaction that allows them to seek help when they encounter problems.

### 3.4. Reframing burdensome experiences

This theme concerns the possibility of growth starting from burdensome experiences and turning adversity into opportunities (Adam and Taylor, 2014; Curtis, 2014; Hodges et al., 2005; Jackson et al., 2011). Hodges et al. (2005, p. 548) describe this as an ability to 'transform a disastrous day into a growth experience'. To foster resilience in this kind of learning process the authors underline the importance of helping students to understand what they have done right. In this way, students can change their self-image from one of incompetence to someone who can and will prevail. Jackson et al. (2011) report how nursing students exposed to marginalization in their clinical placement demonstrated resistance and resilience. According to Curtis (2014, p. 217), some nursing students also described a need to utilize their difficulties to develop 'a thick skin' or 'harden up' to cope with the emotional labour of practice.

Adam and Taylor (2014) outline students' ability to explore their painful experiences, thus gaining insight and learning from them. These authors emphasise that it is not the stressful situations per se that lead to compassion fatigue, but the inability to deal with them in a healthy and positive way.

### 3.5. Adjusting frames for learning

The theme 'Adjusting frames for learning' reflects the need for adjusted frames to support learning processes (Adam and Taylor, 2014; Hodges et al., 2005; Roxburgh, 2014). Roxburgh (2014) refers to two different clinical learning models and how students perceive the impact of these models on their learning capacity. A model for a structured and supportive learning environment in the first year seemed to facilitate the development of resilience in subsequent years. Equipped with experiences of belongingness and self-confidence, the students considered themselves prepared for utilizing the opportunities presented by a rotational practice model. Hodges et al. (2005) emphasise that educational outcomes such as resilience and professional stamina require a theoretical framework that systematically exposes nursing students to a learning model aimed at achieving the desired outcomes. Parse's human science theory (1998) is described by the authors as a framework for guiding teaching and learning, which can promote resilience in nursing students. With guidance from the faculty, students can practice reflection-in-action and learning to think as professionals.

Another kind of framework is learning and teaching strategies, a central theme in Adam and Taylor's (2014) study. Facilitating joint reflection, discussion, identifying learning needs and developing individual "toolkits" of approaches designed to meet these learning needs

empowered students to utilize difficult experiences and move forward.

### 3.6. Synthesis

Two overarching themes representing a final synthesis reveal that the development of resilience in nursing students depends on *An educational culture of trustworthiness*, which paves the way for maturation of *Readiness to care*. In a contextual and dynamic way, the students seem to move along an axis from experiences of inability towards readiness to provide care for patients.

The first theme, *An educational culture of trustworthiness*, appears to be of crucial importance, as in various ways it enables nursing students to utilize the growth potential hidden in demanding situations (Adam and Taylor, 2014; Carroll, 2011; Curtis, 2014; Froneman et al., 2016; Hodges et al., 2005; Jackson et al., 2011; Reyes et al., 2015a; Roxburgh, 2014). By listening to the student voices in the included articles, an educational culture of trustworthiness can be characterized by acknowledging the approaches of educators who model the values and interpersonal skills that students are expected to demonstrate in their nursing practice (Adam and Taylor, 2014; Froneman et al., 2016; Carroll, 2011; Curtis, 2014). The quality of being trustworthy also appears to facilitate a climate characterized by predictable attitudes and standards (Hodges et al., 2005; Roxburgh, 2014), which could be explained as creating confidence, signalling safety and adding frames to investigate challenging experiences and emotions. Additionally, an educational culture of trustworthiness seems to be a source of courage (Adam and Taylor, 2014; Curtis, 2014; Hodges et al., 2005; Jackson et al., 2011). By experiences of working through their own challenges and moving on, nursing students develop a pride and confidence in their own ability to handle difficulties. The opposite of trustworthiness could be explained as inconsistency. A learning culture characterized by inconsistency places nursing students at risk of stagnation, as they devote all their energy to managing the burden.

The second theme, *Readiness to care*, reveals the benefit of nursing students' perseverance in struggling with their demanding and complex learning processes (Adam and Taylor, 2014; Curtis, 2014; Froneman et al., 2016; Hodges et al., 2005; Jackson et al., 2011; Reyes et al., 2015a). Readiness to care can be explained both as the willingness to do something and the state of being prepared. Nevertheless, this is not a fixed position, but should instead be seen as a back and forth movement, comparable with how Reyes et al. (2015a) describe resilience; a dynamic process, moving through adversities and achieving transformation. To develop 'readiness to care' students need educators' attention, respect and support related to their particular experiences and emotions (Adam and Taylor, 2014; Curtis, 2014; Froneman et al., 2016; Hodges et al., 2005; Roxburgh, 2014). Being left alone with difficult experiences and adversity, neglected and lacking role models may result in the students' attention turning inward and give rise to a sense of inability. When thriving in an educational culture of trustworthiness, nursing students are able to carve out space for an essential movement; turning their attention to patient needs.

Readiness to care is characterized by robustness, which is necessary for enabling students to take on their professional role. This can be seen as an essential part of resilience and can be learnt in an educational culture of trustworthiness.

### 4. Discussion

Analysis of the articles included in the present study revealed five descriptive themes and two overarching synthesis themes; *An educational culture of trustworthiness* and *Readiness to care*, leading to an understanding of how nurse educators can support students' development of resilience. These themes reflect educators' possibilities to improve conditions for nursing students' growth.

### 4.1. An educational culture of trustworthiness

Dinç and Gastmans (2012) argue that trust and trustworthiness are especially relevant to healthcare, as vulnerable patients cannot meet their own needs and must rely on the goodwill of others. The present study reveals prerequisites for nursing students' maturation in a professional role that can respond to this vocation, focusing on resilience as an available source waiting to be identified and utilized. A particularly strong finding related to the development of resilience is the need to ensure an educational culture of trustworthiness, described by Serva et al. (2005) as a set of beliefs about the other party that precedes a trusting attitude. In a systematic review of qualitative studies, Rørtveit et al. (2015) report that nurses who facilitate trust are involved, listen and create a dialogical process, are available and act as the patient's advocate in a safe, holistic manner. Other authors (Brien, 1998; Dinç and Gastmans, 2012) suggest that healthcare professionals must be trustworthy in order to meet their obligations.

Hence, an educational culture of trustworthiness represents both a set of values that nursing students are expected to demonstrate in the relationship with patients and their next of kin and a vital prerequisite when they are struggling to build a resilient, professional identity characterized by a caring presence. This duality could be used by educators to encourage the students by making explicit the latent meaning of exploring and withstanding difficulties as an essential part of their development into trustworthy caregivers. This is in line with the need for a holistic perspective on the development of resilience among nursing students (Grant and Kinman, 2013b; Tusaie and Dyer, 2004), embodying both internal and external factors, weaknesses and strengths, vulnerabilities and hardiness (Reyes et al., 2015b). Addressing the whole instead of separating it into parts prepares nursing students for an interaction that reshapes stressors into something that enhance growth and facilitate change. Ensuring an educational culture of trustworthiness is of the utmost importance and in order to do so it is recommended that educators exhibit leadership and work systematically and comprehensively with a value based learning climate. This is in accordance with Gillespie (2005), who stated that the meaning of developing trust in a student-teacher relationship is by underlining the importance of transparency. Reyes et al. (2015b) argue that teachers who engage and connect with their students are a key factor in students' development of resilience, while Carroll and Quijada (2004) suggest that translating characteristics of resilience to the learning environment is crucial. Furthermore, in what they call a "Portrait of resilience", Cope et al. (2014, p. 90) refer to nurses speaking about 'valuing relationships' and 'valuing support', described as providing 'a like understanding of what it is to be a nurse'. The latter confirms the importance of offering nursing students a learning culture with qualities that provide sustainability in their future professional role. Eskilsson et al. (2013, p. 90) also emphasise the need to understand caring and learning as intertwined. By embodying this knowledge and thereby avoiding an understanding of caring as just 'doing', students can find their personal nursing style. Hence, the much discussed gap between theory and practice in nursing education could be bridged. This implies utilizing the opportunities for learning in every moment of caring situations and the possibilities for caring in every learning situation (Eskilsson et al., 2013). Regarding the gap, some will argue that the increased focus on academic competence in the nursing education has been at the expense of developing clinical competence, thereby threatening the quality of care. According to the present study, a more fruitful perspective is investigating how the various parts can mutually strengthen each other by intertwining different competencies.

An educational culture of trustworthiness also involves the need to adjust the frames for learning and enhancing support by providing theoretical teaching and learning frameworks and models in line with the contextual process of developing resilience. Chen (2010) specifically suggests the value of self-reflection as a way for nursing students to become aware of their inner strength, from which they can draw

their resilience. This is reaffirmed by Eskilsson et al. (2013), who underline reflection as a key for addressing demanding experiences in new ways.

Furthermore, attention should be paid to clinical practice models that support outcomes such as resilience and professional stamina. Students (Curtis, 2014) express a need to develop 'a thick skin' or 'harden up' as a defence strategy to cope with the emotional labour of practice. Nurse educators and mentors are crucial for facilitating healthier ways of coping. An educational culture of trustworthiness acknowledges students' recognition of their own vulnerability and the need to stand their ground so that they do not appear helpless in the face of patient suffering.

A culture of trustworthiness can be seen as a 'double condition'; both for the development of resilience in nursing students and for enabling patients to feel safe. Furthermore, there is a double benefit; the nursing students' own growth and the result of this process, namely the ability to be a credible presence in the lives of others, thus improving the quality of care. This is in line with a systematic review of patients' role in their own safety by Severinsson and Holm (2015), in which the authors highlight the importance of increasing trust and positive attitudes among caregivers. Thus, building an educational culture of trustworthiness appears to be of interest to both the clinical field and nursing education.

### 4.2. Readiness to care

Readiness to care reflects a capacity and robustness necessary for the students' future professional role, related to what Tavernier (2006, p. 153) labels 'caring presence'; "the mutual act of intentionally focusing on the patient through attentiveness to their needs by offering of one's whole self to be with the patient for the purpose of healing". The term 'readiness' could be described as willingness to do something, the state of being fully prepared for something (Cambridge Dictionary, 2018). In our context, "something" is responding to the needs of the patients. Dinç and Gastmans (2012) refer to nurse educators' responsibility to ensure that nurses are equipped with the necessary attitudes and knowledge to establish trusting nurse-patient relationships.

Bearing witness to suffering patients is a demanding part of the nursing education, making nursing students aware of their own vulnerability (Eifried, 2003). Wiewiora et al. (2014), with reference to Mayer et al. (1995, p. 712), refer to trustworthiness as 'the willingness of a party to be vulnerable'. The fact that patients have limited opportunity to hide their vulnerability increases the importance of professionals being conscious of the ethical command emerging in what Levinas (1989) terms 'the Other's face'. Jackson et al. (2007) underline the challenge of witnessing suffering, a position involving the emotional labour of managing oneself and others' demanding emotions (Theodosius, 2008). Delgado et al. (2017) describe emotional labour as a facet of all aspects of nursing work and report a lack of resilience interventions that specifically address this topic. The authors also report a need for further investigation of the relationship between resilience and emotional labour. Furthermore, it should be noted that resilience seems to be positively correlated to psychological wellbeing and negatively correlated to vulnerability (Haddadi and Besharat, 2010). Hence, utilizing the opportunities to develop resilience in nursing students could strengthen their capacity for dealing with their own weaknesses without stagnating. Stacey et al. (2017) explored the experiences of a resilience-based approach to clinical supervision among student nurses. The findings revealed that meta-supervision during the education has the potential to increase student nurses' level of resilience.

An outcome of an educational culture of trustworthiness as a condition for the development of resilience could be readiness for care. In this way, resilience appears to be a driving force for and an antecedent to readiness to care. The antonym of readiness is inability, described as the state of being unable to do something (Cambridge Dictionary,

2018). The antonym of an educational culture of trustworthiness could be a culture of inconsistency, where nursing students are neglected due to a lack of positive role models.

According to the present study, nursing students move along an axis between inability and readiness to care due to educational challenges as well as the emotional labour and complex everyday life of nursing practice. By exploring this movement, the present study has added new insights revealing the educational prerequisites necessary for the development of resilience and thereby readiness to care.

Gillespie (2005) addresses the responsibility of educators to increase their awareness of their own educational beliefs and intentions, as this will influence their teaching and relationship with students. Furthermore, the author strengthens her message by using the metaphor "a place of possibility" (p. 211) for the student-teacher relationship. This perspective indicates the need to investigate stressors and reframe burdensome situations as a source for identifying strengths and asking for support.

In order to facilitate students' movement towards readiness to care, it also should be kept in mind that nursing students' needs will vary in accordance with their situation and academic level (Stephens, 2013b). However, the need to feel safe enough to move from what Delgado et al. (2017) describe as surface to deep acting, should be a prerequisite for obtaining positive emotional experiences in nursing practice. While 'surface acting' refers to suppression of genuinely felt emotions, 'deep acting' concerns expressing such emotions. The latter is associated with job satisfaction, an increased sense of connection with patients and even patient satisfaction (Chou et al., 2012).

It should be questioned whether nursing education has sufficiently recognized and systematically exploited the opportunities to support nursing students' movement towards a readiness to care. Nurse educators should increase their awareness of students who have negative clinical experiences and help them to cope with stress, thereby facilitating the development of resilience (Thomas et al., 2012). Eskilsson et al. (2013) highlight the obstacles preventing nursing students from developing in their caring and learning, namely a learning climate characterized by a lack of security, support and feedback. A first step in turning this insight into guidelines for educating nurses who are ready to care should be a focus on a learning culture of trustworthiness. This could facilitate what Rusthon et al. (2016) describe as moving from victimization to empowerment. By walking this path, nursing students could mature and gain the ability to take care both of themselves and their patients in an ongoing process of learning and building resilience.

## 5. Conclusion

In conclusion, the findings of this study highlight the importance of educational institutions offering nursing students a culture characterized by trustworthiness. An educational culture of trustworthiness appears to be a catalyst for the development of resilience in nursing students and could be achieved by educators modelling the values and interpersonal skills students are expected to demonstrate in their nursing practice. When thriving in an educational culture of trustworthiness, nursing students could carve out space for an essential movement; turning their attention beyond themselves. This develops the students' ability to be credible in their caring presence in the lives of others, recognized as a readiness to care.

### 5.1. Implication for nursing education

Nurse educators should be aware of their possibility to strengthen their students' maturation process towards a readiness to care, thus educating nurses with the ability to take care both of themselves and their patients. Future studies should focus on how educational institutions can ensure more systematic working more systematically to implement strategies for development of resilience in nursing students, thereby empowering them for their future professional practice and

ensuring quality care.

## 5.2. Limitations

When conducting literature reviews there is always a risk of omitting some of the content of the included studies (Reid et al., 2009). It is important to acknowledge that this review represents the authors' reading of the studies. Other researchers with divergent interests may arrive at a different result.

## Etical approval details

As this is a systematic review of published primary studies no ethical approval was required. However, the ethical approval in the included empirical qualitative studies was assessed.

## Author contributions

Study design: KEA, AL, ES, Data collection: KEA, AL. Data analysis: KEA, AL, ES, Manuscript writing: KEA, AL, ES. ES supervised the study. All authors agreed on the final version of the manuscript.

## Declaration of competing interest

No conflict of interest has been declared by the authors.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.nepr.2019.102621.

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