From student nurse to nurse professional

ten Hoeve, Yvonne

From Student Nurse to Nurse Professional

The shaping of professional identity in nursing

Yvonne ten Hoeve

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1 CHAPTER

General introduction and outline of the thesis

Professionalization and professional identity development in nursing

Professionalization is by definition an important characteristic of a professional occupation and has been described in the literature in various ways (Ghadirian, Salsali & Cheraqhi, 2014). The concept of professionalization, for example, has been regarded as the process of attaining the status of an independent profession (Evetts, 2014; Freidson, 1983); as the professional socialization of workplaces (Bisholt, 2011); and as 'the process by which an occupation develops the characteristics of a profession' (Hamilton, 1992, p. 32). In the past, the notion of a profession and professionalization was limited to doctors, lawyers and the clergy. However, increasing numbers of vocations have now been 'professionalized', including nursing (Guidotti, 2016; Keogh, 1997). In recent decades, nurses have attempted to develop into professionals with a great deal of knowledge, and they have achieved much in this respect, such as a higher educational level and the development of nursing theories, protocols and guidelines. Today, the focus of nursing activities is on evidence-based practice. Nursing has become an independent discipline and nurses are no longer in the service of physicians but, like the physician him/herself, in the service of the patient. The level of nursing education has increased and gained professional status as a result of the profound change from vocational training to higher education.

The relationship between such professionalization and the development of shared professional identities has been described in various studies (Evetts, 2014; Hughes, 1958). Thus, from a theoretical point of view, the professionalization of nurses is considered to strengthen their professional identity. Moreover, this development of a professional identity in nursing may be affected by numerous social interactions and environmental factors (Franco & Tavares, 2013; Tinkler, Smith, Yiannakou & Robinson, 2017; Workman & Pickard, 2008). Values and beliefs about nursing are essential components of nurses' professional identity, which begins to form in nurse education and continues through the practice of nursing (Cook, Gilmer & Bess, 2003; Deppoliti, 2008).

Therefore, to become a nurse professional, nursing students and newly graduated nurses must develop a professional identity, both during education and in clinical practice. The development of this professional identity in students is shaped through interactions with teachers and fellow students and through practical work during clinical placements. In nurses, the development of professional identity occurs through work experience and the associated contextual impacts, such as cognitive challenges and workplace relationships. Fagermoen (1997), for example, concluded that professional identity in nursing is about how nurses conceptualize what it means to act and be a nurse.

Interaction with other nurses and the sharing of experiences in a narrative and reflective way are important in this respect (Öhlén & Segesten, 1998). Through this interaction with other nurses, students and nurses learn about nursing and about themselves, while working as a nurse may also contribute to their personal growth and self-concept (Gregg & Magilvy, 2001). The study by Fagermoen (1997) also showed that working as a nurse maintains and enhances this self-concept, both as nurses and as individuals.

Thus, it seems apparent that the development of a professional identity is strongly related to the development of a personal identity. Moreover, both personal and professional identity must be conceptualized as a relationship with others, and not as something that exists within an individual (Bosma & Kunnen, 2001; Fagermoen, 1997; Gregg & Magilvy, 2001). Such identity development can be considered a lifelong process which mainly takes place in late adolescence and early adulthood (Kunnen, 2006), with the seeds of professional identity beginning to develop in nursing students (late adolescents) and young nurses (young adults), continuing throughout their education and careers (Johnson, Cowin, Wilson & Young, 2012). Good education and a challenging and safe work environment may be helpful to develop this professional identity and to obtain a stronger position in healthcare. It might also be hypothesized that the development of a professional identity is an indicator of the successful retention of both student and practising nurses in the profession.

However, the theoretical concepts related to the professionalization and professional identity development of nurses are not always in line with the realities of practice. Nurses are often confronted with situations that hamper their development. In practice, nurses are not always given the credit they deserve, due to the underestimation of the profession, among other reasons. Unfortunately, there are still many stereotypes about nurses that do not reflect the professionalization of nursing. This distorted image of the profession can be explained from a historical perspective.

Historical background: the image of nursing

The history of nursing has always been and will always be connected to developments and professional relationships in healthcare. Historically, nurses have found difficulties in distinguishing nursing from other healthcare professions (Deppoliti, 2008; Secrest, Norwood & Keatley, 2003; Willets & Clarke, 2014). Despite the view of Florence Nightingale, who saw nursing as an independent profession equal to the medical profession (Nightingale, 1969), nursing has for a long time been looked at in relationship with doctors. The dominance of the medical (mostly male) profession has had a strong influence on the role, the identity and the position of nurses (Aiken & Sloane, 1997; Gordon, 2005; Mills & Hallinan, 2009). In turn, nurses have been strongly aware of their subordination to the medical profession and, as a consequence, have experienced high levels of dissatisfaction with their professional status (Adamson, Kenny & Wilson-Barnett, 1995).

While nursing has become an independent discipline today, nurses are still working hard to have their professional status and an autonomous position formally acknowledged, especially in hospitals where it is increasingly common to work in multidisciplinary teams. Therefore, it is a great challenge for nurses to stand up for themselves and demonstrate what nursing really entails, because there is still a lack of knowledge about what nurses really do. The public does not always recognize the nurses' skills, and the quintessence of nursing work seems to be unclear (Gordon, 1996; Takase, Maude & Manias, 2006). The 'doctor's handmaiden', the 'ministering angel', the 'battle-axe matron' and the 'sex symbol' are some of the stereotypes that Bridges (1990) identified in a literature review on the images of the nurse and nursing.

The way the media portray nurses may give a clue to the origins of this distorted image (Hallam, 2002). Recent studies by Kalisch, Begeny and Neumann (2007) and Kelly, Fealy and Watson (2012) examined how nurses and nursing identities are constructed in internet video clips and on YouTube. They identified three types of nurses: the nurse as 'a skilled knower and doer', the nurse as 'a sexual plaything' and the nurse as 'a witless incompetent individual'. Nurses themselves experience a discrepancy between the public image and their own perception of nursing practice (Allen, 2007). As a consequence, the public image of nurses influences and undermines nurses' self-concept and professional identity (Takase, Kershaw & Burt, 2001; Tzeng, 2006). This distorted public image of nursing may also influence the recruitment of students and lead to lower nurse staffing levels and nursing shortages, because the perceptions and career aspirations of young people might have a concurrent impact on nurse recruitment (Brodie et al., 2004).

Thus, the expected global shortage of nurses provides another reason, if not increases the urgency, to improve the image of nursing and recruit new students and nurses for the profession. In this respect, the public image of nursing is, to a large extent, affected by the invisibility of nurses and the way they present themselves. Therefore, nurses need to raise public awareness about the various roles and opportunities nursing practice has to offer, also keeping the goal of recruiting students in mind. Becoming more visible and developing the ability to stand up for the profession is itself closely related to the development of professional identity and, subsequently, commitment to the profession (Nesje, 2017; Ruiller & Van Der Heijden, 2016). Therefore, the key goals of this thesis are to gain insight into the concepts of professionalization and the development of the professional identity of student nurses and young nursing professionals. Both the impact of theoretical education and experiences in clinical practice on identity development will be investigated.

Nurse education

In 1999, 29 Western European countries signed the Bologna Agreement, which included reforms in nursing education. The motivation for implementing the reforms in education was concordant in the various countries (Spitzer & Perrenoud, 2006a, 2006b). The first phase of reform was to create a unified European platform (harmonization) of solid preregistration programmes. The second phase dealt with integrating nursing programmes into higher education institutions (Spitzer & Perrenoud, 2006a, 2006b). One of the goals of the Bologna process, generally, is and remains the transparent and efficient development of professionals. As a result of this, the most visible change in nursing higher education was the adoption of Bachelor's, Master's and doctoral levels in nursing education (Collins & Hewer, 2014). The following categories of competence were established in nursing curricula: 1) professional values and nursing role, 2) nursing practice and clinical decision-making, 3) nursing skills, interventions and activities, 4) communication and interpersonal relationships, and 5) leadership, management and team abilities. These competences all include specialist knowledge, skills and attitudes that are defined it terms of learning outcomes in relation to generic competences (Collins & Hewer, 2014; Salminen et al., 2010). Bologna gave an important boost to the

scientific development of nursing.

In the Netherlands, healthcare education programmes changed when the Bologna agreement was concluded in 2002, as a result of which the nursing workforce has been transformed into a highly educated profession. A Bachelor's/Master's structure has been introduced and nursing students have confronted a profound change from vocational training to higher education. At this moment, 17 universities of applied sciences offer a four-year nursing education programme at the Bachelor's level; nine universities of applied sciences offer a Master' programme in Advanced Nursing Practice; and at one university, students can obtain a Master's degree in Nursing Science. The changes in educational programmes can be considered definitive for the recognition of the professional status of nursing and, as a consequence, the recruitment and retention of students and nurses.

The nursing workforce in the Netherlands not only consists of nurses with a Bachelor's of Nursing degree, but of nurses with a great variety of educational levels, such as in-service training, vocational training (MBO-V), a Bachelor's degree (HBO-V) or a Master's degree (MSc). In-service training, which no longer exists, was based on the apprenticeship model, meaning that nurses started working in practice from day one. In the 1970s, training programmes at the MBO-V and HBO-V levels were introduced, offering a combination of theoretical training and clinical placements. Today, nurse education programmes are at level 4 (MBO-V) and level 6 (HBO-V) of the European Qualifications Framework (EQF). Universities of applied sciences offer the broad Bachelor's of Nursing programmes on level 6 and must meet the Dublin Descriptors, which were adopted in 2004 as the Qualifications Framework of the European Higher Education Area. In this thesis, we focus on students enrolled in a Bachelor's of Nursing programme and on nurses with a Bachelor's degree in nursing.

Clinical practice

Internationally, the healthcare environment is growing increasingly complex, with changing healthcare demands. This is due, among other reasons, to an ageing patient population with high comorbidity, and the admission of sicker patients (Guarinoni, Motta, Petricci & Lancia, 2014; Rosenstein, Dinklin & Munro, 2014). Increasing technological developments make it possible to treat high-risk patients with greater needs. These changes all put high demands on the competences, skills and knowledge of nurses, especially on novice nurses with little experience. When newly graduated nurses start working in a clinical setting, they face stressful experiences that are related to heavy workloads, complex care situations and existential confrontations with severely ill patients. Moreover, novice nurses often experience a lack of the practical skills required.

This well-known 'theory-practice gap' is something most novices are confronted with during their transition from student nurse to nurse professional, and it is widely addressed in the international literature (Ajani & Moez, 2011; Clark & Holmes, 2007; Duchscher & Cowin, 2004). The theory-practice gap has been formulated as the dissociation of theoretical knowledge from the practical dimensions of nursing (Factor, Matienzo & de Guzman, 2017; Scully, 2011). In practice, nurses learn to deal with immediate responsibilities, the appropriate manner, have mutual respect and work in collaboration. The gap between novice nurses' theoretical knowledge, gained during education, and the reality of clinical practice, which places high demands on this knowledge and skills, is often associated with uncertainty, anxiety and stress and may eventually lead to burnout and the intention to leave the profession (Higgins, Spencer & Kane, 2010; Teoh, Pua & Chan, 2013).

To overcome this 'theory-practice gap', novice nurses not only need to gain practical skills, but they also need to develop their professional identity to better play their new roles (Apker, Zabava Ford & Fox, 2003; Fagerberg & Kihlgren, 2001). Nurses can develop their professional identity by learning from clinical practice. One of the proven conditions for achieving this is that nurses reflect on the experiences they gain during the course of their profession (Benner, 1984). According to Benner, a nurse who has developed sufficient professional identity can tell a self-story and answer questions such as 'Who am I as a nurse?', 'What kind of nurse do I want to be?' or 'Can I become the nurse I want to be in this hospital/work environment?' This connection between professional identity development and commitment is an important issue, as they are both linked to work satisfaction and remaining in the profession (Liu, Chang & Wu, 2007; Nesje, 2017; Ruiller & Van Der Heijden, 2016).

Main reasons for this study and research questions

Image, career choice and professional identity

Image is part of every profession. It is the way that the profession appears to other disciplines and to the general public. The public image and perception of a profession may impact on its positioning among other professions, and the development of a professional identity. The public image of the nursing profession is still predominantly based on misconceptions and stereotypes (Gordon & Nelson, 2005; Price, McGillis Hal, Angus & Peter, 2013). As suggested above, these misconceptions are largely based on media portrayals of nursing and can influence the recruitment of student nurses (Brodie et al., 2004; Weaver, Salamonson, Koch, & Jackson, 2013). Public image may also influence the development of professional identity and the retention of nurses in the profession (Morris-Thompson, Shepherd, Plata & Marks-Maran, 2011; Takase et al., 2006).

In relation to this issue of the distorted image of nursing, Chapter 2 will address the first research questions of this thesis:

- What is the current public image of nursing?
- How does this image influence the development of nurses' professional identity?

Recruitment and retention of students

In the Netherlands, thousands of students start their Bachelor's programme in nursing at universities of applied sciences annually. After a decline in recent years, the number of enrolments increased to 5,374 students in 2016. At the same time, the universities are confronted with high drop-out rates. While this figure decreased from 18.2% in 2011 to 12.2% in 2016 (the Netherlands Association of Universities of Applied Sciences, 2017), this still means that several hundred student nurses do not manage or want to complete their programme.

Furthermore, only 58.4% succeed in obtaining a diploma within the stipulated four-year programme period. The findings of the studies presented in Chapters 3, 4 and 5 of this thesis provide insight into student nurses' experiences with the educational programme and clinical placements, with the aim of enhancing study success and completion of the programme.

A cross-sectional study was performed among students in a Bachelor's of Nursing programme at four universities of applied sciences in the Netherlands. We used two widely accepted instruments, namely the Nursing Orientation Tool (Vanhanen, Hentinen & Janhonen, 1999) and the Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998) to measure students' orientation and attitudes towards the nursing profession.

The main research questions related to students that will be answered in Chapters 3, 4 and 5 are:

- Why do students choose a nursing career?
- What are their perceptions of nursing?
- How, when and why do these perceptions change?
- What are the reasons for attrition from and retention in nursing programmes?

Recruitment and retention of nurses

Retention of the nursing workforce, especially young nurses, is a major challenge globally. Turnover intentions are related to a diversity of job conditions and work environments, such as work pressure, stress at work and a negative work-life balance (Carter & Tourangeau, 2012; Unruh & Zhang, 2013). In 2016, 50% of nurses working in hospital settings in the Netherlands reported an intention to leave the profession (FNV/Zorg en Welzijn/Ziekenhuisbarometer, 2016). Most of these intentions were due to heavy workload (61%), a lack of time for their patients (35%) and negative work-life balance (35%).

The results of a survey of 750 nurses showed that nine out of ten believed that the intensity and complexity of care have increased over the past five years, and that they experience high levels of stress as a result of excessive workloads (venvn.nl/2017). According to these respondents, the work load is due to structural staff shortages. Moreover, the majority of these nurses (72%) reported a lack of understanding and support from their organization to deal with these issues. Of the respondents under the age of 35 (n = 233), 47% reported that they had considered leaving the profession due to high work pressure on several occasions. International studies showed that newly graduated nurses, especially, experience emotionally and cognitive challenging situations that influence their commitment to the profession and intention to leave or remain (Gardiner & Sheen, 2016; Thoresen, Kaplan, Barsky, Warren & de Chermont, 2003).

Professional commitment, in particular affective commitment, is one of the most important factors for retaining nurses in the profession (Gould & Fontenla, 2006; Parry, 2008; Teng, Lotus Shyu & Chang, 2007). Affective commitment reflects a sense of belonging; that is, a desire to maintain membership of the profession (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer, Allen & Smith, 1993). Understanding which positive and negative experiences novice nurses are confronted with at the beginning of their career and what is needed to improve the transition from student nurse to professional staff nurse may increase affective commitment and retention rates.

Therefore, the study reported on in Chapters 6 and 7 of this thesis explore novice nurses' initial experiences in the clinical setting and their link with emotions and commitment. This longitudinal diary study was performed among novice nurses working at different wards at a university medical centre in the Netherlands. Firstly, we used a qualitative approach with unstructured written diaries to give a voice to nurses and allow them to recount their lived experiences. Secondly, we analysed which factors, derived from the diaries, were related to their emotional state and affective commitment to the profession.

Chapters 6 and 7 answer the following research questions:

- Which positive and negative experiences are novice nurses confronted with at the beginning of their career?
- What is needed to improve their transition from student nurse to professional staff nurse?
- How do work experiences influence their emotional state and commitment to the profession?

Aims and outline of the thesis

This thesis aims to expand the understanding of nursing students' and novice nurses' professional identity development by addressing topics related to education and clinical practice. High-standard theoretical education is indispensable to prepare student nurses in the most optimal manner possible for a challenging work environment that places high demands on their knowledge and skills. When they start working as professionals

after graduation it is likely that these demands and their responsibilities will increase. Therefore, this thesis explores the experiences of both students and young nurse professionals during education and early clinical practice, and the influence of these experiences on their professional identity development.

Chapter 2 provides a state of the art on the global public image of the nursing profession and attempts to shed light on which factors influence the development of the professional identity of nurses.

Chapters 3, 4 and 5 present the results of a longitudinal study among student nurses enrolled in a Bachelor's of Nursing programme at four universities of applied sciences in the Netherlands. Student nurses' orientation and attitude towards nursing at the beginning of their education are explored using the Nursing Orientation Tool (Vanhanen, Hentinen & Janhonen, 1999) and the Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998). In particular, Chapter 3 describes the factors that predict nursing students' positive orientation and attitude towards nursing at the beginning of their education. Chapter 4 discusses the longitudinal study results of students' changing orientation and attitudes during their first two years of education. Chapter 5 reports, from a qualitative perspective, on why students choose a nursing career, what their conceptualization of nursing is, and which intrinsic and extrinsic factors affect their decision to leave or complete the course.

Chapters 6 and 7 focus on novice nurses' first work experiences in a clinical setting at a university medical centre in the Netherlands.

In particular, Chapter 6 describes the results of a longitudinal diary study among novice nurses. The great variety of novice nurses' lived experiences are presented, with the intention of clarifying which experiences matter most to them. Chapter 7 discusses which contextual, relational and cognitive factors, derived from the diaries, are related to novice nurses' emotional state and affective commitment to the profession.

Chapter 8 presents a general discussion of the study results and reflects on the practical implications. In addition, an overview of the main strengths and limitations of the studies will be provided, as well as directions for future research.

The outline and structure of the thesis is depicted in Figure 1.

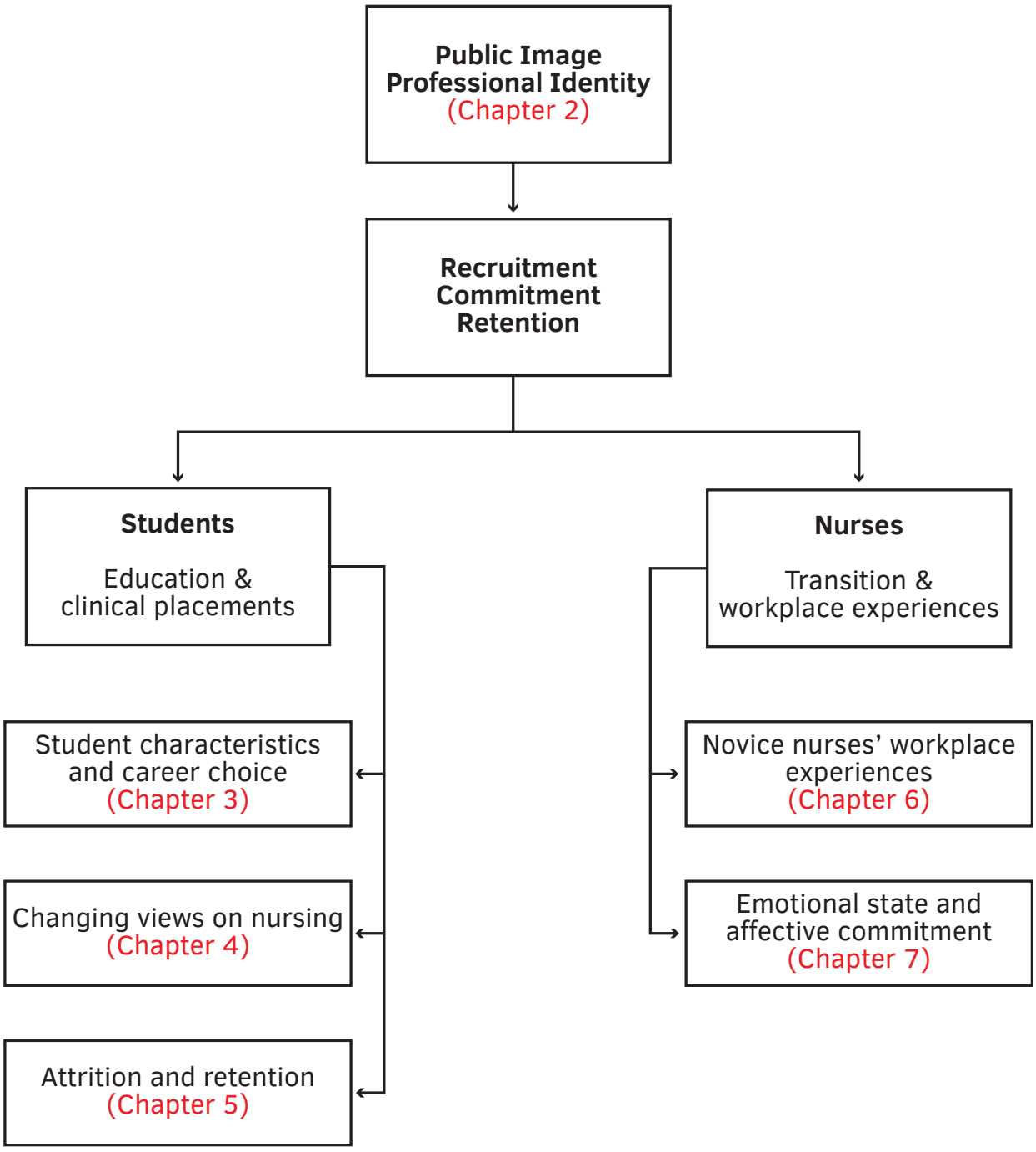

Figure 1 - Outline and structure of the thesis

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2 CHAPTER

The nursing profession: public image, self-concept and professional identity

A discussion paper

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ABSTRACT

Aim
To discuss the actual public image of nurses and other factors that influence the development of nurses' self-concept and professional identity.

Background
Nurses have become healthcare professionals in their own right who possess a great deal of knowledge. However, the public does not always value the skills and competences nurses have acquired through education and innovation.

Design
Discussion paper.

Data sources
We identified 1216 relevant studies by searching MEDLINE, CINAHL and PsycINFO databases in the period 1997 – 2010. Finally, 18 studies met our inclusion criteria.

Discussion
The included studies show that the actual public image of nursing is diverse and incongruous. This image is partly self-created by nurses due to their invisibility and their lack of public discourse. Nurses derive their self-concept and professional identity from their public image, work environment, work values, education and traditional social and cultural values.

Implications for nursing
Nurses should work harder to communicate their professionalism to the public. Social media like the Internet and YouTube can be used to show the public what they really do.

Conclusion
To improve their public image and to obtain a stronger position in health care organizations, nurses need to increase their visibility. This could be realized by ongoing education and a challenging work environment that encourages nurses to stand up for themselves. Furthermore, nurses should make better use of strategic positions, such as case manager, nurse educator, or clinical nurse specialist and use their professionalism to show the public what their work really entails.

INTRODUCTION

The professionalization of nurses through education and innovation has proven to be the focus of one of the most significant and ongoing discussions in the history of nursing. Worldwide, nurses have developed themselves into professionals with a great deal of knowledge, as witnessed by the development of nursing protocols and guidelines. Despite these developments towards professionalization, previous studies on this subject have shown that nurses are not given due recognition for the skills they have by the majority of the public. The essence of nursing is not always clear and nurses still suffer from (gender) stereotypes (Bridges, 1990; Hallam, 1998; Warner, Black & Parent, 1998). A stereotype can be defined as 'a cognitive representation or impression of a social group that people form by associating particular characteristics and emotions with the group' (Smith & Mackie, 2007). Bridges (1990) identified 34 different stereotypes of nurses; most of which have negative connotations. Bridges' study also showed that the media often depict nurses working at the patient's bedside and performing repetitive and routine tasks, mostly as the doctor's handmaiden (Bridges, 1990). Other studies indicate that the portrayal of nurses in the media might give a clue as to how their public image is perceived (Gordon, 2005; Kalisch & Kalisch, 1983; Warner et al., 1998) These studies show that the public image of nurses does not always match their professional image; nurses are not depicted as autonomous professionals and the public is not aware that nowadays nursing is to a great extent a theory-based and scholarly profession (Dominiak, 2004). The nursing discipline has undergone tremendous developments over the last 30 years of the 20th century and in the first decade of the 21st century, in particular, with respect to professionalization. The professionalization of nursing is closely intertwined with a focus on the development of nursing theory (Meleis, 1997), nursing research and nursing practice, which ideally are interrelated. Research can validate theory, which then may change nursing practice (Donahue,1998). Nightingale (1820-1910) and Henderson (1897-1996) have been visible forces for nursing across boundaries, in respectively the 19th and the 20th century. Moreover, the nursing profession has developed numerous types of education programs in the last decades, which resulted in a variety of nursing levels, like bachelor, master and doctoral degrees. Even the most respected news media sources belittle nursing, so readers do not get a sense that nurses are educated life-saving professionals (Summers & Summers, 2009).

Although the phenomenon of nursing and its characteristics are carefully considered, this has not yet resulted in a public image that recognizes the scientific and professional development of the nursing profession. The aim of this paper is to discuss the current state of affairs regarding the public image of nurses worldwide and to analyze the potential influence of this image on the development of nurses' self-concept and professional identity. A search of the literature is performed and recent publications on these themes are brought together to broaden this discussion.

Background

Although Florence Nightingale saw nursing as an independent profession that was not subordinate but equal to the medical profession (Nightingale, 1969), for a long time nursing was seen as inseparable from the medical profession. The medical (male) dominance strongly influenced the role development, the image and the position of nurses (Fletcher, 2006; Gordon, 2005; Hallam, 2000). Previous studies on this subject show that nurses have always been strongly aware of their subordination to the medical profession and are still experiencing high levels of dissatisfaction with their professional status. Twaddle and Hessler (1987) investigated how the domination of nursing by others originated. They found that in the western civilization, domination began in the early 1900s, when medicine became a dominant force and care of the sick became institutionalized. The study of Walby, Greenwell, Mackay and Soothill (1994) shows that the nursing and medical professions in Western Europe have a complicated relationship, which amongst others is mediated by hierarchy and subordination. The workplace studies of Adamson, Kenny and Wilson-Barnett (1995) and Aiken and Sloane (1997) demonstrated how the impact of medical dominance on autonomy and job satisfaction of nurses led to decreased patient outcomes. Adamson et al. (1995) examined the influence of perceived medical dominance on the workplace satisfaction of Australian and British nurses. The results of their study show that medical dominance is an obstacle to the workplace satisfaction of both Australian and British nurses, who experienced a high degree of dissatisfaction with their professional status. Historically, nurses deferred to physicians, for reasons that include the disparity of power between the genders (Summers & Summers, 2009). However, understanding nursing and the development of nursing and medicine cannot be separated from understanding the societal context, as Kalisch and Kalisch (1995) demonstrate in their study on American nursing.

The traditional role and image of nurses can be seen as the expressions of an oppressed group. The dominance of the oppressor, in this case the physician, marginalizes the oppressed group and may lead to the development of low self-concept, which can in turn lead to negative self-presentation (Fletcher, 2006; Fletcher, 2007). Self-concept is closely related to professional self-concept, which is a prerequisite for the vocational and academic development of the identity of a profession (Arthur, 1995; Arthur & Randle, 2007).

The idea of being subordinated to the medical profession is not the only factor that influences the self-concept and professional identity of nurses. Other determinants include work environment, work values, education and culture. Professional identity and self-concept can undergo changes due to interactions with colleagues, other health care professionals and patients. Work environment and work values can also play a role in this respect (Allen, 2004; Ewens, 2003; Mills & Blaesing, 2000). Education and the acquisition of knowledge are likely to have an impact on nurses' job satisfaction and self-concept (Arthur, 1992; Pask, 2003). Furthermore, international differences in traditional cultural and social values need to be taken into account when measuring nurses' professional identity and self-concept (Fealy, 2004; Thupayagale-Tshweneagae & Dithole, 2007).

There is a strong need for a discussion on the image, the self-concept and the professional identity of nurses in a global context. The outcomes of such a discussion can help nurses develop strategies to achieve a public image that reflects their scholarship and professionalism. This paper looks at the characteristics of the international development of these important issues.

Data sources

Search methods

A literature search was performed using the databases MEDLINE, CINAHL and PsycINFO. The search strategy aimed to retrieve suitable studies published between 1997 and 2010. The search terms used were nurses, nurse*, perception, public image, professional image, stereotyp*, self concept, power, public opinion and social identification. Original research was included if it was published in English and available as a full text article. The research design of the studies had to be clear, with sample, instrument(s) and statistical method explicitly described.

Search outcome

The first search resulted in 1216 citations. After screening these on title, 287 abstracts were included for further assessment. The first author assessed the abstracts on their relevance for the purpose of the study, which resulted in 58 articles. These were reviewed by all authors and finally 18 articles were included in this discussion paper. Relevant studies included studies that examined the role of the public image of the nursing profession, studies that analysed the way nurses develop their self-concept and professional identity or studies that looked at the influence of the public image on nurses' self-concept and professional identity. Figure 1 shows a flow chart of the selection process.

The included studies were heterogeneous with respect to design, sample and setting. The samples vary from 1957 RNs to five communication professionals. The settings were a university nursing school, the clinical setting of a hospital or a variety of settings. The included studies were conducted in Australia (3), Brazil (3), Sweden (3), USA (3), Taiwan (2), Hong Kong (1), Israel (1), Japan (1) and Norway (1).

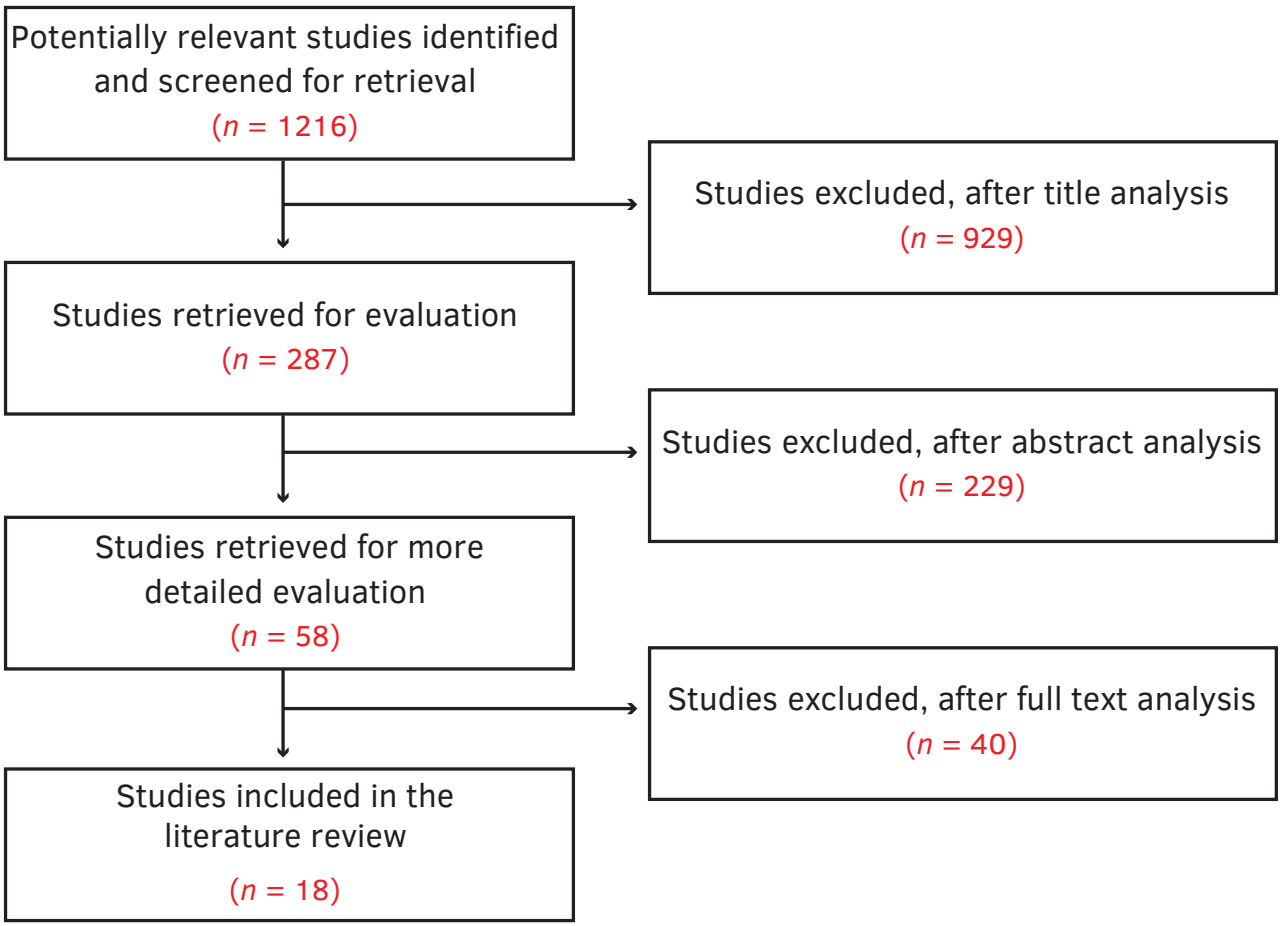

Figure 1 - Flow chart of study selection process

Data abstraction and synthesis

A key word analysis was performed based on the concepts of public image, professional identity and self-concept. Next, a content analysis of the included studies was conducted to systematically identify the main characteristics of the studies on the basis of the terms public image, self-concept and professional identity. Extracted data included author(s), year and country of publication, study design, quality of the study, sample, instrument(s), data analysis, aim of the study, outcomes on public image, outcomes on self-concept and professional identity and comments. The main characteristics of the 18 included studies are presented in Table 1.

Subsequently, the articles were judged on their substantive concepts to identify the main themes. Five main themes were identified: (1) work environment and work values; (2) education and career choice; (3) traditional values, culture and gender; (4) caring; and (5) identity and performance. The themes and related studies are presented in Table 2.

Table 1 - Characteristics of the included studies

Reference Study design	Sample/instrument Data analysis	Aim	Public image, self-concept and professional identity	Comments
Ben Natan & Becker (2009) Quantitative methods Descriptive survey	309 adults 18-50 years McCabe questionnaire Descriptive statistics, inf. statistics; t-tests; parametric tests; Spearman correlation	To clarify factors that influence the choice of ideal careers and nursing careers among the general population	The public has a mayor misperception of nurses' work. Careers in nursing are perceived as tedious and lacking challenges, creativity, responsibility, high wages, status and comfortable working conditions	Nursing schools need to promote the nursing profession among the public. Lectures by nurses are very significant. Research is necessary to examine why people who are intrinsically motivated to choose a care-giving profession do not choose a career in nursing
Dahlborg & Lyckhage (2009) Qualitative design	Discourses from 1999-2003 Documents, reports, campaigns, TV series; Discourse and content analysis	To explicate the predominant discourse in the field of Swedish nursing	The media play a major role in disseminating prevailing conceptions and conventions pertaining to the nursing profession. The media present nursing in ways that neglect the official requirements of the profession	Health care seems to be more heavily influenced by the media than by the official requirements of nursing. Therefore, the public could get low expectations of the competences of nursing
De Araujo Sartorio & Pavone Zoboli (2010) Qualitative study within the scope of descriptive ethics	18 nurse teachers Semi structured and unstructured interviews Hermeneutic-dialectic method	To identify the ethical image of nursing	Five distinctive perspectives of an ethical nurse emerged: good nurses fulfil their duties correctly, are proactive patient advocates, are prepared and available to welcome others as persons, are talented, competent and carry out professional duties excellently; combine authority and power sharing in patient care	Some perspectives pointed to traits from the past. This caused some concern, because students should not start their careers with the shadows of historical hurts. Faculty should make the teaching and work of nursing healthier
Donelan, Buerhaus, DesRoches, Dittus & Dutwin (2008) Qualitative disproportionate stratified sampling design	1,604 respondents age 18 and older Survey: Computer Assisted Telephone Interviewing Stratification scheme and sample balancing	To examine the influence of societal demographics, perceptions of the nursing shortage and media influences on perceptions of nursing careers	Images of nurses are partly shaped by personal experience with nurses but also by exposure in the media (TV, news). This exposure is more helpful than harmful	The nursing profession is highly respected. Nevertheless a shortage of nurses persists. Implementing a workforce strategy is essential to understand and maintain the public's support for the nursing profession
Huffstutler, Stevenson, Mullins, Hackett & Lambert (1998) Qualitative survey	831 interviews with non-nursing university students, professional persons, other non-nursing individuals Interviews with three open-ended questions Secondary analysis technique	To evaluate the perceptions of nursing's image by non-nursing university students, professionals, and other non-nursing individuals	Student opinions of nursing were significantly affected by parents, friends and guidance counsellors. The meaning and practice of nursing care is not entirely understood by the various individuals who were interviewed	Nurses need to be agents of change and educate the public about the many different possibilities available in basic nursing and advanced practice preparation

Tabel -1 (Continued)

Reference Study design	Sample/instrument Data analysis	Aim	Public image, self-concept and professional identity	Comments
Kalisch, Begeny & Neumann (2007) Quantitative descriptive Comparative design	Nursing websites 144 in 2001 152 in 2004 Internet Nursing Image Tool Descriptive statistics; Pearson X^2 tests; Nonparametric tests, Interrater reliability	To analyze the image of nursing on the Internet and to research whether this image underwent changes from 2001 to 2004	One of the major influences on the image of nurses is the largely inaccurate and negative portrayal of the nursing profession. This image has an impact on the quality and quantity of the work performed	This study reveals a relatively positive image of nursing on the internet. Unfortunately, a downward trend in the depiction of nurse characteristics is evident. The Internet offers nurses the opportunity to demonstrate the best aspects of their profession
Kemmer & Silva (2007) Qualitative cross-sectional descriptive study	5 Communication professionals Semi structured interviews Collective subject discourse; Descriptive analysis	To further the understanding of the social representations of nurses and the nursing profession by communication professionals	The media transmit a distorted image of nurses. Nurses are depicted as the doctor's shadow and not as professionals	To give more visibility to the nursing role professionals need to position themselves strategically and to educate the public on nursing (TV, internet, news, press). Invisibility Diminishes nurses' ability to change the directions of health care
Arthur et al. (1999) Quantitative design	1957 RNs from 11 countries Questionnaires: PSCNI; TIQ; TISQ; CAQ Correlation and reliability analysis; ANOVA	To compare the caring attributes of RNs from eleven different countries with their views of themselves and their perceptions of technological influences on their practice	Participants valued professional interaction with colleagues and believed in their skills and flexibility as nurses. They felt respected by other professionals, but were less convinced that their career was going in the direction they had envisioned before starting	Nurses worldwide have much in common but still retain individual cultural features related to caring and their practice as nurses. Future studies are recommended to examine, respect, preserve and nurture these unique characteristics
Fagerberg & Kihlgren (2001) Qualitative longitudinal study	27 nursing students 19 nurses Interviews and diaries Phenomenological hermeneutics	To understand how nurses experience the meaning of their identity as nurses, as students and two years after graduation	he context in which nurses work is very important for the development of their identity, skills and expertise as nurses. All nurses narrated their stories from one dominant perspective, which is understood as their professional identity	Participants did not shift their dominant perspective over time. It may be understood as the nurses' life paradigm
Fagermoen (1997) Mixed Methods Survey + focus groups	767 nurses + 6 nurses in focus groups Questionnaires + interviews Hermeneutical analysis	To identify the values underlying nurses' professional identity as expressed by what is meaningful in nurses' work	Working as nurses maintains and enhances their self-concept both as nurses and as persons. The value of altruism or care for the patients' health and well-being appeared to be an overriding value; a moral point of view on which they based their practice	Shortage of personnel and time were perceived to affect the opportunities for providing quality nursing care, which in turn was experienced as a strain and for some created a feeling of meaninglessness

Table 1 - Characteristics of the included studies

Reference Study design	Sample/instrument Data analysis	Aim	Public image, self-concept and professional identity	Comments
Gregg & Magillvy (2001) Grounded theory design	18 nurses Interviews, observations, theoretical memos Constant comparative analysis	To explore the process of establishing the professional identity of Japanese nurses	Nurses' work contributes to their professional growth and satisfaction. Participants identified themselves as nurses through integrating a nurse into self. The findings acknowledge the inseparability of identification with nursing and commitment to nursing	Nurses as educators and role models are essential to the process of establishing a professional identity
DeMeis, de Almeia Souza & Ferreira da Silva Filho (2007) Qualitative study	27 nursing professionals Interviews Content analysis Interpretative Phenomenological Analysis (IPA)	To present narratives of professional identity among nurses in Brazil and search for meanings of care and their place in nursing activities	Nursing is still influenced by traditional values. Nursing is seen as a profession of low social status and as a domestic activity that does not require qualifications. Nurses possess a low professional self-esteem, caused by a negative public image	With the process of increasing professionalization, nurses acquire higher academic qualifications and technical knowledge, but care is delegated to socially less valued professionals
Liu (2010) Qualitative study	20 nurses Web-based online forum; open-ended questions Thematic analysis	To explore nurses' perceptions of their work role on the basis of the perspectives of Chinese gender roles and culture	In Chinese culture, the traditional gender roles have a strong influence on the public image of physicians and nurses. Nursing is still seen as a feminine, caring occupation, with low professional status and subordinate to physicians. Nurses' perceptions of their role and work environment are strongly influenced by culture and gender stereotypes	A more gender sensitive work environment in health care is recommended. Nurses could contribute by asking the government to implement gender equality education programs
Öhlén & Segesten (1998) Qualitative survey	8 RNs Semi structured interviews Concept analysis	To highlight the concept of professional identity of nurses to promote theoretical clarity and examine implications for nursing practice	Nurses are part of a social struggle for power where ideas are created through gender segregation. The stereotypical image of the nurse in the media is an expression of this struggle. Professional identity is developed through interaction with other nurses and has a strong impact on nurses' self-esteem and empowerment. The professional self-image of the nurse is also based on the ideas of people in general regarding nurses	Professional personal development and growth of nurses should be made possible through the development of personal self-care skills and increased possibilities for nurses for sharing experiences with other nurses in a narrative and reflective way

Tabel -1 (Continued)

Reference Study design	Sample/instrument Data analysis	Aim	Public image, self-concept and professional identity	Comments
Takase, Kershaw & Burt (2001) Quantitative descriptive correlational design	80 RNs IWS; PNIS; Six Dimension Scale of Nurs. Performance Descript. statistics; Pearson; Crohnbach α coefficient	To investigate nurses' responses to the image discrepancy between the public and nurses and its relationship to their self-concept, job satisfaction and performance	The media project distorted images of nursing. The public's perception of the nursing profession tends to be influenced by these nursing stereotypes. Nurses perceive their public image more negatively compared with how they see themselves, which causes image discrepancy. This can lead to job dissatisfaction and low job performances	The development of counteractive measures to public stereotypes could lead to improvement of nursing practice, which can change the public's attitude towards nursing
Takase, Kershaw & Burt (2002) Quantitative descriptive correlational study	80 RNs PNIS; Self-esteem scale; IWS;Six Dim. Scale of Nursing Performance Decr. Statistics; Cronbach; Anova; Pearson correlation	To identify the relation-ships between nurses' perception of common public stereotypes of their profession, nurses' self-concept, self-esteem job satisfaction and job performance	The public still has a stereotypical image of nurses, which influences the development of nurses' self-concept. Nurses who perceive their public image more negatively tend to report a more negative self-concept. The greater the self-concept, or job satisfaction, the greater the performance and the engagement in and interaction with society and other health care members	Nurses need to develop the necessary preventive measures to counteract the multifarious effects of nurse stereotyping
Takase, Maude & Manias (2006) Mixed Method Correlational design	346 nurses + 6 in focus groups PNIS; Task Performance Scale Pared t-test; regression analysis	To examine how the relationship between nurses' perceived public image and self-image is associated with their job performance and turnover intentions	The public tends to view nurses as feminine and caring professionals not as leaders or independent professionals. This image is also a result of nurses' invisibility in the media. Nurses perceive a lack of under-standing from the public. The relationship between self-image and perception of the public image as being caring predicts job performance	The nursing profession needs to improve its public image and its self-image to solve turnover problems and to resolve the current nursing shortage
Tzeng (2006) Quantitative study Cross-sectional design	488 participants (students, staff and faculty members) Nursing Image Questionnaire Descriptive and ordinal logistic regression analysis	To investigate the perceived images and expected images of Taiwanese nurses	Nurses are frequently portrayed in prime time sitcoms and dramas as subservient, inept and insignificant. The public perception of nursing does not match the perception of nurses themselves. The incorrect portrayal of nurses is partially responsible for public perceptions of nursing and for how nurses perceive and use power. The public image of nurses is a mirror of nurses' perceptions of self	Nurses should do more to improve their image. If they have a negative image of themselves, the image they project to the public is equally negative

Table 2 - Themes and related studies

Themes identified in the included studies	Related studies
Work environment	Arthur *et al.* 1999, De Araujo Sartorio & Pavone Zoboli 2010, Fagerberg & Kihlgren 2001, Fagermoen 1997, Gregg & Magillvy 2001, Öhlén & Segesten 1998, Takase *et al*. 2001
Education & career choice	Ben Natan & Becker 2010, Dahlborg-Lyckhage & Pilhammer-Anderson 2009, De Araujo Sartorio & Pavone Zoboli 2010, DeMeis *et al.* 2007, Donelan *et al*. 2008, Fagerberg & Kihlgren 2001, Gregg & Magilvy 2001, Huffstutler *et al*. 1998, Kalisch *et al.* 2007, Liu 2010
Traditional values, culture & gender	Dahlborg-Lyckhage & Pilhammer-Anderson 2009, De Araujo Sartorio & Pavone Zoboli 2010, DeMeis *et al.* 2007, Huffstutler *et al*. 1998, Kemmer & Silva 2007, Liu 2010, Öhlén & Segesten 1998, Takase *et al.* 2001
Caring	Arthur *et al*. 1999, Ben Natan & Becker 2010, Dahlborg-Lyckhage & Pilhammer-Anderson 2009, DeMeis *et al.* 2007, Donelan *et al.* 2008, Fagerberg & Kihlgren 2001, Fagermoen 1997, Huffstutler *et al.* 1998, Liu 2010, Öhlén & Segesten 1998, Takase *et al*. 2006
Identity & performance	Ben Natan & Becker 2010, Donelan *et al.* 2008, Huffstutler *et al*. 1998, Kalisch *et al*. 2007, Kemmer & Silva 2007, Liu 2010, Takase *et al*. 2002, Takase *et al.* 2006, Tzeng 2006

DISCUSSION

Nurses' depiction in the media

The image of nursing is determined by how nurses themselves and others (the public) perceive nursing. Earlier studies have indicated that the public image of nurses often differs from nurses' own image of nursing. This public image is predominantly based on misconceptions and stereotypes, which find their origins in distorted images of nurses in the media. The media plays a part in perpetuating the stereotype of the nurse as angels of mercy, the doctor's handmaiden, battleaxe and sexy nurse (Bridges, 1990; Gordon & Nelson, 2005; Hallam, 1998). Due to such images, the public views nurses as feminine and caring, but not necessarily as autonomous health care providers (Kemmer & Silva, 2007; Takase, Maude & Manias, 2006). Kalisch and Kalisch (1981, 1982a, 1982b, 1982c, 1983) have conducted extensive research on the image of nursing in the media (newspapers, TV, films, novels). They identified six images of nurses corresponding to six different periods: (1) Angel of Mercy (1854-1919); (2) Girl Friday (1920-1929); (3) Heroine (1930-1945); (4) Mother (1946-1965); (5) Sex Object (1960-1982); and (6) Careerist (1983-Present). The presence of these stereotypical images is confirmed by Gordon (2005), who analysed the image of nurses in advertising campaigns and found that even though much has changed for women in the twentieth century, images of nurses still rely on images of angels. Nurses are generally prized for their virtues, not their knowledge. In contrast, the study of Stanley (2008), who analysed the image of nurses in feature films made in the Western world, shows a more nuanced picture. Stanley (2008) examined 36,000 feature film synopses and found that while early films portrayed nurses as self-sacrificial heroines, sex objects and romantics, more recent films portray nurses as strong and self-confident professionals. A recent study of Kelly, Fealy and Watson (2012) discussed how nurses and nursing identities are constructed in video clips on YouTube. Three nursing identity types could be found as follows: the nurse as 'a skilled knower and doer', the nurse as 'a sexual plaything' and the nurse as 'a witless incompetent individual'. Although the results of these studies show a rather heterogeneous picture of the image of nursing, the stereotypical images of nurses nevertheless remain persistent.

We have identified several aspects of these stereotypical images in the studies discussed in this paper and, as can be expected from the outcomes of previous studies, the results shows that the actual public image of nursing is diverse and incongruous and tends to be influenced by nursing stereotypes (Öhlén & Segesten, 1998; Takase, Kershaw & Burt, 2002). With respect to male nurses, men were either portrayed as the second sex in nursing care (Dahlborg-Lyckhage & Pilhammar-Anderson, 2009), or as a nurses with different work patterns who are not influenced by marriage (Liu, 2010). Öhlén and Segesten (1998) demonstrate that male nurses experience uncertainty from other people meeting a male nurse as a result of stereotyped images.

The media's projection of images of nurses, in ways that neglect the official requirements of the profession, also has an impact on the view of the public on nursing (Dahlborg-Lyckhage & Pilhammar-Anderson, 2009; Takase, Kershaw & Burt, 2001). Nurses seem to be viewed as feminine and caring not as autonomous health care providers (Kemmer & Silva, 2007; Takase et al., 2006).

Moreover, nursing is seen as a profession with limited career opportunities (Ben Natan & Becker, 2010; Huffstutler, Stevenson, Mullins, Hackett & Lambert, 1998). Donelan, Buerhaus, DesRoches, Dittus and Dutwin (2010) report more positive findings. They demonstrate that the nursing profession is highly respected by the American public, but nevertheless, the authors conclude that a nursing shortage persists in the United States. The study of Kalisch, Begeny and Neumann (2007) also shows that nurses are seen as qualified, skilled and respectable professionals. The limitation is that, in their study, Professional Nursing Organizations and job sites are populating nursing on the internet. From the results of the studies we may carefully conclude that the image of nurses in the media does not (yet) meet the professional image of nursing.

Defining image, self-image, self-concept and professional identity

In the included studies, the concepts image, self-image, self-concept and identity were used incongruously, even by the same author in the same study, thus making it difficult to come to a uniform definition. Self-image and self-concept, for instance, were used interchangeably, as were professional image and professional identity. For the sake of clarity, this paper restricts its focus to the terms self-concept and professional identity and uses the definition of Tajfel and Turner (1986) on self-concept in general, which reads as follows: 'the way we think about ourselves'. With respect to the self-concept of nurses, in specific, we rely on the definition of Takase et al.: 'nurses' self-concept can be defined as information and beliefs that nurses have about their roles, values and behaviours' (Takase et al., 2002, p. 197).

The Social Identity Theory of Tajfel and Turner (1986) argues that the self-concept of an individual or a group (for example, nurses) is derived from the perceived image of the group by society. When you assume that society thinks well of you, it will boost your self-concept and vice versa. Self-concept (the way we think about ourselves) can be used as an umbrella term, with self-image (the way we see ourselves), self-esteem (the way we feel about ourselves) and self-presentation (the way we present ourselves to others) as underlying concepts (Tajfel & Turner, 1986). We chose to use the concept of self-concept throughout this paper, because it applies mostly to the professional self (the profession), rather than to the psychological self (the person).Therefore, it can be linked to professional identity. Nurses' professional identity is defined as 'the values and beliefs held by nurses that guide her/his thinking, actions and interactions with the patient' (Fagermoen, 1997). The included studies show that professional identity can be reflected in the nurse's professional self-concept, which is also based on the general public opinion on nurses (DeMeis, de Almeia Souza & Ferreira da Silva Filho, 2007; Öhlén & Segesten, 1998). Congruence exists between the public image and nurses' self-concept: nurses who perceive their public image to be negative are likely to develop low self-concept (Gregg & Magilvy, 2001; Öhlén & Segesten, 1998; Takase et al., 2002). In turn, nurses' negative self-concept and presentation influence the public's opinion (Tzeng, 2006).

Work environment and work values

In 7 studies work environment and work values were mentioned as factors of influence on nurses' professional identity. Nurses learn from their work experiences and professional interaction with colleagues, in particular, is highly valued. In the study of Arthur et al. (1999) the professional self-concept, technological influences and caring attributes of 1957 Registered Nurses in 11 countries were examined. They found that the sample as a whole valued professional interaction with colleagues and believed in the skills of nurses. This view is shared by Gregg and Magillvy (2001), who also found that nurses learn from their work experiences. Through interaction with other nurses they learn things about nursing and about themselves and working as a nurse may also contribute to their personal growth and self-concept (Gregg & Magillvy, 2001). The Swedish nurses in the study of Öhlén and Segesten (1998) mentioned that they develop their professional identity through interaction with other nurses and by sharing their experiences in a narrative and reflective way. Takase et al. (2001) found that the participants in their study evaluated their performance as nurses positively and that this positive self-concept is related to the professional socialization process. Nurses develop a professional identity through the skills, knowledge and values inherent in their profession. The study of Fagermoen (1997) showed that working as nurses maintains and enhances their self-concept, both as nurses and as persons.

Education and career choice

Next to work environment, education and the presence of preceptors also contribute to nurses' job satisfaction and self-concept. The nurses in the study of Fagerberg and Kihlgren (2001) mention that the influence of preceptors during education and in the work was very important. This view was shared by the participants in Gregg and Magillvy (2001) study on nurses in Japan. Some participants considered their (basic) nursing training to be low level education, but most participants felt they had gained positive influences from their education, including continuing education after becoming a nurse. In contrast, De Araujo Sartorio and Pavone Zoboli (2010) found that the nurse teachers in their study seemed to be driven by historical scars that still influence their focus on the actual role of nurses and which in turn might have detrimental effects on the teaching and work of nurses.

Although nurses see themselves as well- trained professionals, the public still sees nursing as a low-status profession that is subordinate to the work of physicians, does not require any academic qualifications and lacks professional autonomy. The public is oblivious to the different levels of education and professionalism involved in nursing (Dahlborg-Lyckhage & Pilhammar-Anderson, 2009; DeMeis et al., 2007; Liu, 2010). The study of Huffstutler et al. (1998) shows that even though many of the respondents believe that education is important for becoming a nurse, the majority does not have a clear conception of the meaning and practice of the nursing profession. In a study on Israeli nurses, Ben Natan & Becker (2010) found a positive correlation between the image of nursing and the decision of students to choose a nursing career. They discovered that the more positive the image of nursing, the higher the change that students would opt for a nursing career. Their findings also revealed that nursing is seen as a profession that has limited career opportunities and that the characteristics of nursing are incompatible with the characteristics of an ideal career.

However, these results contrast with the findings of Donelan et al. (2008), who performed a national survey of the public's opinion of nursing and a national survey of registered nurses in the USA on their own opinion of nursing. They found that the public was more positive about a career in nursing than the nurses themselves. The qualification the public named most frequently with respect to nursing included 'highly knowledgeable, qualified, skilled' (Donelan et al., 2008). Kalisch et al. (2007) share this view as a result of their study on the image of nurses on the Internet. With respect to education, nurses are described as being knowledgeable and skilled and more nurses who hold a doctoral degree are mentioned than in the past. Although, we must keep in mind that these results are biased by the fact that the subjects were Professional Nursing Organizations, job sites and resource/Website directories.

Traditional values, culture and gender

The nursing profession continues to suffer from the influence of traditional values and cultural and social norms in respect to gender and professional status. Öhlén and Segesten (1998) found that a stereotypical image of nurses is an expression of the tradition of viewing nursing as a part of the female sphere of the family. As a result, nurses are struggling for power in a gender-segregated society. In Brazil, for instance, nursing is still seen as a female and domestic vocation related to the social universe of the 'house'. Nursing remains a predominantly feminine and domestic activity that has a low social status and is discredited by society. People look at the doctor who gets all the credits (DeMeis et al., 2001; Kemmer & Silva, 2007). The online forum used by Liu (2010) to explore nurses' perceptions of their work role on the basis of Chinese cultural and gender roles shows similar results. Participants mentioned that they would not encourage their children, especially their sons, to become nurses. The author argues that one of the main underlying reasons for this negative view of nursing is to be found in the traditional norms and values in Chinese culture. The Chinese caring system, where persons with lower status should care for those with higher status, qualifies nurses as caregivers with low professional status and as subordinates to physicians. Nursing is still seen as a feminine, caring sub-professional occupation rather than a profession (Liu, 2010). The study of Dahlborg-Lyckhage and Pilhammar-Anderson (2009) on predominant discourses in Swedish nursing shows that the image of nurses in gendered discourse has been mainly negative. Nursing was, and sometimes still is, portrayed as a female profession, with nurses playing supporting roles to physicians and occupying a subordinate position with regard to decision making and delegating tasks. These studies show that the public in various countries has a strong tendency to regard nurses as 'subordinate to doctors' (De Araujo Sartorio & Pavone Zoboli, 2010; Huffstutler et al., 1998; Takase et al., 2001) or as 'the doctors shadow' (Kemmer & Silva, 2007). Öhlén and Segesten (1998), however, believe that awareness of this process may create opportunities for nurses to develop professionally.

Caring

Caring was the most commonly identified factor of influence on the development of nurses' self-concept and professional identity (mentioned in 11 studies). The nursing profession is strongly associated with caring, both by the public and by nurses themselves. However, a discrepancy exists in the interpretation of the concept of caring. The studies show that nurses consider caring to be part of their professional identity, whereas the

public associates caring with feminine qualities and unprofessionalism. Today's nurses try to gain recognition for the importance of caring in a society where caring is undervalued (Öhlén & Segesten, 1998). Nurses are viewed by the public as feminine and caring professionals, but they are not recognized as leaders or independent health care professionals (Takase et al. 2006). The results of the study of Huffstutler et al. (1998) indicate that nursing is seen as the profession most closely associated with caring. Despite the technological developments in health care, nurses are considered to be caring persons and thus the most important requirement for becoming a nurse is to be able to care for others.

With regard to nurses themselves, the extensive study of Arthur et al. (1999) showed that nurses in all 11 countries believe in a confidential relationship between nurses and their patients based on truthfulness and respect. Despite their individual cultural features, nurses across the world do have much in common when it comes to caring and their practice. Nurses believe that the primary responsibility of nurses is to perform nursing care for patients and to ensure their patients' well-being (Dahlborg-Lyckhage & Pilhammar-Anderson, 2009; Fagerberg & Kihlgren, 2001). Fagermoen (1997) shows that for most of the nurses in her study the value of care for the patients' health and well-being appears to be an over-riding value, on which they base their practice. Positive correlations have also been found between choosing nursing as a career and intrinsic factors, such as caring for others, helping others and feeling responsible for others (Ben Natan & Becker, 2010). In contrast, the study of DeMeis et al. (2007) showed that nurses themselves may also consider caring to be an unprofessional activity. The respondents state that when nurses reach higher professional standards, patient care is delegated to a socially less-valued professional category that requires lower academic qualifications.

Identity and performance

Nine studies mentioned the poor communication of nurses with the public and the invisibility of nurses in the media. A common theme in these studies is that nurses should do their best to improve the negative image of their profession, whereby keeping the goal to recruit new students in mind. The studies emphasize the shortage of nurses, which is partly caused by nurses themselves, who do too little to recommend their careers to others (Donelan et al., 2008; Takase et al., 2006). Nurses need to counteract the effects of nurse stereotyping and improve the public image of their profession. A stereotypical public image is also partially responsible for the way nurses perceive and use power. Nurses need power to improve their visibility (Takase et al., 2002; Tzeng, 2006). According to Kemmer and Silva (2007), nursing professionals have partly inflicted their invisibility in the media on themselves. As long as nurses do not feel responsible for the distorted images of the roles they have performed and are still performing in health care and as long as they do not take a stand to correct these images, their invisibility will continue. Nurses need to raise public awareness about the various roles and opportunities both basic and advanced nursing practice have to offer. To give more visibility to the nursing role, a strategy needs to be developed which will use the (social) media (Internet, TV, internal news, press) to inform the public (Kalisch et al., 2007; Kemmer & Silva, 2007).

Implications for nurses

Around the world, nursing baccalaureate, master and doctoral degree programs prepare nurses for a variety of nursing roles. Nurses are educated to develop nursing theories and conceptual models, conduct nursing research and test nursing theories (Meleis, 1997). As a result, nursing is becoming more scholarly. The public needs to become aware that nursing research exists and that it is important to patient health. This awareness, in turn, will have a positive effect on the public image of nursing and will empower nurses.

This paper, however, shows that the public is not always aware of the qualifications nurses need for their profession. The public image of nursing is to a large extent, affected by the invisibility of nurses and the way they present themselves. Ineffective communication skills influence the public perception of nurses. Nurses should work harder to communicate their professionalism to the public and they need to make clear what they really do. As nurses see caring for patients as a core value in nursing practice, it is important to demonstrate to the public that this entails more than just sitting by the patient's bedside, as portrayals of nurses in the media would sometimes lead the public to believe. Nurses could use discourse and new (social) media to present their profession to the public (Ben Natan & Becker, 2010; Kalisch et al., 2007).

RECOMMENDATIONS

We argued in this paper that, to become more visible inside and outside health care organizations, nurses should present themselves more clearly to the public. This could be achieved by pursuing higher education and by working in a challenging work environment that offers nurses the possibility to break away from the daily routine and that challenges them to deepen and broaden their knowledge and skills. Job rotation, gaining professional autonomy, opportunities for interprofessional learning and peer consultation could help nurses to become more visible within their organization and on a macro level, within society. Nurses could, for example, create a more challenging work environment by embracing a more active attitude that includes participation in representative bodies and unions. Interaction with other nurses and working as a nurse may contribute to the development of their self-concept and identity as a nurse. Out of their professional identity nurses can also adopt and develop new leadership roles. Nursing research can be helpful to further the profession and research outcomes could be used to improve the development of professional identity. Another strategy that could help nurses is to participate in the development of cross-national knowledge about nursing practice. It would be very interesting to examine in which countries nurses are 'doing well' in respect to public image and consequently represent their professionalism in the eyes of society.

CONCLUSION

This discussion paper gives an overview of the current state of affairs with regard to public image, self-concept and professional identity of nurses. The findings show a rather diverse picture of the actual view of the public on the nursing profession. The heterogeneity of setting, sample and population of the studies makes it quite difficult to explain these differences. Furthermore, traditional cultural and social values determine the way the public perceives the nursing profession. The self-concept of nurses and their professional identity are determined by many factors, including public image, work environment, work values, education and culture. Virginia Henderson (1978) already stated that 'nurses self-image is often at odds with the public's image and what nurses do is at odds with what nurses and the public think they should do'. A negative public image may challenge nurses to look for successful strategies to improve their self-concept and to show their invaluable contribution to the health care system. One of the strategies is to promote nursing by giving lectures to spread information on the profession. As educators and role models, they can establish a professional nurse identity. Professional development of nurses could also be realised by sharing their work experiences with other nurses. In addition, nurses should make better use of strategic positions, such as case manager, nurse educator, or clinical nurse specialist to show what their work as health care professionals entails. The public should be able to identify with nurses and the work they do. In the media, nurses are hardly seen as professional advisors or experts. A convincing number of nurses is needed to change the public opinion. Kalisch and Kalisch (1983) state that nurses can intervene in four steps: (1) getting organized; (2) monitoring the media; (3) reacting to the media; and (4) fostering an improved image. Unless nurses themselves establish a public image and professional identity that recognizes the value of their professional and educational development, the problem of a 'fuzzy' and inaccurate image will continue to exist.

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3 CHAPTER

Predicting factors of positive orientation and attitudes towards nursing

A quantitative cross-sectional study

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ABSTRACT

Background
Previous studies have identified various reasons for students to choose a career in nursing. Students at the start of their programme hold a great variety of images and perceptions of nursing which can affect their orientation and attitudes towards their future profession.

Objectives
This paper aims to examine nursing students' orientation and attitudes towards nursing at the beginning of their educational programme, and to explore predictors of positive orientation and attitudes.

Design
The study used a quantitative cross-sectional design.

Settings
A survey was conducted among first-year nursing students at four nursing universities of applied sciences in the Netherlands.

Participants
Questionnaires were administered to all students enrolled in a bachelor of nursing programme (n = 1414) at these universities.

Methods
Respondents completed a survey consisting of: 1) Nursing Orientation Tool, 2) Nursing Attitude Questionnaire, and 3) demographic data such as gender, living status, nursing experience, preliminary training, first-choice programme, and career choice. Kruskal Wallis tests, with post hoc Mann Whitney U tests, were used to compare group scores. Multiple regression was performed to investigate predictors of positive orientation and attitudes towards nursing.

Results
Students in this study sample (n=1244) strongly agreed with statements related to caring, nursing expertise, professional nursing knowledge and the application of this knowledge. Predictors of positive orientation and attitudes towards nursing include having nursing/caring experience, indicating nursing as the first choice for study, preliminary vocational training, and a desire to make a career in nursing.

Conclusions
Data from this survey suggest a link between personal and environmental characteristics and motivations to select nursing as a career. Understanding which factors predict positive orientation and attitudes towards nursing could offer educators a tool in the recruitment and selection assessment of new students.

INTRODUCTION

Perceptions of nursing and career choice

There are several reasons why students choose nursing as a career, such as a desire to care for and work with sick people (Cook, Gilmer & Bess, 2003; Jirwe & Rudman, 2012); past healthcare work experience (Beck, 2000; Larsen, McGill & Palmer, 2003); the expected career opportunities and the wide variety of available work the profession has to offer (Mooney, Glacken & O'Brien, 2008; Vanhanen, Hentinen & Janhonen, 1999). The literature shows that the desire to care for others is one of the main motives for students to choose nursing as a career (Mooney et al., 2008; Phillips et al., 2015). Nursing is regarded as a profession in which the values of caring and helping others are central and the focus of all nursing activities (Day, Field, Campbell & Reuter, 2005; O'Brien, Mooney & Glacken, 2008). Students choose nursing because they value a career involving altruism, intellectual challenges, goal attainment, and job security (Miers, Rickaby & Pollard, 2007; Rhodes, Morris & Lazenby, 2011; Sand-Jecklin & Schaffer, 2006). The study by Phillips et al. (2015) revealed that student nurses at the beginning of their training are enthusiastic about the caring aspect of the profession and that they really aim to make a difference to people's lives.

Personal and environmental characteristics are closely linked to motivations of students to choose nursing and to complete their programme. It seems that nursing students begin their training with a fairly well-formed sense of their future profession, but past research also shows that there is a noticeable gap between expectations and the reality of the clinical learning environment (Magnussen & Amundson, 2003; Papathanasiou, Tsaras & Sarafis, 2014). Unrealistic expectations of nursing programmes can lead to dissatisfaction and voluntary withdrawal (Brodie et al., 2004; O'Donnell, 2011). As dropout rates of nursing students is a worldwide problem, it is of main importance to further investigate their orientation and attitudes and potential predictors of a positive outcome.

Factors influencing students' orientation and attitudes towards nursing

Despite the fact that the image of nursing is undergoing change, many stereotypes still remain which are influenced by a number of factors including society and the media (Bolan & Grainger, 2009; Mooney et al., 2008). Nursing is regarded as a profession undervalued by society, and which lacks academic training and intellectual depth (Brodie et al., 2004; O'Brien et al., 2008). It is not inconceivable that these images mark student perceptions of the nursing profession. Previous studies show that nursing students begin their programme with preconceived ideas and misconceptions about nursing and nurses (Brodie et al., 2004; Day et al., 2005; Happell, 1999). These perceptions can differ by gender, preliminary training and healthcare work experience. The studies by Cowin and Johnson (2011) and Miers et al. (2007), for example, showed significant differences in perceptions according to mode of entry and healthcare experience. Students with healthcare work experience were notably less focused on nurses being compassionate and more on aspects of the professional role of nurses. Other characteristics can also influence students' perceptions of nursing (Bolan & Grainger, 2009; Safadi, Saleh, Nassar, Amre & Froehlicher, 2011; Vanhanen-Nuutinen, Janhonen, Maunu & Laukkala, 2012). The study by Safadi et al. (2011) showed that students who said that nursing

was their first choice demonstrated more positive perceptions of nursing.

With regard to education, the Netherlands underwent a radical change in healthcare education when the curriculum was reformed at the national level. Until 1971 the system of professional training of nurses had been based on the apprenticeship model; since then, nursing programmes have been linked to higher education institutions. In 2002 the Bologna agreement was concluded and the Bachelor's-Master's structure in higher education, including higher vocational education, was introduced. Professional values, nursing roles, nursing practice and clinical decision-making are some of the competence categories which comply with the Bologna agreement (Salminen et al., 2010). It is imperative therefore, that the perceptions of Dutch nursing students towards these concepts are verified.

Objectives
The aim of this study was twofold:

1) to examine what nursing students' orientation and attitudes towards nursing are at the beginning of their education

2) to explore which characteristics are the strongest predictors of positive orientation and attitudes towards nursing

METHODS

Study design and sample
A cross-sectional survey design was used. Questionnaires were administered to all first-year students enrolled in a Bachelor of Nursing programme at four nursing universities of applied sciences in the Netherlands (n=1414).

Instruments
The Nursing Orientation Tool (Vanhanen et al., 1999) and the Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998) were used. A forwards-backwards translation process was performed for both instruments to ensure content and semantic equivalence and applicability to the Dutch cultural context. The translator for the blind reverse translation was not involved in the project.

The Nursing Orientation Tool (NOT)
The Nursing Orientation Tool (Vanhanen et al., 1999) is a widely-used self-report instrument and consists of seventeen items using a five-point Likert scale. The instrument measures students' orientation to nursing using three subscales: caring, nursing expertise and life orientation. The caring orientation is based on 'students' meaningful caring and nursing experiences either in their families or in working life'. The nursing expertise orientation is based on 'professional nursing experience'. The life orientation is based on 'the need to keep a balance between family life and studies' (Vanhanen & Janhonen, 2000b, p. 655). The validity and reliability of the tool were tested in previous studies (Janhonen, Vanhanen & Atwood, 2000; Vanhanen & Janhonen, 2000a).

The Nursing Attitude Questionnaire (NAQ)

This instrument was developed by Toth et al. (1998) and is one of the earliest tools measuring attitudes towards nursing. Attitude towards nursing was defined theoretically 'as the view that persons hold regarding the roles, values, and professional activities of nurses, and the responsibilities nurses have towards society' (Toth et al., 1998). The NAQ consists of a thirty-item questionnaire using a five-point Likert scale. The reliability of the NAQ was tested in previous studies (Bolan & Grainger, 2009; Grainger & Bolan, 2006; Toth et al., 1998). However, these studies used the scores across the entire NAQ to compare demographics or interventions, not content areas. No factor analysis was performed to test its construct validity. It is not clear which items contribute to which factor or dimension of the 'attitude towards nursing' concept. To reduce the NAQ items to a smaller number of coherent subscales, we submitted the questionnaire to closer inspection.

Item reduction and factorial testing of the NAQ

A team of four researchers reviewed the NAQ items to verify that their wording reflected the concept measured: attitude towards nursing. The specific meaning of each item was examined to establish face validity. Twelve items were removed based on open discussions of the intended meaning and group consensus, resulting in eighteen items for inclusion for further analysis. Two core concepts were clearly differentiated: Nursing Agency and Advocacy & Empathy. Nursing Agency can be regarded as the link between nursing science and nursing practice (Orem, 2001). Orem made the point that 'nurses must not only master such knowledge, that is, make the knowing their own, but also master its application in practice situation' (Orem, 2001, p. 16). Advocacy & Empathy refers to the extent that nurses speak out and speak for patients, and act on the unmet needs of patients (Hanks, 2008; O'Connor & Kelly, 2005).

To test the factorial structure of the reduced NAQ, an Exploratory Factor Analysis (EFA) was performed first. The results of the EFA revealed two measurable factors in the reduced NAQ. A Confirmatory Factor Analysis (CFA) was then conducted. The goodness-of-fit of the two factor solution was evaluated in the CFA using multiple criteria: chi-square ($\chi 2$), chi-square/degrees of freedom ($\chi 2/df$) and root mean square error of approximation (RMSEA). The following goodness-of-fit indices were obtained for the two-factor model (with criteria for good fit in brackets): $\chi 2/df$ = 3.69 (2.0-5.0), CFI = 0.90 (>0.90), RMSEA = 0.046 (< 0.06), NNFI = 0.87 (>0.80). The Cronbach's alpha of the reduced NAQ (18 items) in this study was .79. The reliability of the subscales ranged from good to acceptable: Nursing Agency (14 items α = .74) and Advocacy & Empathy (4 items; α = .63). We considered the reduced NAQ suitable for further analyses based on these outcomes.

Data collection
Arrangements were made with Deans and Faculty Boards of each nursing university to permit teachers to use 15 minutes of their classes to distribute and collect the questionnaires. The data were collected at the beginning of the programmes in September 2011.

Data analysis
Comparisons were made using chi-square tests for categorical variables and the Spearman's Rank Order Correlation for the relationship between two continuous variables. The Kruskal Wallis tests, with post hoc Mann Whitney U tests, were used to compare group scores. Multiple regression was performed to test which of the characteristics was most predictive of positive orientation and attitudes towards nursing. Because some independent variables were not continuous, (first-choice programme, preliminary training, nursing/caring experience, and living status) dummies of these variables were constructed to perform the regression analysis.

Ethical considerations
Deans and Faculty Boards of each university provided their permission for this study. The confidentiality of the study was guaranteed in the covering letter and the students were advised of the study's purpose. The respondents were informed in writing that participation in the study was voluntary, and that their responses would be analysed and published anonymously. Consent for participation was assumed for all questionnaires returned.

RESULTS

Demographics

A total of 1244 completed questionnaires were returned, a response rate of 88%. The majority (82%) of the respondents were female. The mean age was 20 years (SD 4.3), with 77% being between 17 and 20, 20% between 21 and 30, and 3% being 31 and older. See Table 1 for all the characteristics.

Table 1 - Sociodemographic characteristics of the sample at baseline (*n* = 1244)

	% (n)	Mean (SD)
Gender		
Male	18 (221)	
Female	82 (1023)	
Age		20 (4.3)
Preliminary training		
Vocational	20 (246)	
Non vocational	80 (997)	
Nursing/caring experience	50 (617)	
Earlier problems with study		
Study related problems	13 (159)	
Personal problems	40 (502)	
Study related and personal problems	47 (583)	
Nursing as first priority	67 (825)	
Career aspiration		
Nursing career	81 (1001)	
Other career	16 (198)	
Do not know yet	3 (45)	

Sociodemographic associations

Female students more often reported that nursing was their first choice than male students, $\chi 2$ (1, n = 1239) = 10.56, p = .001. Male students had more often encountered problems with previous programmes than female students $\chi 2$ (1, n = 1243) = 10.72, p = .001. Respondents who were living at home with their parents mentioned that nursing was their first-choice programme more often than respondents living independently, $\chi 2$ (1, n = 1236) = 4.43, p = .035, they also faced more problems with previous programmes, $\chi 2$ (1, n = 1240) = 15.42, p = .000, and they had less nursing/caring experience $\chi 2$ (1, n = 1241) = 36.78, p = .000. Students with preliminary vocational training reported more often that nursing was their first-choice programme, $\chi 2$ (1, n = 1239) = 8.31, p = .004. They also had more nursing/care experience than students with non-vocational preliminary training, $\chi 2$ (2, n = 1243) = 31.58, p = .000. Students who reported that nursing was their first-choice programme also aimed to make a career in nursing. The difference with other students was significant $\chi 2$ (2, n = 1239) = 99.04, p = .000. Finally, a significant association was found between students with nursing/caring experience and their aim to make a career in nursing, $\chi 2$ (2, n = 1244) = 14.36, p = .001.

Orientation to nursing: caring, nursing expertise and life orientation (NOT)

The results from the closed questions demonstrated that most students agreed with statements related to the caring orientation scale and the nursing expertise orientation scale. The life orientation scale showed that this group of students scored low on the items which reflect problems with finding a balance between their studies and private life. The highest scores are displayed in bold (Table 2).

The results of the non-parametric tests revealed that female students agreed more with statements related to caring and life orientation, while males scored higher on nursing expertise. Students for whom nursing was the first-choice programme agreed more with the statements related to the caring orientation and the nursing expertise scale items than students who had initially chosen another programme. Preliminary vocational training had a positive influence on the students' orientation to caring, nursing expertise and life orientation. Students with nursing/caring experience showed a more positive orientation to caring and nursing expertise than students who did not have nursing/caring experience. Respondents who aimed to make a career in nursing had a more positive orientation to caring and to nursing expertise than their counterparts who were seriously considering a career change. Finally, students who lived independently had a more positive orientation towards their future profession compared to students living at home with their parents (Table 3).

Table 2 - Survey responses for 'caring orientation', 'nursing expertise' and 'life orientation'

N = 1244	SA %	A %	U %	D %	SD %	M*
Caring Orientation Scale						
1. I've dreamt of becoming a nurse since I was a child	6.3	17.3	19.6	31.7	**25.1**	2.48
2. Nursing is a calling	5.7	**41.0**	37.2	12.3	3.8	3.32
3. A nurse must have a powerful need to take care for others	44.2	**51.2**	2.9	1.4	0.3	4.38
4. It is important to me that I get to study nursing	22.2	**59.9**	14.8	2.6	0.5	4.01
5. Working as a nurse gives my life a meaningful content	14.3	**51.7**	27.9	4.8	1.3	3.37
6. I expect, as a nurse I have an opportunity to develop as a person	25.3	**59.8**	11.6	2.3	0.9	4.06
Nursing Expertise Orientation Scale						
1. I chose nursing because of the variety of jobs available	38.3	**44.2**	8.6	6.5	2.3	4.10
2. I am confident I will become a good nurse	26.3	**60.9**	11.8	0.8	0.3	4.12
3. One of the most important qualities of a nurse is mental strength	20.2	**59.0**	18.2	2.3	0.3	3.96
4. In nursing, I can choose my working field according to my personal interests	35.2	**53.0**	9.4	1.9	0.6	4.20
5. I expect this training to give me a possibility to progress in my career	24.4	**54.6**	17.9	2.5	0.6	4.00
6. In nursing, I can learn to understand myself and others better than in some other professions	8.3	39.3	**40.4**	10.9	1.1	3.43
Life Orientation Scale						
1. I would not have started studying nursing here if it had meant moving away from my family	2.7	10.6	27.8	**42.5**	16.4	2.41
2. I would have applied to study here earlier but it was not possible because of where my family was living	1.4	0.4	9.2	21.3	**67.8**	1.46
3. My studying is dependent on the financial situation in my family	3.4	11.6	14.8	29.2	**41.0**	2.07
4. I applied to study nursing, because I was unemployed/going to be unemployed	1.5	1.2	3.0	14.3	**79.9**	1.30
5. I do not want to make decisions in my life that would risk my family being together	13.7	23.2	**33.8**	13.2	16.2	3.05

SA = Strongly Agree (5); A = Agree (4); U = Uncertain (3); D = Disagree (2); SD = Strongly Disagree (1)
*M = Mean total score (range 1.0 – 5.0)

Table 3 - Personal and environmental characteristics and factor scores on orientation

Scale	Gender		Nursing as 1st choice		Vocational training		Nursing experience		Nursing career choice		Living status	
	z	*p*	*z*	*P*	*z*	*p*	*z*	*p*	*z*	*p*	*z*	*P*
NOT	-.931	.352	-4.81	.000**	-4.40	.000**	-4.65	.000**	-6.45	.000**	-2.09	.036*
Caring	-2.70	.007**	-6.90	.000**	-3.06	.002**	-4.37	.000**	-7.08	.000**	-1.24	.214
Nursing Expertise	-3.18	.001**	-2.32	.020*	-2.44	.015*	-3.12	.002**	-5.07	.000**	-1.16	.247
Life orientation	-2.46	.014*	-.126	.900	-2.31	.021*	-.541	.588	-.601	.548	-1.69	.091

*. P-value becomes significant at 0.05 / **. P-value becomes significant at 0.01

Predictors of a positive orientation towards nursing

Five variables proved to be predictors of a more positive orientation towards nursing. Being a male student was a predictor of a more positive orientation towards nursing expertise; females agreed more with statements related to the life orientation scale. Choosing nursing as a first-choice programme and having preliminary vocational training were predictors of a more positive orientation towards nursing and the caring orientation. Having nursing/caring experience and choosing a career in nursing predicted a more positive orientation towards caring and nursing expertise (Table 4).

Table 4 - Predictors of a positive orientation to nursing

Scale	Gender		Nursing as 1st choice		Vocational training		Nursing experience		Nursing career choice		
	β	*p*	*β*	*p*	*β*	*p*	*β*	*p*	*β*	*p*	R^2
NOT			.10	.001**	.08	.017*	.10	.000**			.08
Caring			.14	000**	.06	.025*	.10	.001**	.14	.000**	.09
Nursing Expertise	.09	.002**					.08	.009**	.14	.000**	.04
Life orientation	.06	.027*								.	.02

*. P-value becomes significant at 0.05 / **. P=value becomes significant at 0.01

Attitude towards nursing: nursing agency and advocacy & empathy (NAQ)

The NAQ demonstrates that students agreed with all items on the advocacy & empathy subscale and with most items on the nursing agency subscale. The highest scores are displayed in bold (Table 5).

The results of the non-parametric tests showed that males scored higher on items on the nursing agency subscale. Students for whom nursing was the first-choice programme agreed more with statements related to advocacy & empathy. Students with nursing/caring experience scored higher on the overall NAQ and on nursing agency than students without nursing/caring experience. With regard to overall NAQ scores, the same applies to students who lived independently compared to students living at home with their parents. However, they agreed less with statements related to advocacy & empathy (see Table 6).

Predictors of positive attitudes towards nursing

With respect to the NAQ, four independent variables turned out to predict more positive attitudes. Being a male student, having nursing/caring experience, and living independently turned out to be predictors of more positive attitudes towards nursing agency. Having nursing as first-choice programme was a predictor of more positive attitudes towards advocacy & empathy (Table 7).

Table 5 - Survey responses for 'nursing agency' and 'advocacy & empathy'

N = 1244	SA %	A %	U %	D %	SD %	M*
Nursing Agency Scale						
1. Nurses consistently update their practice in relation to current health trends	17.8	**62.6**	17.7	1.7	0.2	3.96
2. It takes intelligence to be a nurse	13.2	**56.8**	22.6	6.9	0.5	3.75
3. Nurses should have a baccalaureate degree for entrance into practice	8.5	26.7	**34.5**	26.3	4.1	3.09
4. Nurses with advanced degrees make important contributions to patient care	11.0	**40.7**	40.3	6.9	1.1	3.54
5. Nurses are capable of independent practice	35.2	**56.9**	5.3	2.0	0.6	4.24
6. The service given by nurses is as important as that given by physicians	39.5	**50.5**	5.7	3.2	1.1	4.24
7. Research is vital to nursing as a profession	18.8	**60.2**	19.8	1.0	0.2	3.96
8. Nurses participate in the development of health care policies	28.7	**63.8**	6.3	1.0	0.2	4.20
9. Nurses act as resource persons for individuals with health problems	20.7	**61.4**	13.5	3.7	0.6	3.98
10. Nurses integrate health teaching into their practice	6.1	**59.5**	32.8	1.3	0.2	3.70
11. Nurses speak out against inadequate working conditions	11.9	**44.7**	40.9	2.5	----	3.66
12. Nurses follow the physician's orders without questions	1.5	6.6	15.6	**57.4**	18.9	3.86
13. Nurses incorporate research findings into their clinical practice	13.0	**60.5**	23.9	2.3	0.2	3.84
14. The major goal of nursing research is to improve patient care	21.7	**59.3**	14.9	3.4	0.6	3.98
Advocacy & Empathy Scale						
1. Nurses are patient's advocates	23.2	**61.1**	13.0	2.7	0.1	4.05
2. Nurses protect patients in the health care system	23.2	**64.7**	10.1	2.0	0.1	4.09
3. Nurses in general are kind, compassionate human beings	20.7	**60.4**	14.6	3.6	0.6	3.97
4. Nurses value time at the bedside caring for patients	22.0	**67.5**	8.7	1.5	0.3	4.09

SA = Strongly Agree (5); A = Agree (4); U = Uncertain (3); D = Disagree (2); SD = Strongly Disagree (1)
*M = Mean total score (range 1.0 – 5.0)

Table 6 - Personal and environmental characteristics and factor scores on attitudes

Scale	Gender		Nursing as 1st choice		Nursing experience		Living status	
	z	*p*	*z*	*p*	*z*	*p*	*z*	*p*
NAQ	-1.69	.091	-.415	.678	-2.42	.016*	-2.23	.026*
Nursing Agency	-2.17	.030*	-.407	.684	-2.89	.004**	-3.59	.000**
Advocacy & Empathy	-.020	.984	-2.56	.010*	-.328	.743	-2.01	.045*

*. P-value becomes significant at 0.05 / **. P-value becomes significant at 0.01

Table 7 - Predictors of a positive attitude toward nursing

Scale	Gender	Nursing as 1st choice	Nursing experience	Living status	R^2
Nursing Agency	β = .07 p = .018*		β = .07 p = .023*	β = .07 p = .010**	.02
Advocacy & empathy		β = .07 p = .010**			.01

*. P-value significant at the 0.05 level / **. P-value significant at the 0.01 level

DISCUSSION

The first aim of this study was to explore the orientation and attitudes of nursing students towards nursing at the beginning of their programme. The results showed that respondents generally strongly agreed with statements related to caring, nursing expertise, nursing agency and advocacy & empathy. Protecting and caring for patients, future career opportunities, integrating nursing research into clinical practice and participating in healthcare policies turned out to be important issues. In addition, the students felt it important to study nursing and to have the opportunity to develop as people and professionals. They also believed that the service provided by nurses is as important as that provided by physicians. With regard to the second aim, the findings indicate that a more positive orientation and attitude towards nursing was predicted by personal and environmental characteristics such as gender, living status, having indicated nursing as first-choice programme, starting the nursing programme having completed preliminary vocational training, having nursing/caring experience, and aiming to make a career in nursing.

Previous studies have been conducted to evaluate student motivation to choose a career in nursing. In the study by Jirwe and Rudman (2012) approximately 75 % of the respondents wanted to care for and help others. This is consistent with our findings. The studies by Bolan and Grainger (2009) and Grainger and Bolan (2006) also show that beginner students have a quite positive image of nursing, and that they believe in the importance of nursing research and nurses' role in policy development. With respect to career, students in our study chose nursing because of the variety of jobs available, the field which matches their personal interests, and the opportunities offered for career progression. These results also strengthen those of previous studies (Jirwe & Rudman, 2012; Larsen et al., 2003; Rognstad, aasland & Granum, 2004). Across the whole sample, the life orientation scale scores were the lowest, indicating that this group of students did not experience problems with finding a balance between their studies and private life/family. In contrast, the studies by Vanhanen and Janhonen (2000a) found that life orientation was the most dominant orientation in nursing. This could be because this study was conducted in Finland, where the distance between work location and family was one of the determining factors for registering for a particular programme (Vanhanen & Janhonen, 2000a; Vanhanen et al., 2012).

Our study found significant gender differences. Males scored higher on nursing expertise and nursing agency, both domains reflecting the roles and professionalism of nursing. Females agreed more with statements related to life orientation, and finding a balance between studies and private life. These differences can be explained by traditional gender differences which remain prevalent, even in Western cultures. The gender differences in Israeli nursing students in the study by Toren, Zelker and Port (2012) also showed that proximity of living arrangements to the workplace was more important to females, as well as transportation to and from work. Cowin and Johnson (2011) found that males rated lower for caring on the Qualities of Nursing (QoN) scale which examines the qualities of professional nurses. Male students in the study by Zysberg and Berry (2005) placed greater emphasis on aspects such as leadership and advancement, while females paid more attention to a perceived fit between themselves and the profession

of nursing (Zysberg & Berry, 2005). In our study, previous nursing/caring experience proved to be the most important factor of influence on positive orientation and attitudes toward nursing. This corresponds with the results of the study by Pryjmachuk, Easton and Littlewood (2009), who found that students with more experience were more likely to choose a career in nursing and complete their programme. Larsen et al. (2003) and Miers et al. (2007) also found that past healthcare work experience was a motivating factor for choosing a career in nursing. Students with nursing experience also seemed to have more insight into the reality of working with patients. This is congruent with Cowin and Johnson's (2011) findings that students with healthcare experience were more focused on aspects of the role and professional issues of nursing. Students for whom nursing was the first-choice programme turned out to be more positively oriented towards nursing, especially the caring orientation. They also agreed more with advocacy & empathy issues. This can be related to the results from previous studies which showed that the desire to care for others is one of the main motives for students choosing a career in nursing (Mooney et al., 2008; Phillips et al., 2015). Interestingly, the studies by Safadi et al. (2011) and Salamonson et al. (2014) showed that students for whom nursing was the first choice were more likely to continue their educational nursing programme. In our study, having completed preliminary vocational training was a predictor of a positive orientation towards nursing and the caring dimension. From this we can assume that these students had already chosen vocational training or a caring profession before starting nursing training. This finding, however, is inconsistent with the study by Miers et al. (2007), who found that students with vocational training gave fewer altruistic reasons for choosing nursing as a career than those without. Our study demonstrated that students who aimed for a non-nursing career agreed less with statements related to caring and to nursing expertise. Having an ambition to make a career in nursing seemed to predict a positive perception of both the caring and the professional dimensions of nursing.

The results of the statistical analyses showed significant differences between group scores on orientation and attitudes towards nursing. However, the explained variance of the predictors was low. In this study we did not include independent variables such as role models and the students' own experiences as patients. The studies by Larsen et al. (2003) and Lai, Peng and Chang (2006) showed that these variables positively influence student perceptions of nursing. Including these variables could increase the explained variance of the predicting factors. Nevertheless, the results of this study showed statistically significant predictors, from which important conclusions can be drawn about how predictor values are associated with orientation and attitudes of nursing students. Additional qualitative research might give more insight into, yet unknown, explanatory variables. However, studies on human attitudes show in general quite low R-squared values (Fichman, 1999; Frost, 2013).

Study strengths and limitations

The strength of this study is its large sample and high response rate (88%), representing 32% of all first-year nursing students registered for a bachelor of nursing programme in the Netherlands in September 2011. This large sample implies high representativeness for the target population and therefore good generalizability of the findings to other student populations. The reduced version of the Nursing Attitude Questionnaire

needs further psychometric testing. The reliability of the subscales ranged from good to acceptable, implying that the validity and reliability of the instrument should be tested further. However, both instruments (the NOT and the NAQ) are commonly used in nursing research to investigate the perceptions of nursing students.

CONCLUSIONS

With this study we aimed to gain insight into issues related to nursing students' orientation and attitudes towards nursing, to enable us to derive tools to achieve desired or even necessary changes in education and the curriculum. The students' agreement with statements related to nursing expertise and nursing agency, such as mastering knowledge and its application in practice, are in line with the professional value, roles, nursing practice and clinical decision-making competence categories of the Bologna agreement. This could indicate that the perceptions of this cohort of students of these concepts are very positive and professional. A positive attitude is a prerequisite for effective learning. Professional orientation has also been linked to the students' study performance, learning motivation and satisfaction (Vanhanen and Janhonen, 2000a, 2000b). The importance of preconceptions in the context of learning a profession should not be underestimated. Understanding nursing students' orientations and attitudes toward nursing offers educators the opportunity to prepare them better for their future profession.

RECOMMENDATIONS

Experience in a healthcare setting influences students' career decision-making, and has been found to be one of the predictors of positive orientation and attitudes towards nursing. Therefore, it is imperative that students are provided with opportunities to interact with professional nurses at an early stage in their programme. Preliminary vocational training, indicating that nursing is the student's first-choice and wanting to make a career in nursing also predict positive orientation and attitudes towards nursing. This could be important in recruitment and selection interviews with new students to understand early commitment to nursing. A strong orientation and attitude towards nursing, combined with personal interest, could provide strong motivation for remaining in a programme and thus reduce student dropout in the early years of nursing training. More longitudinal research is required to investigate students' changing perceptions of nursing, linked to decisions to remain in or withdraw from nursing programmes.

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4 CHAPTER

Nursing students' changing orientation and attitudes towards nursing during their education

A two-year longitudinal study

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ABSTRACT

Background
Previous studies have shown that nursing students' perceptions of nursing change over time. Little research has been undertaken in the Netherlands of students entering nursing programmes and of how they progress.

Objectives
The aims of this study were to explore whether nursing students' orientation and attitudes towards nursing changed over time, when these changes occurred, and what factors influenced the changes. We also aimed to identify the factors which prompted them to consider leaving their programmes, and what factors affected their motivation to stay.

Design
The study used a longitudinal quantitative design.

Participants
Questionnaires were administered to all students enrolled in a Bachelor's of nursing programme at four nursing universities of applied sciences in the Netherlands (n=1414). The data for this study were collected during the first two years of the programme, from September 2011 to June 2013. A total of 123 respondents completed the survey each year and this group was used to examine changes over time.

Methods
At four time intervals respondents completed a survey consisting of 1) the Nursing Orientation Tool, 2) the Nursing Attitude Questionnaire and 3) background characteristics. Non-parametric tests were used to explore changes in factor scores over time.

Results
The results showed an improvement in the students' orientation and attitudes towards knowledge, skills and the professional roles of nurses, while empathic behaviour decreased over time. Although the changes showed non-linear patterns over time, the results showed clear effects between the different time points. The reasons for attrition (24%) proved to be related both to problems with the educational programme and to personal problems. An important motivator for students to stay in the course was their passionate desire to become nurses, suggesting that the positive aspects of a nursing career dominated the problems they encountered.

Conclusions
Tutors and mentors should pay more attention to the individual perceptions and problems of first and second-year students, both in the classroom and during clinical placements. Knowledge of the students' perceptions from the very beginning could be vital to study success.

INTRODUCTION

Several studies have explored students' reasons for becoming nurses. Both intrinsic factors, such as an altruistic motivation to help other people and a personal interest in healthcare (Halperin & Mashiach-Eizenberg, 2013; Jirwe & Rudman, 2012; Rognstad, 2002), and extrinsic factors, including job security, social status, employment opportunities and the ability to enter tertiary education, appear to influence career choice significantly (Mooney, Glacken & O'Brien, 2008; McLaughlin, Moutray & Moore, 2010; Wilkes, Cowin & Johnson, 2015). Moreover, past experiences as patients or with the hospitalization of loved ones, and prior health work experience were motivating factors which made students decide to become nurses (Day, Field, Campbell & Reutter, 2005; Larsen, McGill & Palmer, 2003). Students choose nursing for altruistic and professional reasons, where they see nursing as a profession focused on saving lives and improving healthcare through professional knowledge, which requires expertise and exercising responsibility (Halperin & Mashiach-Eizenberg, 2013; Manninen, 1998). With regard to professionalism, previous studies showed that the perceptions of nursing students changed as they progressed in their educational programmes, and moved from having a lay image to a professional image of nursing (Day et al., 2005; Karaoz, 2003). They revealed less idealistic views of nursing in terms of caring and helping people, and they spoke of nursing in more professional terms as they progressed in their programmes (Bang et al., 2011; Bolan & Grainger, 2009; Sand-Jecklin & Schaffer, 2006). During their educational programmes, students' perceptions of caring changed and they developed a stronger professional self-concept, including satisfaction, skill, leadership, flexibility, communication and the ability to cope with the role of being a nurse (Mackintosh, 2006; Watson, Deary & Lea, 1999a; 1999b). The students who participated in the study by Safadi, Saleh, Nassar, Amre and Froelicher (2011) started their programmes with traditional altruistic views, but they developed more biomedical, technological views during their education.

Nursing students' conceptions of nursing are largely based on discussions and dialogues between students and teachers at school, and on real observations made in clinical settings (Grainger & Bolan, 2006; Manninen, 1998; Sand-Jecklin & Schaffer, 2006). Students with experience in clinical settings were more focused on aspects of the professional nursing role (Cowin & Johnson, 2011; Safadi et al., 2011). The study by Day et al. (2005) and Sand-Jecklin and Schaffer (2006) showed that students' perceptions of nursing changed as a result of classroom experiences. Interaction with teachers and other students made students realize that nursing was an academic profession. Education programmes not only provide students with new knowledge and skills, but also with changing views on clinical practice, nursing roles and the professional values of nursing.

Healthcare education programmes have recently undergone a thorough change as a result of which the nursing workforce has transformed into a highly educated profession. Radical change in healthcare education took off in the Netherlands when the Bologna agreement was concluded in 2002. The Bachelor's-Master's structure in higher education, including vocational education, was introduced. Nursing students were confronted by a profound change from vocational training to higher education due to the Bologna process. It seems plausible that this change to a higher educational level resulted in

more academic requirements, which may have an impact on preliminary withdrawal from the course by students who are more practically minded. It could be suggested that their focus might be less on the professional values, nursing roles, nursing practice and clinical decision-making that are some of the competence categories affected by the Bologna agreement (Salminen et al., 2010).

Nowadays, the Bachelor of Nursing in the Netherlands is a four-year programme. In the first year, the students gather theoretical knowledge, practical work and communication skills. In the second year, they learn to work in more complex care situations and they complete a clinical placement of 10-20 weeks. The third year consists of a 20 week clinical placement and choosing a specialist nursing area for their final year. The fourth and final year focusses on working and doing research in clinical practice. The aforementioned change in the educational programme may have influenced students' commitment to their studies and to their future profession. This is an important issue, as commitment reflects an individual's desire to be part of a profession, and is a prerequisite for retention and/or attrition. Clements, Kinman, Leggetter and Teoh (2016) explored the links between commitment and attrition, and the results of their study showed that students considered commitment as essential to managing the demands of their educational programme.

High drop-out rates for student nurses, especially in the first two years of their educational programme, is a growing global concern. In the UK the average attrition rates for student nurses range between 20% and 40% (Clements et al., 2016; Willis, 2015). The attrition rates in Canada are 10-40% (Canadian Nurses' Association, 2009;Grainger & Bolan, 2006), and Australia faces attrition rates up to 40% (Dragon, 2009; Health Workforce Australia, 2014). In the Netherlands attrition rates for student nurses range between 20% to 50%, and are nationally more or less the same (the Netherlands Association of Universities of Applied Sciences; in Dutch: Vereniging Hogescholen, 2016). All these figures refer to attrition rates in the first two years until the year before graduation. However, we must be careful when interpreting these figures, as different definitions are used to describe attrition, and an accurate calculation of attrition rates is complex. Figures provided by the participating universities in our study showed that 45% of students left the programme during the first two years of their education. It is therefore interesting to explore the reasons for early withdrawal and the relationship with students' orientation and attitudes towards the nursing profession.

Objectives

The aim of this study was twofold:

1) to explore whether nursing students' orientation and attitudes towards nursing change over time; and when these changes occur

2) to explore whether and why they ever considered withdrawing from their educational programme, and what intrinsic and extrinsic factors affected their motivation to stay

METHODS

Study design and sample

A longitudinal quantitative survey design was used. Respondents were recruited from four nursing universities of applied sciences in the Netherlands Questionnaires were administrated to all students enrolled in the Bachelor's of Nursing programme.

Instruments

Students completed a three-part questionnaire consisting of a) the Nursing Orientation Tool (Vanhanen, Hentinen & Janhonen, 1999), b) the Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998), and c) background information. The Nursing Orientation Tool (NOT) (Vanhanen et al., 1999) is a widely used self-report instrument and consists of 17 items using a five-point Likert scale. The instrument measures students' orientation towards nursing using three subscales: caring, nursing expertise and life orientation. The caring orientation is based on students' meaningful caring and nursing experiences either in their families or in working life ('A nurse must have a powerful need to take care for others'). The nursing expertise orientation is based on professional nursing experience ('I expect this training to give me a possibility to progress in my career'). Life orientation is based on the need to maintain a balance between family life and studies ('I do not want to make decisions in my life that would risk my family being together') (Vanhanen & Janhonen, 2000b, p. 655). The validity and reliability of the tool were tested in previous studies (Janhonen, Vanhanen & Atwood, 2000; Vanhanen & Janhonen, 2000a). The Nursing Attitude Questionnaire (NAQ) was developed by Toth et al. (1998) and is one of the earliest tools for measuring attitudes towards nursing. Attitude towards nursing was defined theoretically 'as the view that persons hold regarding the roles, values, and professional activities of nurses, and the responsibilities nurses have towards society' (Toth et al., 1998). The NAQ consists of a 30-item questionnaire using a five-point Likert scale. The reliability of the NAQ was tested in previous studies (Bolan & Grainger, 2009; Grainger & Bolan, 2006; Toth et al., 1998). However, these studies used the scores across the entire NAQ to compare demographics or interventions, not content areas. No factor analysis was performed to test its construct validity. It is not clear which items contribute to which factor or dimension of the 'attitude towards nursing' concept. To reduce the NAQ items to a smaller number of coherent subscales, we submitted the questionnaire to closer inspection. Twelve items were removed based on open discussions of their intended meaning and group consensus, resulting in eighteen items for inclusion for further analysis. Two core concepts were clearly differentiated: Nursing Agency and Advocacy & Empathy (Ten Hoeve, Castelein, Jansen, Jansen & Roodbol, 2016). We tested the factorial structure of the reduced NAQ, and the results of the Exploratory Factor Analysis and the Confirmatory Factor Analysis showed that the reduced NAQ was suitable for further analyses (Ten Hoeve et al., 2016). A forwards-backwards translation process was performed for both instruments (the NOT and the NAQ) to ensure content and semantic equivalence and applicability to the Dutch cultural context.

The background questions were related to gender, age, past problems with study programmes, preliminary training, living status and nursing experience. Moreover, students were asked whether they chose nursing as their first-choice programme, and whether

they had decided to make a career in nursing. At the end of their second year of their programme, students were also asked whether they had considered withdrawing from the programme, and their reasons for withdrawal. Students who had considered withdrawing but remained were asked what their motivations were for continuing.

Data collection

The data for this study were collected at the beginning of the educational programme (September 2011), after six months' study (March 2012), at the beginning of the second year (October 2012) and at the end of the second year (June 2013), which is halfway through their course. Arrangements were made with the deans and Faculty Boards of each nursing university to permit teachers to use 15 minutes of their class time to distribute and collect the questionnaires.

Data analysis

The continuous variables were non-normally distributed and non-parametric repeated measures tests were therefore used to test students' changing orientation and attitudes towards nursing. Chi-square tests were used to compare the categorical variables, and Mann-Whitney *U* tests captured differences in scores on the NOT and the NAQ between the longitudinal group (n = 123) and the rest of the initial large group (n = 1121) at baseline (T0). A Friedman test was used to test changes in scores on the NOT and the NAQ over time, followed up by post-hoc Wilcoxon Signed Rank Tests to test when significant differences in orientation and attitudes occur. A conventional significance level of $p < 0.05$ was used.

Ethical issues

Permission to execute this study was obtained from the deans and Faculty Boards of each university. Students were informed in the covering letter about the purpose and the confidentiality of the study, that participation was strictly voluntary and that they could withdraw from the study at any moment without consequences.

RESULTS

At T0 (September 2011), a total of 1244 completed questionnaires were returned, a response rate of 88%. However, the follow-up responses were substantially lower, with 583 questionnaires returned at T1 (March 2012), 463 at T2 (September 2012), and 403 at T3 (June 2013). Of the initial 1244 students, 123 completed the survey each time, which also means that they managed to complete the first two years of their programme. This group (n = 123) was used for the further analyses of orientation and attitude changes over time, withdrawal and motivations for remaining in the programme.

Demographics

At baseline, the longitudinal group (n = 123) did not differ from the rest of the initial large group (n = 1121) with regard to background characteristics, except for gender (Table 1). This is also true of the scores on the NOT and NAQ. A Mann-Whitney *U* test revealed no difference between the NOT scores of the longitudinal group (Md = 3.3;

n = 123) and the rest of the initial large group (Md = 3.3; *n* = 1121), *U* = 631185; *z* = -1.53; *p* = .13). Nor were differences found between the NAQ scores of the longitudinal group (Md = 3.9; *n* = 123) and the rest of the initial large group (Md = 3.9; *n* = 1120), *U* = 66935; *z* = -.515; *p* = .61) (Table 1).

Table 1 - Student characteristics at baseline (T0)

	Initial Large Group	Longitudinal group	*P*-value difference
	Mean ± SD, *N* (%) or median [25th; 75th percentile] (*n* = 1121)	Mean ± SD, *N* (%) or median [25th; 75th percentile] (*n* = 123)	
Age	19.92 ± 4.3	19.83 ± 4.8	0.280
Gender (female)	913 (81.4)	110 (89.4)	0.038*
Living independently	324 (28.9)	35 (28.5)	0.986
Preliminary vocational training	230 (20.5)	16 (13.0)	0.062
Nursing experience	564 (50.3)	57 (46.3)	0.459
Nursing as first choice	739 (65.9)	86 (71.1)	0.317
Nursing as future career	901 (80.4)	100 (81.3)	0.892
Problems with study	534 (47.6)	48 (39.0)	0.085
NOT	3 [3;4]	3 [3;3]	0.127
NAQ	4 [4;4]	4 [4;4]	0.606

Abbreviations: NOT: Nursing Orientation Tool; NAQ: Nursing Attitude Questionnaire
**P*-value becomes significant at 0.05.

Changes over time on the NOT and the NAQ.
The results of the Friedman tests revealed a significant change over time in the students' scores on the NOT (except for the Nursing Expertise subscale) and the NAQ. Mean rank scores, standard deviations and significance are reported in Table 2.

Table 2 Students' orientation and attitudes towards nursing over time (N=123)

Scale	T0 *Mean rank (SD)*	T1 *Mean rank (SD)*	T2 *Mean rank (SD)*	T3 *Mean rank (SD)*	*Sig*
NOT	2.33 (0.27)	2.26 (0.27)	2.72 (0.30)	2.69 (0.32)	0.004**
Caring	2.51 (0.47)	2.11 (0.44)	2.78 (0.48)	2.59 (0.52)	0.000**
Nursing Expertise	2.45 (0.46)	2.50 (0.38)	2.59 (0.39)	2.46 (0.53)	0.796
Life Orientation	1.58 (0.63)	2.77 (0.53)	2.88 (0.53)	2.77 (0.70)	0.000**
NAQ	2.36 (0.27)	2.50 (0.29)	2.80 (0.34)	2.35 (0.31)	0.017*
Nursing Agency	2.25 (0.31)	2.38 (0.39)	2.64 (0.37)	2.73 (0.40)	0.009**
Advocacy & Empathy	2.83 (0.43)	2.67 (0.38)	2.91 (0.39)	1.59 (0.35)	0.000**

≠ Friedman test
* p-value becomes significant at 0.05
**p-value becomes significant at 0.01

Nursing Orientation Tool
The results over time on the NOT showed a significant time effect, $X2$ (3, n = 123) = 13.23; $p < 0.01$. Follow-up analyses showed that the scores on the NOT did not change between T0 → T1, z = -0.10; $p > 0.05$; r = -0.00. Between T1 → T2 there was a significant increase, z = -2.71; $p < 0.01$; r = -0.17. Between T2 → T3 the results showed no significant time changes, z = -0.50; $p > 0.05$; r = -0.03 (Figure 1).

Caring
The results over time on the Caring subscale indicated a significant effect, $X2$ (3, n = 123) = 19.68; $p < 0.001$. Follow-up analyses showed a significant decrease T0 → T1, z = -2.33; $p < 0.05$; r = 0.15 and a significant increase T1 → T2, z = -3.62; $p < 0.001$; r = 0.23. From T2 → T3 the scores decreased again, but not significantly, z = -0.82; $p > 0.05$; r = 0.05 (Figure 1).

Nursing Expertise
The scores on the Nursing Expertise subscale showed no significant time effect, $X2$ (3, n = 123) = 1.021; $p > 0.05$ (Figure 1).

Life Orientation
The scores on the Life Orientation subscale indicated a significant effect over time, $X2$ (3, n = 123) = 91.75; $p < 0.001$. Follow-up analyses showed a significant increase T0 → T1, z = -6.63; $p < 0.001$; r = 0.42. The scores showed a continuous increase T1 → T2, z = -0.79; $p > 0.05$; r = 0.07; and T2 → T3, z = -0.12; $p > 0.05$; r = 0.00, but these changes were not significant (Figure 1).

Nursing Attitude Questionnaire

The results over time on the total NAQ showed a significant time effect, $X2$ (3, n = 123) = 10.20; $p < 0.05$. Follow-up analyses did not show significant changes T0 → T1, z = -1.07; $p > 0.05$; r = 0.06, nor T1 → T2, z = 1.59; $p > 0.05$; r = 0.10. The difference in scores T2 → T3 indicated a significant decrease, z = -0.2.40; $p < 0.05$; r = 0.15 (Figure 2).

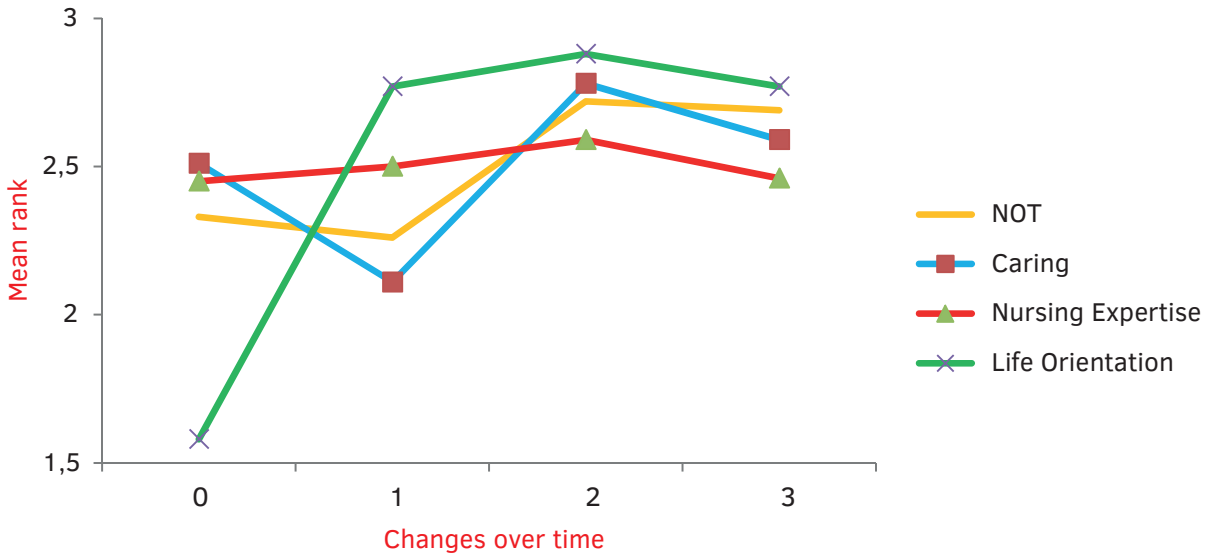

Figure 1 - Changes over time NOT and subscales in nursing students (first two years of study)

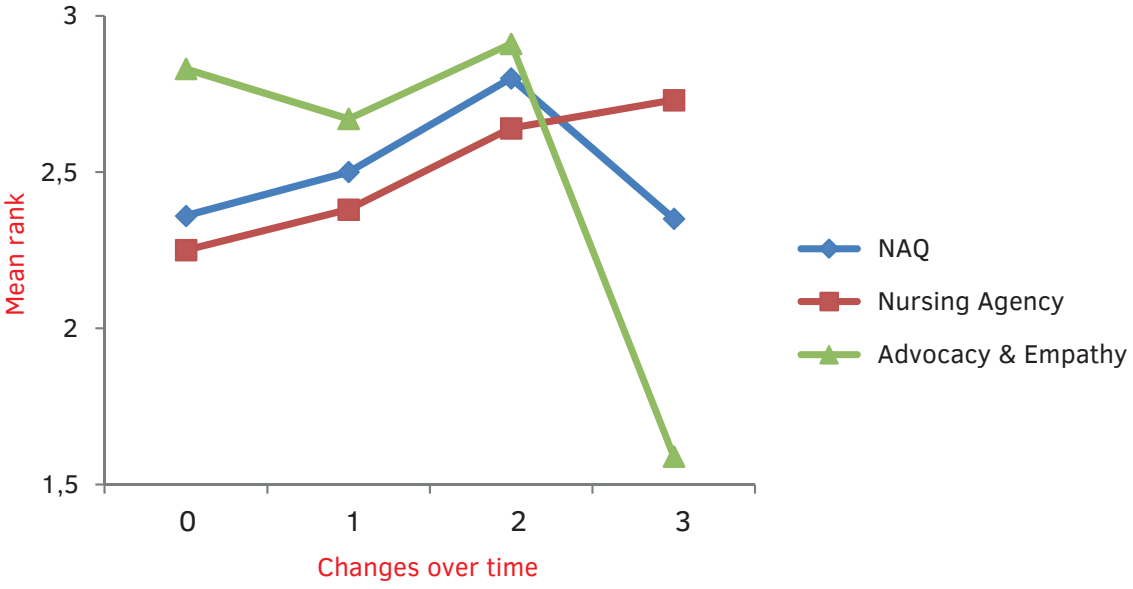

Figure 2 - Changes over time NAQ and subscales in nursing students (first two years of study)

Nursing Agency
The results over time on the Nursing Agency subscale indicated a significant time effect, $X2$ (3, n = 123) = 11.52; $p < 0.01$. Follow-up analyses showed a significant increase T0 → T1, z = -2.09; $p < 0.05$; r = 0.13. Scores T1 → T2 remained unchanged, z = -0.64; $p > 0.05$; r = 0.04, and increased T2 → T3, but not significantly, z = -1.29; $p > 0.05$; r = 0.08 (Figure 2).

Advocacy & Empathy
The results over time on the Advocacy & Empathy subscale showed a significant time effect, $X2$ (3, n = 123) = 97.04; $p < 0.001$. Follow-up analyses did not show significant changes T0 → T1, z = -0.88; $p > 0.05$; r = 0.06; or T1 → T2, z = -1.47; $p > 0.05$; r = 0.09. The changes from T2 → T3 showed a significant decrease, z = -7.39; $p < 0.001$; r = 0.47 (Figure 2).

Motivations for Withdrawal and Continuation
At the end of the second year of their programme, students were asked whether they had ever considered withdrawing from the programme, and if so what their reasons for withdrawal were. The results showed that nearly a quarter of the students in the longitudinal group (n = 123) had considered withdrawing from their educational program during their first 2 years (24%). The majority of these students (n = 30) mentioned reasons related to the educational programme (80%), such as the academic level of education being too high, the academic level of education being too low, learning too much theory, and unsatisfying clinical placements. They also considered leaving for personal reasons (60%) such as illness, financial problems and lack of motivation to study. At the end of the second year the number of students who considered stopping decreased to 3%. These students (n = 4) all mentioned experiencing problems related to the programme, such as the academic level of education being too low, learning too much theory and the clinical placement too difficult. Only one student mentioned personal problems, such as a lack of motivation to study and incompatibility with family commitments.

Students who had considered withdrawal but nevertheless remained were asked what their motivations were to continue their programme. They all mentioned (n = 30) intrinsic motivations to stay in the programme (100%), such as wanting a nursing diploma at all costs, really wanting to become nursing professionals and perseverance. Extrinsic factors were mentioned by 33% of these students (n = 10), such as support from family and friends, and support from tutors and school staff.

DISCUSSION

Changes in Orientation and Attitudes towards Nursing

The first aim of this study was to examine changes in orientation and attitudes of nursing students towards their future profession from the beginning of their educational programmes to the end of their second year. The results of the analyses showed significant changes over time in students' orientations related to the items of the total NOT and of its Caring and Life Orientation subscales; the scores on the items in the Nursing Expertise subscale showed no time effect. Students' attitudes towards the items of the total NAQ and the items of the Nursing Agency and Advocacy & Empathy subscales also showed significant changes over time. However, the changes over time showed non-linear patterns. The patterns fluctuated over time for both orientation and attitude, which is consistent with the study by Cowin and Johnson (2015). The results of their longitudinal study on the qualities of nurses also showed great fluctuations in changes over a period of four years. In our study the patterns showed an increase in both orientation and attitudes between T1 (at six months) and T2 (at twelve months). This implies that the perceptions of nursing in this cohort of nursing students became more positive after they completed their first year of study. However, at the end of year two their evaluation of most of the scale and subscale items decreased again.

The results of this study showed that orientation and attitudes towards items related to knowledge, skills and the professional roles of nurses, such as 'nurses participate in the development of healthcare policies', and 'nurses integrate health teaching into their practice', showed significant increases. The orientations and attitudes towards items related to empathic behaviour, such as 'nurses in general are kind, compassionate human beings', and 'nurses value time at the bedside caring for patients' showed significant decreases. Exposure to the process of nurse education seemed to shift students' focus, especially at the end of the second year of education, once all students had completed their first internship in clinical practice. This is in line with the results of previous studies which showed that classroom and clinical experiences enhance the professional features of nursing and ensured that students recognized more fundamentally what nursing really entails (Cowin & Johnson, 2015; Day et al., 2005; Tseng, Wang & Weng, 2013). The first-year students in the study by Grainger and Bolan (2006) saw nurses as nice people who feel good about what they are doing, while fourth-year students were more focused on the professional roles of nurses.

With regard to caring, previous studies found that the desire to work with people, human wellbeing and health promotion were seen as important aspects of nursing by students at every phase of education (Karaoz, 2003; Miers, Rickaby & Pollard, 2007; Vanhanen & Janhonen, 2000b). This is in accordance with the findings of our study, which showed that the scores on the caring subscale at the beginning of education and at the end of year two remain quite stable, despite some fluctuations over time. Students' perceptions of items related to life orientation showed an increase from the beginning to the end of year two, with the largest change being between T0 (at the beginning of the programme) and T1 (after six months). Students were significantly more oriented towards finding a balance between their studies and private lives as they progressed in their programmes. Vanhanen and Janhonen (2000a) found that life-oriented students

were the ones who intended to stay in nursing.

Motivations for Withdrawal and Continuation

In our cohort of students, the dropout rate during the first two years was extremely high (45%). Our results showed that even in the completers group, 24% had considered withdrawing during the first two years of their studies. However, intrinsic and extrinsic motivations were strong enough to cause them to decide to stay. At the end of year two, the number of students who considered leaving dropped to 3%, indicating that the first 12 to 18 months are decisive for whether students complete their programmes. Reasons for attrition were related to both the educational programme and to personal problems. This is in accordance with the findings of Hamshire, Wilgoss and Wibberley (2013b) and Vanhanen and Janhonen (2000b), who found that students consider leaving because of motivational problems, personal problems and dissatisfaction with the curriculum. Our findings showed that unsatisfying clinical placements were identified as reasons for withdrawing. Research from other countries suggests that students do not always feel supported by mentors who demonstrate lack of time to support them (Brodie et al., 2004; Hamshire et al., 2013a; Last & Fulbrook, 2003). Additional qualitative research could shed more light on this important issue.

Students' motivations for completing their programme were influenced by both intrinsic and extrinsic factors. At baseline, students in the longitudinal group (n = 123) more often mentioned that nursing was their first choice programme than students in the rest of the initial large group (n = 1121). This is consistent with the findings of Safadi et al. (2011) and Salamonson, Everett, Cooper and Lombardo (2014) that students who selected nursing as their first choice were nearly twice as likely to complete their programme compared to those who did not. Our study showed that an important intrinsic motivation for students to remain in their programmes was their passionate desire to become nurses, suggesting that the desirable elements of a nursing career outweighed the problems they encountered. This desire can manifest itself at a very young age, and for some students nursing had always been a career goal (Day et al., 2005; Stomberg & Nilsson, 2010). Support from family and friends, and support from tutors and school staff proved to be extrinsic factors which really influenced their decision to pursue nursing. Students in the study by Bowden (2008) and Cameron, Roxburgh, Taylor and Lauder (2011) stated that family members and friends who were also nurses offered encouragement and practical support, enabling them to cope with the demands of the programme. Support from personal tutors could help students deal with academic pressures. These findings may have implications for Schools of Nursing with regard to the educational level of beginning students, the academic level of teachers, the support from mentors, and the tracking of students through their programme. Given the attrition rates, since 2012/2013 at several Universities of Applied Sciences in the Netherlands, teachers have a short appraisal (10 min) with students before admission, focusing on their conceptualization of the nursing profession and their motivations to choosing a nursing career. Moreover, all teachers in the Bachelor programme must be highly qualified with regard to education (at least a Master's Degree) combined with accurate experience in clinical practice. These first cautious changes may be of great importance to increase retention in nursing students.

Study Strengths and Limitations

The strength of this longitudinal study is that we performed our research at four universities of applied sciences in the Netherlands. The data were also collected at four time points within a two-year period from the same student cohort. A limitation of this study is that 123 out of the 1244 students completed the survey at all four time points, which could suggest that their perceptions are not representative of the whole study group. However, comparison between the characteristics of this longitudinal group and the rest of the large initial group at baseline (T0) showed no significant differences, except for gender. Comparisons between the scores on the NOT and the NAQ at baseline also showed no differences between the two groups. This could imply that the current results may hold true for the whole study group.

CONCLUSIONS

The aim of this study was to gain insight into the changing orientations and attitudes of nursing students towards nursing and their motives for completing their educational programmes. The results show that in the longitudinal group (n = 123), student perceptions changed from being idealistic and empathic to being more professional with a focus on knowledge, skills and role development. The majority of students begin their nursing programmes with altruistic views on nursing and they may run the risk of being disappointed and discouraged by the high academic demands placed on them during education and clinical placements. Students' grades at the time of their second year might have an impact on their attitudes towards nursing. It is not entirely inconceivable that their ability to adopt altruistic attitudes towards caring for people is influenced by low self-confidence in clinical practice as a result of academic failure. Additional qualitative research may give more insight into the interaction between students' academic performance and their attitudes towards the caring aspect of nursing.

The students' changing perceptions of nursing is an important issue, as they may be predictive of withdrawal from the programme. Student attrition is a major problem globally. In our cohort of students, the dropout rate during the first two years of education was extremely high (45%). The reasons for attrition proved to be complex and both institution and student-centred. This study showed that the first two years of education are decisive for students' completion of their programmes. It is therefore essential that tutors and mentors pay more attention to the individual perceptions and problems of first and second-year students both in the classroom and during clinical placements. Knowledge of the perceptions of students from the very beginning may be vital to study success. To solve student attrition it is of great importance to closely monitor students and guide them during their educational programme, particularly in the first two years.

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CHAPTER 5

Dreams and disappointments regarding nursing: Student nurses' reasons for attrition and retention

A qualitative study design

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ABSTRACT

Background
In the Netherlands, hundreds of students register annually for a nursing programme, but not all of these students manage to complete their training.

Objectives
The main aim of this study was to examine which factors affect student nurses' decision to leave or complete their programme.

Theoretical framework
The study used an exploratory descriptive design, employing a qualitative phenomenological approach.

Sample
Student nurses (n = 17) at the beginning of their third year of the four-year Bachelor's programme.

Data collection
Data were collected at four Universities of Applied Sciences in the Netherlands, from December 2013 to January 2014. Semi-structured interviews were used to collect the data, using an interview guide.

Results
The main reasons for students to become nurses were the caring aspect, personal experiences with healthcare, role models in their immediate environment, and job opportunities. They had both altruistic and professional perceptions of their profession. Reasons for attrition were strongly related to the training programme and to their clinical placements, in particular the perceived lack of support from mentors and team. Feelings of being welcomed and working in a nice team proved to be more important reasons for completing the programme than the specific clinical field.

Conclusions
Student nurses started their studies with many dreams, such as caring for people and having the opportunity to deliver excellent nursing care. When their expectations were not met, their dreams became disappointments which caused them to consider stopping and even to leave (attrition). The role of lecturers and mentors seems invaluable in protecting and guiding students through their programme and placements. Optimal cooperation between lecturers and mentors is of paramount importance to retain student nurses in their training programmes.

INTRODUCTION

Student attrition from nursing programmes has been a long-standing problem and is a major issue globally (Cameron, Roxburgh, Taylor & Lauder, 2011a; Glosssop, 2001; Hamshire, Willgoss & Wibberly, 2013). Glossop defines attrition as 'the difference between the numbers of students beginning each cohort and the numbers who completed that cohort' (Glossop, 2002, p. 377). Attrition from nursing programmes is not only a threat to the future nursing workforce, but it is also costly. The literature suggests that there is often a discrepancy between the expectations that beginner nursing students have of their training programmes and the nursing profession, and what they actually encounter during their studies and practice (Last & Fulbrook, 2003; O'Donnel, 2011). This difference between expectation and practice is often at the root of students' premature attrition. The social context of nursing students consists mainly of their learning and work environment. Interaction with peers and mentors, both at school and in practice, forms an essential part of their professional development (Bowden, 2008; Williams, 2010). These interactions can affect their decision to leave or stay in their programmes. Previous studies showed that nursing students demonstrate a wide range of pre-existing perceptions of nursing. Despite this variety, most students consider nurses to have caring and compassionate qualities (Mooney, Glacken & O'Brien, 2008; Newton, Kelly, Kremser, Jolly & Billett, 2009). In addition to the caring aspect, students choose nursing for various other reasons, such as the strong desire to become a nurse, and job possibilities (McLaughlin, Moutray & Moore, 2010; Wilkes, Cowin & Johnson, 2015).

There is a relatively high dropout rate in degree programmes which are chosen because of career, status or salary expectations. Failure is much less likely among students who were intrinsically motivated and chose their programme because of its content. Intrinsic motivation appears to play a considerable role in study success. Students with high intrinsic motivation perform better and respond better to changes. Ryan & Deci define intrinsic motivation as 'the doing of an activity for its inherent satisfactions rather than for some separable consequence' (Ryan & Deci, 2000, p. 56). The social contexts in which people are embedded may influence positive motivation and enhance performance and well-being. When intrinsic and extrinsic motivations are not satisfied in the learning and/or work environment, this may lead to disappointment, dissatisfaction, and finally to voluntary withdrawal.

In the Netherlands, hundreds of students register annually for a nursing programme at universities of applied sciences. Unfortunately, not all of these students manage to complete their programme. University reports indicate that attrition is most common during the first or second year of their studies (the Netherlands Association of Universities of Applied Sciences; Vereniging Hogescholen, 2016). There is little robust information about why Dutch nursing students consider leaving their pre-registration nursing programmes. The purpose of this study is to explore, from a qualitative perspective, the intrinsic and extrinsic factors which may affect nursing students' decisions to leave or complete their course.

Objectives
The aim of this study was:

1) to determine why students choose a career in nursing

2) to improve our understanding of student nurses' conceptualization of nursing

3) to examine both intrinsic and extrinsic factors that influence their decision to leave or complete their programme

METHODS

Research Team and Reflexivity
It is vital that interviewers are able to understand the participants' views and terminology (Pope & Mays, 2006). Therefore, four student nurses, in pairs of two, performed the interviews as part of their graduation project in a Bachelor's programme in nursing. Prior to conducting the interviews, they received interview training from an expert, and after high consensus rates of the interviews they were allowed to perform the interviews in pairs of two. Two researchers continuously supervised the interview process, and students and supervising researchers did not have a previous relationship with the participant prior to study commencement.

Theoretical Framework
The study used an exploratory descriptive design, employing a qualitative approach. Semi-structured interviews were conducted and the phenomenological method was used to analyze the participants' experience of completing a Bachelor's of nursing programme. Phenomenology tends to look at data thematically to extract essences and essentials of participant meanings (Miles, Huberman & Saldaña, 2014, p. 8).

Sampling
This study follows up an earlier survey about nursing students' orientation and attitudes towards nursing (Ten Hoeve, Castelein, Jansen, Jansen & Roodbol, 2016a, 2016b). The survey took place at four Universities of Applied Sciences in the north, the south and the center of the Netherlands, in order to ensure a representative geographical and demographical distribution. The students who participated in this survey were also asked, by means of closed questions, whether they ever considered withdrawing from the programme, and their reasons for withdrawal. Subsequently, students who had considered withdrawing but remained were asked what their motivations were for continuing. In order to gain more insight into these relevant topics, the researchers asked the Deans and Faculty Boards of the four universities to give their permission for this qualitative follow-up study. After permission was obtained, the researchers provided the schools with the identification numbers of students they would like to interview. A purposive sampling method was used based on the results of the quantitative survey: 1. students who never considered stopping, 2. students who considered stopping, but continued and 3. students who stopped. The Deans approached the students by e-mail with the invitation to participate. Initially, twelve students responded positively. In order to

obtain saturation we asked the Deans to approach the students a second time. Finally, we included seventeen students after saturation was reached. Of the participants (n = 17), eight students never considered stopping, seven considered stopping, but continued, and two withdrew from their programme.

Setting

With participants who expressed an interest in and willingness to participate, appointments for the interviews were made based on their availability. Interviews were conducted at a time and place convenient to the participants. During each interview, only the participant and two interviewers were present.

Data Collection

Data were collected from December 2013 – January 2014, when participants were in their third year of the four-year Bachelor's programme. Semi-structured interviews were used to collect the data, using an interview guide (Appendix A). The interviews were semi-structured, because each participant was asked a set of similar, non-identical questions, depending on the group they belonged to. Especially, since the interviews were conducted by students in pairs of two, an interview guide and instructions on how to use it, was essential. The topics for this guide were derived from the quantitative survey and they were used to gain more insight into nursing students' motivation to choose a career in nursing, their views on training and clinical placements, and their perceptions of nursing. At the beginning of the interview the participants signed a consent form, after being informed about the purpose and confidentiality of the study, and that participation was on a voluntary basis. All interviews were audiotaped, no field notes were made during or after the interviews. The duration of the interviews averaged 45 minutes and data saturation was discussed after each interview. The audiotaped interviews were transcribed verbatim and anonymity was guaranteed by removing the association between the identifying dataset and the data subjects.

Data Analysis

The transcripts were cross-checked for quality by the researchers before they were imported to Atlas.ti software programme (Friese, 2014). Thematic analysis was used to analyze the data. Recurrent phrases were coded and codes with similar elements were merged to form into subthemes. Both thematic coding (topics from the interview guide) and open coding (themes derived from the data) were used. The researchers then discussed and compared their generated codes and subthemes. Subthemes were further clustered for areas of commonality to form into themes.

Analysis of Differences Between Groups

To explore if there were differences between the subgroups with respect to their reasons for withdrawing, we created a code family comprising a. the '#fam: considered stopping', b. '#fam: never considered stopping' and c. '#fam: stopped' codes, and all the codes with negative experiences related to education, clinical placements and team. After that we queried the data to explore whether there were differences between the subgroups in terms of motivation to continue their programme. We created a code family comprising the '#fam: considered stopping', '#fam: never considered stopping' and '#fam: stopped' codes, and all 'motivations to continue' codes and all codes related to

positive experiences with education, clinical placements and team. The content of the quotations was read, interpreted and compared.

Trustworthiness

To guarantee the rigor and trustworthiness, this study adhered to the criteria proposed by Lincoln and Guba (1985). Data credibility was established by selecting an appropriate method for the data collection (semi-structured interview guide), and by the researchers who conducted the interviews being familiar with the context of the nurses' practice environment. Dependability was ensured by describing the data analysis in detail and providing direct citations to reveal the basis from which the analysis was conducted. The researchers coded the interviews independently from each other. The conformability and consistency of the analysis were established by holding meetings to discuss preliminary findings, where emerging codes and themes were discussed until a consensus was reached. This procedure was maintained during the entire coding process. To enhance the transferability of the findings, a description of the context, selection of participants, data collection and process of analysis is provided.

RESULTS

Demographics

Participating students (n = 17) ranged in age from 19 to 33 years and were mostly female (n = 15).

Themes and subthemes

Three major themes emerged from the data: (1) reasons for choosing a nursing career, (2) conceptualization of nursing, and (3) reasons for attrition and retention (Appendix B). Figure 1 provides a network view of the themes and the different types of relationships between these themes and sub-themes. This network view is also helpful in visualizing how the various issues regarding attrition and retention are related.

Reasons for Choosing a Nursing Career

Although nursing was not everybody's first choice of study, most participants had sought a career that suited them involving caring and having contact with people. For example, 'You must feel the need to help people … you must feel empathic…. if you do not have that quality, nursing will not suit you' (student 5). Most students mentioned their passion for the profession, they experienced nursing as a profession which really suited them. 'Then I found out that nursing was the real profession for me. I also told my family and they said: 'Why didn't you think of this before? It suits you so well' (student 1). Nursing was also perceived as a career which offered job security, job opportunities and a variety of jobs. One participant said, 'You are sure that you can get a job with this training; nursing offers you a lot of job opportunities' (student 3). Some students chose nursing because of their own experience as patients. They referred to the personal experiences which led them down this route. For example, 'I myself have a lot of physical problems, so I see people work in the hospital quite often. So I do know what it means to be a nurse' (student 14). Direct experience of the nursing profession from having family members or friends who were nurses was also perceived to be a great source of both

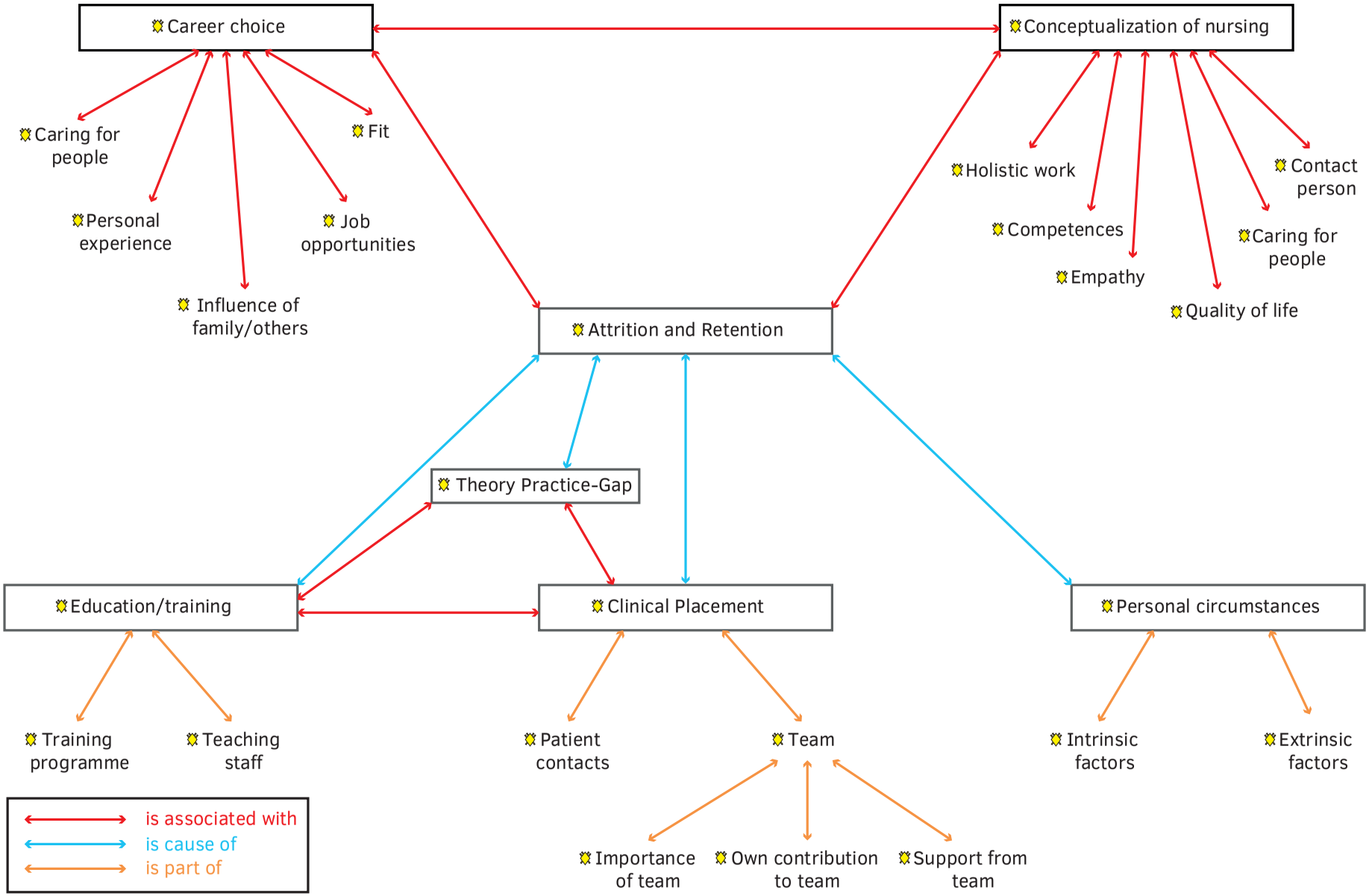

Figure 1 - Network view reasons for attrition and retention

emotional and instrumental influence. ‘My aunt is a nurse and two of my three cousins are studying nursing. It really runs in the family’ (student 4).

Conceptualization of Nursing

For the majority of students, being able to really satisfy the needs of their patients was of paramount importance. To make someone’s day and have time for patients was considered the real essence of nursing. ‘It’s a bit of a cliché, but I think that you have to find it essential to be with patients at critical moments. I think that’s a very important aspect of your profession as a nurse’ (student 10). Many participants described nursing as a profession which integrates physical, psychological and emotional care. They feel the need to deliver complete care to their patients, from a holistic point of view, ‘The nurse cares for the physical as well as the mental problems, the person as a whole. That is the crux of nursing’ (student 7). Showing empathy and feeling emotionally involved with patients were also considered basic components of nursing care. One of the participants expressed his feelings this way, ‘It’s all about your relationship with the patient, it’s not about yourself. In one way or another, it suits me very well to put myself in my patients’ shoes and be their advocate’ (student 10). Most of the participants had the ambition to offer an optimal quality of care and quality of life. For example, ‘Taking care of people and offering the best possible quality of life… this is and remains the primary goal’ (student 13). According to the participants, nurses must also have the competences to practise effectively. Competences were associated with professional values, nursing practice and the ability to use their nursing skills appropriately. ‘I really think that critical thinking and reflection are important. And putting patients at the heart of everything you do’ (student 2).

Reasons for Attrition

Students who considered stopping attributed this to problems with the training programme, the theory-practice gap and clinical placements. Personal problems were also influential, such as feeling uncomfortable when working in a group or uncertainty about their own performance.

Training Programme

Feelings of dissatisfaction with the training programme were often associated with the organization or the quality of the programme, with the competence of teaching staff and a lack of support from them. For example, ‘When I said that I thought they should pay more attention to practical nursing skills, I got the third degree from one lecturer’ (student 9).

Theory-Practice Gap

The theory-practice gap was a reason for students to consider leaving. They felt stressed and unprepared in dealing with professional demands. ‘Once you get your degree it comes down to what you can do. If I pass my exams, I will graduate. But there are many nursing tasks that I am not yet able to do’ (student 10).

Clinical Placement
Students mentioned poor quality placements and a lack of emotional and practical support from their colleagues and mentors. They also expressed feelings of not being welcomed as part of the team. 'They really had no idea why I was there. They thought that I was a nursing assistant, they did not know that I was a Bachelor's student' (student 14).

Personal Circumstances
Some students experienced serious personal problems, such as problems achieving their learning goals, problems working in a team and being uncertain about their own knowledge and abilities. 'It's because of my personality. I worked on a ward with many colleagues and I clammed up completely. I enjoyed the work very much, but I like working alone and I found all the colleagues quite annoying' (student 4).

Motivations to Continue
The reasons for continuing in spite of these difficulties were positive experiences with the training programme and clinical placements. Intrinsic and extrinsic personal factors were also drivers for staying.

Training Programme
Satisfaction with the organization of the training programme and with the competence of teaching staff. 'I have certainly learned what it means to work in healthcare. I am happy that I have gained more insight. When I finally get my degree, I can apply this knowledge in practice' (student 10).

Clinical Placement
The participants mentioned that positive experiences with clinical placements had made them decide to stay. The importance of working in a team and the support from colleagues encouraged them to stay. Moreover, being welcomed in a team and working in a nice team proved to be more important than the patient group with whom they worked.'I work in a great team and if you work in a really nice team, the patient group is not very important. It really does not matter where your clinical placement is' (student 2).

Personal Circumstances
Intrinsic factors, such as perseverance and the drive to become a nurse, were keys to persistence for some students. 'I considered stopping school, but then I thought, I'm just not going to give up. If I had stopped at that moment, I really would not have known what else to do, because I really want to become a nurse' (student 1).

Extrinsic factors such as strategic choices and the influence of family and friends were also mentioned as important motivating factors, 'I only have three weeks of my clinical placement to go before graduation. So I'm not going to stop now, because I will have a degree in my pocket and a college degree is always great' (student 16).

Differences Between Groups

Regarding attrition, students who never considered stopping were far less negative about their training programme, clinical placements and the team than the students in the other two subgroups. When they expressed negative experiences with the training programme it always had to do with the balance between the amount of theory and the teaching of practical skills. 'In the first year we got a lot of theory. I would have liked there to have been a clinical placement of about a month or so, just to experience how it is in practice' (student 17). All students who considered stopping, expressed negative experiences with the training programme, especially related to the content of the programme. It had to do with the difficulty or the quality of the programme, and the organization of classes and clinical placements. They were also negative about the quality of and support from the teaching staff. For example, 'I really disliked the organisation of the training programme and I missed a lot of things. I considered stopping because of the lack of structure. Moreover, some lecturers contradict each other' (student 14). Negative experiences with clinical placements were mostly related to not being able to complete learning goals or assignments, the feeling of not being welcomed in a team, and inadequate communication with staff and collaboration in teams. 'This is not a very nice team to work with, I think they really do not like students at all' (student 6). These problems were not mentioned by students who never considered stopping. The two students who did stop mentioned problems with the academic demands, in particular problems writing reports and a lack of support from school and mentors. 'The emphasis is on writing reports. You must be able to write down all your actions. Even if you are a great student nurse, if you cannot write reports, you are not accepted' (student 5). Regarding the theory-practice gap all students, except those who stopped, mentioned a lack of practical skills. Table 1 shows the query results. The numbers in the table refer to the number of quotations, not the number of respondents.

Regarding motivations for continuing, the students who stopped had fewer positive experiences with their clinical placements and the team. Positive experiences with clinical placements were only due to patient contacts, not to colleagues. 'I really enjoyed working with patients, but the contact with my colleagues was not very pleasant. I derived pleasure in my work only from the people I cared for' (student 5). Regarding the team students mentioned positive experiences with support from their colleagues, and the importance of working together to deliver good quality care. Regarding intrinsic motivation students who considered stopping mentioned that they just wanted to persevere in order to get their degree, and that they really wanted to become nurses. 'I really want a nursing career. After having dropped out for a while, I became so much more motivated to get my degree'(student 11). Influence of family and other students, and strategic choices were important extrinsic motivators for continuing. 'Classmates and friends said: ''You just have to go for it, because this is what you really want''. So that really motivated me' (student 6). One of the students who never considered stopping motivated her classmates to persevere in getting their degrees. Most of these students wanted to become nurses motivated by their desire to care for people and to mean something for their patients. 'The idea of being able to mean something for people professionally attracted me greatly' (student 10). Table 2 shows the query results. The numbers in the table refer to the number of quotations, not the number of respondents.

Table 1 - Code co-occurrences between subgroups regarding reasons for attrition

	#fam: considered stopping (*n*=7)	#fam: never considered (*n*=8)	#fam: stopped (*n*=2)
Education/training: negative on training	25	8	4
Education/training: negative on teaching staff	8	1	0
Clinical placement: negative on placement	15	1	11
Team: negative on team	1	0	5
Theory-practice gap	15	8	0

Table 2 - Code co-occurrences between subgroups regarding motivations to continue

	#fam: considered stopping (*n*=7)	#fam: never considered (*n*=8)	#fam: stopped (*n*=2)
Education/training: positive on training	5	12	2
Education/training: positive on teaching staff	2	2	2
Clinical placement: positive on placement	5	4	2
Team: positive on team	9	8	0
Intrinsic motivation: perseverance	3	2	0
Intrinsic motivation: wanting to become a nurse	7	11	0
Extrinsic motivation: influence of family/others	3	1	0
Extrinsic motivation: strategic choice	6	0	0

DISCUSSION

The first aim of this study was to determine why students choose a career in nursing. The results showed that the caring aspect was one of the main reasons for becoming a nurse. Intrinsically motivated reasons, personal experiences with hospitals and nurses, and role models in their immediate environment were also a major influence on career choice. These results are consistent with the study by Crick, Perkinton and Davies (2014). Their cohort of student nurses also entered the profession with a strong desire to care for people, had experienced positive examples of nursing care, and were influenced by having a nurse in the family (Crick et al., 2014). Our findings indicated that the majority of students perceived nursing as a career with job opportunities and job security. These findings are in accordance with the findings of an earlier study in Israel (Haron, Reicher & Riba, 2014) in which 775 first-year students also mentioned working conditions as an influential factor. The results of the study by McLaughlin et al. (2010), in which 68 undergraduate student nurses in their second year explained in essays on career motivation that a desire to care for people, personal experiences, the influence of significant others, and job security were important reasons for entering the nursing profession (McLaughlin et al., 2010).

Regarding student nurses' conceptualization of nursing, the second aim of this study, the analyses showed that they had both altruistic and professional perceptions of the profession. Altruistic views encompassed the caring aspect, the need for empathy and the holistic nature of the profession. These views were affirmed in earlier studies (Karaoz, 2005; Petrucci, La Cerra, Aloisio, Montanari & Lancia, 2016). The perceptions of student nurses of their professional role encompassed nursing competences and the need to provide high quality care. Similar results were obtained by Rhodes, Morris and Lazenby (2011) who concluded that the image of nurses as competent and intelligent caregivers must become as well known as the image of nurses as 'angels in white' to attract qualified students to the nursing profession (Rhodes et al., 2011).

The third aim of our study was to examine factors which influenced student nurses' decision to leave or complete their programme. Reasons for attrition were strongly related to the training programme and clinical placements. The differences between the three subgroups showed that students who never considered stopping were far less negative about their training programme and clinical placements than the students in the other two subgroups. The students who stopped mentioned having problems with academic demands, especially regarding writing reports during their clinical placements. Similar findings were reported in previous studies suggesting that student nurses struggle with the academic demands of a programme and are ill-prepared for academic studies (Cameron, Roxburgh, Taylor & Lauder, 2011b; Whitehead, 2002). Frustrations about the quality of the training and teaching staff were also expressed by students who considered stopping. Furthermore, another reason for attrition proved to be a perceived lack of support from mentors and team during clinical placements. These findings are supported by the results of previous studies, which revealed that students faced disappointments when they were first exposed to the reality of the clinical environment (Cooper, Courtney-Pratt & Fitzgerald, 2015; Thomas, Jinks & Jack, 2015). Finally, students expressed feeling unprepared for practice as a reason for withdrawing. A consistent

theme was concern about lacking the knowledge to deliver good care. This theory-practice gap and these feelings of being unprepared for clinical practice continues to concern the education sector worldwide (Haycock-Stuart, MacLaren, McLachlan & James, 2016; Milton-Wildey, Kenny, Parmenter & Hall, 2014).

Both intrinsic and extrinsic factors proved to be important for motivating students to complete their programme. The quality of the clinical placements, especially the perceived support from mentors and team, were important reasons to convince students who considered stopping to complete their programme. Being welcome in a team and working in a good team proved to be more important than the patient group with whom they worked. This is a striking finding, since so far it has been assumed that students first choose their preferred clinical field. Other studies have underlined this essential role of mentors and team (Borrott, Day, Sedgwick & Levett-Jones, 2016; Courtney-Pratt, Ford & Marlow, 2015).

Study strengths and limitations

The strength of this study is that it provided a qualitative follow-up to preliminary quantitative studies. More insight is thus gained into the motivations of students choosing a nursing career, and their intentions to stop or stay. Another strength is that we questioned both the students who never considered stopping and the students who considered stopping but continued, and students who actually stopped. A limitation of this study is that the number of students who stopped is small ($n = 2$) in relation to the other two groups ($n = 7$ and $n = 8$, respectively). However, in a qualitative study this poses no threat to the reliability and transferability of the results, since the thick description is sufficient.

CONCLUSION

This study showed that student nurses started their training with many dreams, such as caring for people, getting jobs with many opportunities, and having the opportunity to deliver excellent nursing care as member of a team. In the first two years of their training they had experiences, which did or did not meet their expectations. Both classroom and clinical placement experiences proved to be related to a student's decision to continue or to drop-out. Their dreams came true when they had pleasant and motivating experiences, both in the classroom and in the clinical placements. When their expectations were not met they became disappointed, which caused them to consider stopping and even leaving their programme. The results of this study showed that both positive and negative experiences during clinical placements are strongly related to the team. This is a notable outcome because the importance of a team is often underestimated. It is generally assumed that students choose a particular clinical field, but actually working in a good team is a more important reason for completing a programme. The role of teaching staff and mentors seems invaluable in protecting and guiding students through their programme and placements. Moreover, optimal cooperation between lecturers and mentors is of paramount importance to retain student nurses in their training programmes.

Appendix A

Topic List Student Interviews

1) Can you tell us why you chose to study nursing?
2) What were the main reasons to choose this?
3) Are there people in your surroundings who played a role in making this choice or was it entirely your own?
4) How do you value the level of training?
5) What is your opinion about teachers?
6) What is your opinion about clinical placements?
7) Can you tell us something about your experiences during your clinical placements?
8) If you have ever considered stopping, what were the main reasons to reach this decision?
9) What was your motivation to proceed anyway?
10) According to you, what is the essence of nursing?

Theme Subthemes	Quotes from the interviews
REASONS FOR CHOOSING A NURSING CAREER	
Caring for people: nurses want to care for and work with people	*'You must feel the need to help people … you must feel empathic. If you do not have that quality, nursing will not suit you' (P5)* *'Especially wanting to work with people, which is of course very cliché, but really connecting to people when they are vulnerable. I found that really interesting' (P12)*
Fit: wanting to be a nurse/nursing is a suitable profession	*'Then I found out that nursing was the real profession for me. I also told my family and they said: 'why didn't you think of this before, it suits you so well! I hear it from family, friends, everyone. It seemed to be predetermined for a long time' (P1)* *'I actually knew from an early age that I want to be a nurse. People always said that I am really a type of person to work in healthcare' (P11)*
Job opportunities: nursing offers a wide range of jobs	*'You are sure that you can get a job with this training. In health care there is always something…nursing offers a lot of job possibilities' (P3)* *'I chose this training because I can always find a job in healthcare. That really appeals to me' (P8)*
Personal experience with healthcare: experiences as a patient	*'I myself have a lot of physical problems, so I see people work in the hospital quite often. So I do know what it means to be a nurse' (P4)* *'Due to my illness I have always had frequent contact with doctors and nurses. I*

	could see what their work really entails, and so yes, then you follow your role model … your dream job' (P14)
Influence of family/others: having family members or friends who work as nurses were a source of influence in choosing a nursing career	*'My aunt is a nurse and two of my three cousins are studying nursing. It really runs in the family' (P4)* *'I have spoken to people who were studying nursing; they really made me enthusiastic' (P7)*
CONCEPTUALIZATION OF NURSING	
Caring for people: nurses care for people	*'It's a bit of a cliché, but I think that you have to find it essential to be with patients at critical moments. I think that's a very important aspect of your profession as a nurse' (P10)* *'Nursing encompasses quite a lot. The key is that you find it important to take care of people' (P17)*
Holistic work: nurses deliver total patient care, not only physical, but also social and emotional	*'The nurse cares for the physical as well as the mental problems, the person as a whole. That is the crux of nursing' (P7)* *'Guiding a patient throughout a course of treatment, from beginning to end. Give complete guidance and support, including nursing skills' (P15)*
Empathy: nurses understand or feel what a patient is experiencing	*'Just listen to what a patients have to say. You must take the time to sit down with your patients, so that they can express their feelings' (P6)* *'It's all about your relationship with the patient, it's not about yourself. In one way or another, it suits me very well to put myself in my patients' shoes and be their advocate' (P10)*

Quality of life: nurses take care for the general well-being of patients	*'The essence of nursing is to deliver optimal quality of life to someone with a particular disability or disorder' (P10)* *'Taking care of people and offering the best possible quality of life… this is and remains the primary goal of nursing' (P13).*
Competences: nurses apply their knowledge in their practice	*'You have to be critical. I really think that critical thinking and reflection are important and putting patients at the heart of everything you do' (P2)* *'You have to be competent, and be able to apply your knowledge and justify it' (P11)*
REASONS FOR ATTRITION	
Training: dissatisfaction with the organization and quality of the programme	*'I wanted to quit because I really did not like the quality of the training' (P15)* *'In the first year we got a lot of theory. I would have liked there to have been a clinical placement of about a month or so, just to experience how it is in practice' (P17)*
Teaching staff: lack of competence and lack of support from teachers	*'When I said that I thought they should pay more attention to practical nursing skills, I got the third degree from one lecturer' (P9)* *'I find these teachers friendly people, but they cannot teach!' (P16)*
Theory-practice gap: the experienced gap between theoretical knowledge and clinical practice	*'Once you get your degree it comes down to what you can do. If I pass my exams, I will graduate. But there are many nursing tasks that I am not yet able to do' (P10)* *'I had the expectation that I needed to know everything about all medical disorders. However, very frequently, almost every day, I ask myself 'what is this*

	clinical problem?' I still have the idea that I have to learn so much more' (P18)
Clinical placement: negative experiences with team/little or no support from team	*'I stopped my clinical placement because there simply was no click with my colleagues. That's why it did not go well and I did not manage to achieve my goals. Every day I went to my placement with a stomachache' (P1)* *'This is not a very nice team to work with, I think they really do not like students at all' (P6).*
Personal circumstances: negative experiences due to personal limitations	'*It's because of my personality. I worked on a ward with many colleagues and I clammed up completely. I enjoyed the work very much, but I like working alone and I found all the colleagues quite annoying' (P4).* *'I had to figure out everything on my own. I'm a perfectionist and make things too complicated. The result was that I became very insecure' (P16)*
MOTIVATIONS TO CONTINUE	
Training: satisfaction with the organization and quality of the programme	*'The first two years were very nice. The theoretical part was not too difficult. It was a very nice, social programme' (P5)* *'I have certainly learned what it means to work in healthcare. I am happy that I have gained more insight. When I finally get my degree, I can apply this knowledge in practice' (P10)*
Teaching staff: satisfied with competence of teachers and support from teachers	*' I find that many teachers are knowledgeable and that you can really learn from them. Many teachers have a lot of practical experience and they can transfer their knowledge to me' (P12)* *'There are teachers who really teach well and give you a lot of new information.*

	They really know what they are talking about' (P16)
Clinical placement: positive experiences with team/support from team	*'I work in a great team and if you work in a really nice team, the patient group is not very important. It really does not matter where your clinical placement is' (P2)* *'That you ask for assistance and discover that you can do things together and that you are not alone' (P18)*
Team: importance of working in a team	*'You can only deliver excellent nursing care with teamwork. As an individual you can also provide excellent care of course, but working in a team is essential to me' (P2)* *'It's very important to me that I can contribute as a member of a health care team' (P9)*
Patient contacts: positive experiences with patients	*'I was working with a nice patient group, I really had a click with them. Everything went just fine' (P9)* *'I like to work with patients. I really enjoy patient contact; their life stories are very interesting!' (P15)*
Personal intrinsic factors: perseverance and the drive to become a nurse	*'I considered stopping school, but then I thought, I'm just not going to give up. If I had stopped at that moment, I really would not have known what else to do, because I really want to become a nurse' (P1).* *'It's a shame to stop now, because I have only one year and a half to go. I am going to persevere to get my degree' (14)*

Personal extrinsic factors: influence of family and friends, and strategic choice	*'I had a lot of people around me, friends and classmates, who stimulated me to proceed' (P6)* '*I only have three weeks of my clinical placement to go before graduation. So I'm not going to stop now, because I will have a degree in my pocket and a college degree is always great' (P16).*

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6 CHAPTER

The voice of nurses: novice nurses' first experiences in a clinical setting

A longitudinal diary study

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Manuscript under review

ABSTRACT

Aims and objectives
To gain greater understanding of which personal and professional demands novice nurses are confronted with, and what can be done to improve the transition from novice to professional staff nurse.

Background
Novice nurses are confronted with a lot of physical, emotional and intellectual changes in the role-transition process from student nurse to professional staff nurse, which are often related to feelings of confusion, uncertainty and stress. Few studies have investigated, on a longitudinal basis, the lived experiences of novice nurses in the clinical setting.

Design
A qualitative longitudinal approach, based on interpretative phenomenological analysis. Unstructured written diaries were used to allow nurses to tell their own stories.

Methods
A sample of eighteen novice nurses was recruited from several wards at a University Medical Center in the Netherlands. The inclusion criteria were a Bachelor's degree in nursing, aged under 30, and no more than one year's work experience. Data were collected from weekly measurements from September 2013 to September 2014.

Results
Eight major themes emerged from the diaries (n = 580): relatedness, competence, development, organizational context, existential events, goals, autonomy and fit. This study revealed that the need for relatedness was by far the most reported theme. Support and positive feedback from colleagues appeared to be crucial for novices starting work in a highly complex environment.

Conclusion
This study showed that one of the strategies novice nurses use to deal with challenging and existential situations is to share their experiences with colleagues. Therefore, novice nurses should always work in a safe environment which enables this.

Relevance to clinical practice
Identification of key issues around understanding novice nurses' first clinical experiences may help to improve their transition from novice to professional staff nurse. The presence and support of supervisors and mentors is inevitable to keep novice nurses motivated for the profession.

INTRODUCTION

The transition from being a nursing student to a professional practicing nurse is a complex process often described as the struggle to develop a new professional sense of self (Arrowsmith, Lau-Walker, Norman & Maben, 2016; Björkström, Athlin & Johansson, 2008; Duchscher & Cowin, 2004).

Striving for this professional self and a new professional identity is linked to novice nurses' experiences in the clinical setting, where they are confronted with new challenges and responsibilities (Bjerknes & Björk, 2012; Duchscher, 2009; Leong & Crossman, 2015). Benner (1984, p. 22) says 'any nurse entering a clinical setting where she or he has no experience with the patient population may be limited to the novice level of performance if the goals and tools of patient care are unfamiliar'. In their first years of practice novice nurses have many personal and environmental experiences and are confronted with a broad range of physical, emotional, developmental and intellectual changes (Björkström et al., 2008; Duchscher, 2009). The role transition to becoming a staff nurse and being responsible for patients is often associated with feelings of confusion, uncertainty and stress (Al Awaisi, Cooke & Pryjmachik, 2015; Gardiner & Sheen, 2016; Kumaran & Carney, 2014; O'Shea & Kelly, 2007).

Novice nurses are usually in 'emerging adulthood', a stage of life where they have to balance the demands of work and personal life, a process in which their performance at work is influenced by demands from their personal life and vice versa. They are confronted with and need to respond to situations which are professionally and emotionally challenging. When they start working in a clinical setting, young nurses transition professionally from student nurse to staff nurse (Arrowsmith et al., 2016; Zhang, Qian, Wu, Wen & Zhang, 2016) and emotionally from adolescence to adulthood (Arnett, 2014). Young nurses are confronted both with ongoing professional and emotional developmental processes and with new demands. Encounters with severely ill patients, especially patients of their own age, are often accompanied by conflicting emotions. These salient events appeal to their professional skills, but they increase their awareness of mortality (Anderson, Kent & Owens, 2015). Support and guidance from experienced colleagues and supervisors seem indispensable to teaching novice nurses how to deal with these emotionally stressful events (Howarth, Holland & Grant, 2006; Jewell, 2013). Furthermore, integration into the team and the need to feel accepted are important conditions for a proper transition from student to professional nurse. Previous research on this topic revealed that being a team member and acceptance from experienced nurses can also positively influence novices' transition through the development of their professional identity (Howarth et al., 2006; Kelly & Courts, 2007).

The increasing complexity of care in the healthcare sector, especially in academic settings, makes the transition from school to practice even more challenging (Björkström et al., 2008; Guarinoni, Petrucci, Lancia & Motta, 2015). Nurses are confronted with stressful circumstances, heavy workload and patients with high comorbidity (Anderson et al., 2015; Taubman-Ben-Ari & Weintraub, 2008), and especially novice nurses are often not yet equipped to cope. Their knowledge and technical competence are often insufficient to prepare them for the transition to clinical situations (Olson, 2009): their

theoretical knowledge and the reality of clinical practice do not match. Feeling underprepared to meet the expectations of the clinical work environment, new nurses often experience a sense of 'reality shock'. Reality shock occurs on transitioning from the educational to the clinical setting, where there are different priorities and pressures, and the discovery that school-bred values conflict with work-world values (Kramer 1974). This reality shock or stress experience is mainly caused by the theory-practice gap (Bjerknes & Björk, 2012; Clark & Holmes, 2007; Duchscher & Cowin, 2004). Moreover, when expectations and reality do not match, the 'reality shock' of clinical practice may be a potentially predictive factor for burnout and early withdrawal from the profession (Cowin & Hengstberger-Sims, 2006).

Reality shock and the theory-practice gap as part of the transition process have been extensively investigated in previous studies. However, most of these studies were based on the expectations of the researchers and used semi-structured interviews or questionnaires with specific questions about a particular topic (Al Awaisi et al., 2015; Clark & Holmes, 2007; Leong & Crossman, 2015). The current longitudinal study has an open character and focuses on novice nurses' lived experiences in a clinical setting to gain a greater understanding of which demands from personal and professional life they are confronted with, and what can be done to improve the transition from being a novice to a professional nurse.

METHODS

Study design

The study adopted a qualitative longitudinal approach, based on interpretative phenomenological analysis to allow in-depth exploration of the participants' lived experiences. Unstructured written diaries were selected for optimal data collection. Diaries have the advantage of measuring real-life experiences and collecting the participants' own stories, without being theoretically driven. Because we focused on the novice nurses' own stories, we did not formulate any hypotheses in advance, but allowed the nurses to speak for themselves. After completing the diary, they answered some quantitative questions.

Sample and setting

A sample of novice nurses working on several wards at one University Medical Center in the Netherlands was recruited for this study. The inclusion criteria were a Bachelor's degree in nursing, aged under 30 and with no more than one year's work experience. Participants were recruited in cooperation with the head of nursing at the in-patient departments. Twenty-four nurses met the inclusion criteria and they were invited in writing to participate in this study. The nurses who met the inclusion criteria and were willing to participate (n = 19) were invited to a meeting where they were informed in detail about the purpose of the study and the associated workload.

Data collection

Using the Qualtrics package, data were collected from weekly measurements from September 2013 to September 2014. The nurses were asked to describe in their diaries a personal or work-related experience which was really important to them. We also asked them if they had shared this experience with their colleagues and/or supervisor. After completing the diaries, they answered quantitative questions measuring their level of exploration and commitment to the profession, but these were not used in this study.

Data analysis

The diaries were thoroughly read by three researchers, to obtain a contextual understanding of the described experiences. We started the analytical process with open questions, such as 'what experiences did the nurses describe? How did they act and feel? What situations were they confronted with?' The data were inductively explored using content analysis to identify themes as they 'emerged' from the data (Pope & Mays, 2008). Theoretical concepts, recurring themes and subthemes were identified using grounded theory and a constant comparison method (Charmaz, 2014; Miles, Huberman & Saldaña, 2014). When new themes emerged from the data, they were assessed and either absorbed into existing themes or identified as a new theme. The statements within each theme were read, discussed and compared critically. Subsequently, based on the themes and subthemes identified, the texts were deductively coded using the ATLAS.ti package. Three researchers independently coded the diaries, which were then compared to obtain inter-coder reliability and to avoid obtaining only the subjective judgments and interpretations of one researcher (Pope & Mays, 2008). To improve inter-coder reliability, the different coders' data were uploaded to the Coding Analysis Toolkit (CAT) in Atlas.ti (Friese, 2014). This resulted in a fairly high degree of agreement between the researchers (80%). Where there was disagreement, the 'mismatches' were discussed and codes were renamed, merged or deleted.

Ethical considerations

Approval for the study was obtained from the Ethical Committee Psychology of the University. Oral and written information about the research was provided, and participants signed a consent form. Because the researchers had no hierarchical working relationships with the participants, they could feel free to be honest in the descriptions of their experiences. Participants were informed that participation was voluntary and that they could withdraw from the study at any time without consequences. Finally, confidentially was guaranteed and secured by coding all the diaries and keeping the codes and the participants' names separately.

Trustworthiness

Credibility was confirmed by selecting the appropriate data collection method of diaries. Participants wrote their diaries in their own practice environment at a convenient moment. Dependability was established by detailed data analysis and description. Conformability and consistency of analysis were established through discussions of preliminary findings, until consensus was reached. A description of the context, participant selection, data collection and analysis process is provided to enhance our findings' transferability.

RESULTS

Background characteristics

Nineteen novice nurses from various hospital departments participated. Soon after the start of the study, one of the nurses dropped out. The remaining 18 participants were female and were aged from 21 to 26. The participants differed in their preliminary training, graduation year and staff position. See Table 1 for all characteristics.

Table 1 - Background characteristics of participants (*n*=18)

	% (n)	Mean ±SD
Gender female	100 (18)	
Age		23.06 ±1.43
Full-time education	61 (11)	
Dual education	39 (7)	
Working experience (max. 12 months)	56 (10)	
No working experience	44 (8)	
Staff nurse	44 (8)	
Float pool nurse	56 (10)	

Themes and subthemes

We received 580 completed diaries (range per participant 19-50, mean per participant 35). Eight major themes were identified: relatedness, competence, development, organizational context, existential events, goals, autonomy and fit (Figure 1). The need for autonomy, relatedness and competence – three of the themes which emerged from the diaries – resemble the concepts from the Deci and Ryan's Self Determination Theory (SDT). SDT provides a coherent and comprehensive basis for understanding personality development (Deci & Ryan, 2000). Autonomy is related to a person's need to feel in control of his/her own behaviours and goals Relatedness comprises the need to experience a sense of belonging and attachment to other people, while competence reflects the way that people need to gain mastery of tasks and learn different skills (Deci & Ryan, 2000). Orem's nursing theories regard competence as both the possession of knowledge and the power to put this knowledge to use in concrete situations (Orem, 2001, p. 16), which is why we divided this theme into situations in which novices demonstrated having the required competence and situations in which they felt competent. Development and goals can be viewed as two different but coherent themes, where development is about ongoing experiences, and goals are about the future. The organizational context in which novices begin working is mainly described in terms of workload and complexity of care. The existential theme is about novices' first experiences with illness and death. Finally, fit is about the extent to which they find that the profession suits them. An overview of all themes and subthemes and authentic examples is presented in Appendix A.

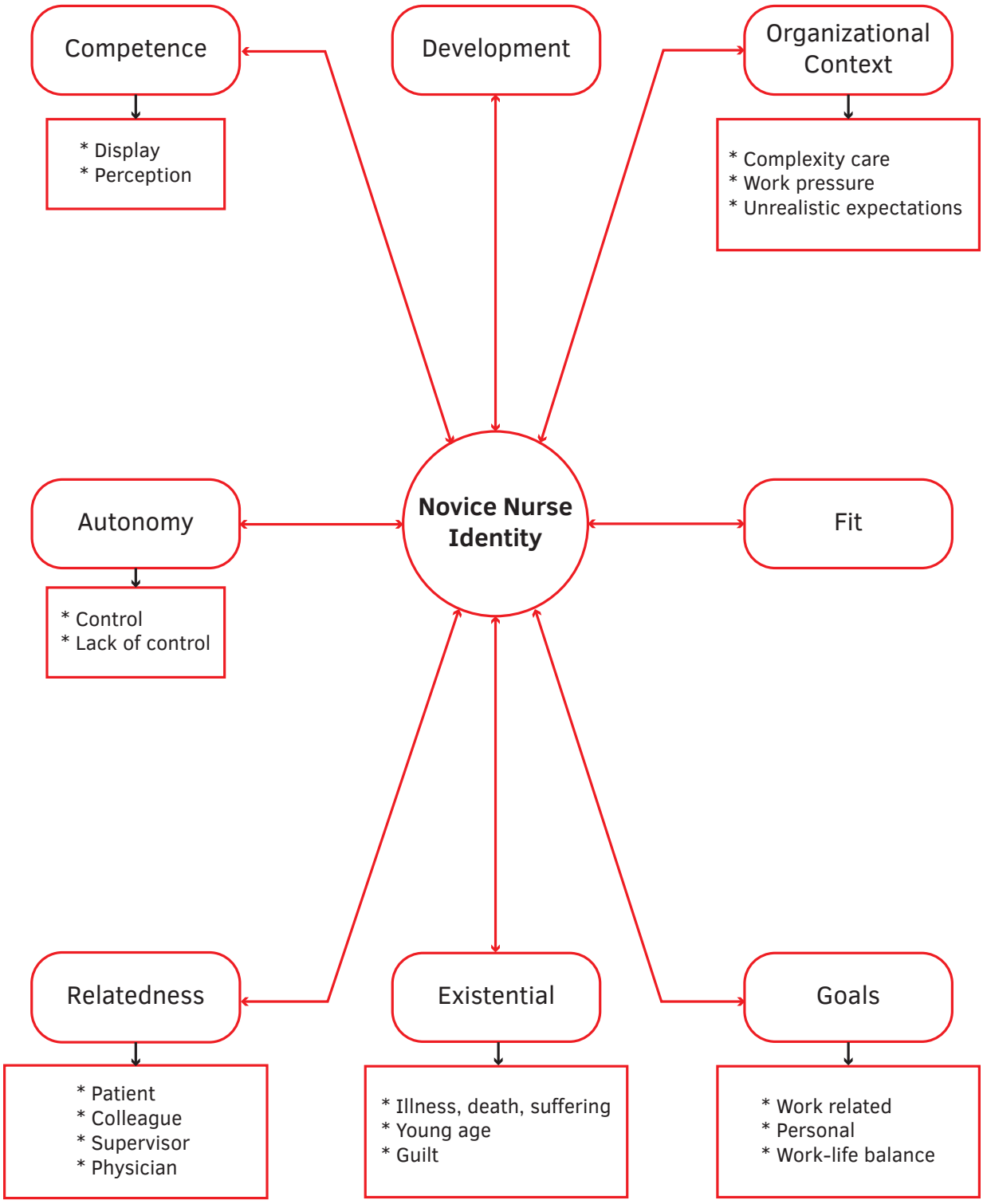

Figure 1 - Major themes

Experiences

The findings obtained from the diaries were grouped into the aforementioned themes and subthemes which emerged from the thematic analysis of the reported experiences. The analysis showed that these experiences differ in nature and scope, and that both positive and negative experiences were described. Direct quotations from a sample of the participants illustrate how the experiences were voiced by the nurses. Many diaries described more than one experience. A total of 1321 experiences were reported and the percentage distribution on the themes is shown in Figure 2. We ordered the themes by frequency and described the characteristics of the experiences reflecting the themes.

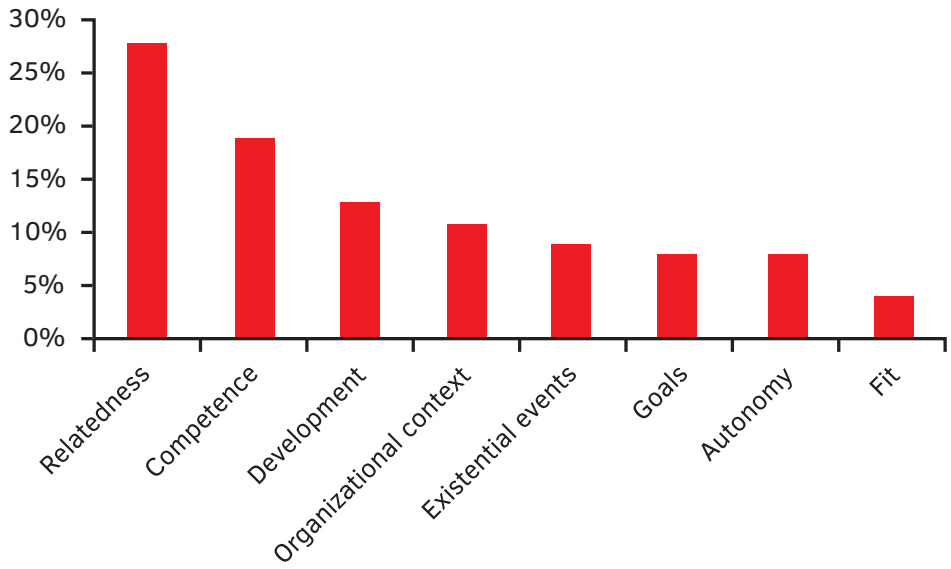

Figure 2 - Reported experiences (*n*=1321)

Relatedness

Experiences concerning relatedness were most frequently described and could be classified into experiences with patients, colleagues, supervisors and physicians. Many of the nurses (13) reported positive experiences with patients and the impact of these experiences on their self-confidence and self-concept. They felt respected and trusted by their patients, which also furthered their commitment to the profession. These interpersonal moments and being able to achieve something for a patient also seemed to have a motivational quality for both of them.

Last week I experienced something that I hope I will experience more often in the future: gratitude from a patient. I received a card on which she wrote that I had supported her very well over the weeks. This wonderful gesture really gave me a boost to keep going (nurse 14).

Furthermore, many novices (*n*=14) reported negative experiences with patients. The most frequent form was verbal harassment, such as harsh criticism in front of others, insults and humiliating remarks. Sexual harassment from patients was also reported.

My patients have a rather 'big mouth'. I believe that not all patients are respectful and sometimes I am amazed at how they speak to me. Some patients do not see that this is my job and that I want to keep enjoying my work (nurse 18).

One of my patients flirted a lot and I found this quite annoying. I immediately told him that I wanted his behaviour to change. The consequence was that I was less willing to help him compared to my other patients (nurse 9).

Relationships with physicians were mentioned by 9 nurses as collaborative and pleasant. Compliments from physicians gave their self-confidence a particular boost. Two of the nurses wrote:

Many mistakes were being made on admission. I reported this to our attending physician. He dealt with it and the next day I discussed the entire case with him, so I could tell my own story. This was very pleasant (nurse 10).

The physician said that I had made the right decision. I was glad that the doctor gave me this compliment. It gave me great confidence! (nurse 16).

On the other hand, many nurses (*n*=10) reported frustrating working relations with physicians. They reported feeling ignored, belittled and complained of not being treated like professionals.

When I had to take care of a baby with abnormal vital signs I had to hold my ground against the doctor. He waved away my concerns, which gave me the impression that he did not take me seriously (nurse 14).

The most frequently mentioned relatedness experiences referred to colleagues and their team. Perceived positive support from colleagues, reported by 14 nurses, were mostly related to stressful and demanding situations. The readiness of colleagues to lend a hand made them feel confident, but asking for help was often experienced as difficult when their colleagues were perceived as also overwhelmed with work. The following description is an example:

I recently had a patient who needed a lot of care and I had to ask two colleagues to help me. I sometimes feel very troubled that I have to ask for help all the time, because they were also very busy. But it is nice that these colleagues are always willing to help me (nurse 4).

One of the nurses wrote that a colleague's support was very helpful in dealing with their emotions after the death of a patient:

In the morning I talked with my colleagues about this experience, and later I drank a cup of coffee with a colleague from the nightshift to distract myself (nurse 17).

The following comments show a consistent thread in novice nurses' recognition of what they learned from working in a good team. Positive experiences of feeling supported by the team (n=14) contributed to enjoying work and they expressed that working as a team is essential for providing good care.

It was a bad day on a very busy ward. But I saw how nurses are able to help and support each other. I experienced real teamwork and really enjoyed it, because you realise that you are not alone (nurse 4).

Because we continue to work together as a team, we are able to care for all patients extremely well (nurse 14).

In contrast, others reported situations where they lacked the support of colleagues (n=13). One of the nurses wondered why colleagues refused to help when patient care situations became chaotic and stressful.

But no one had time (they said) and then I discovered that one colleague was just chatting, very relaxed, in a patient's room while I was working extremely hard. I was really fed up at that, because I am always there for my colleagues (nurse 14).

Negative experiences with the team were reported by 8 nurses, as they reflect not being welcomed and even being confronted with horizontal workplace violence, either verbal or nonverbal. The violence was sometimes perceived as systematically directed at them personally:

I came into the team room to ask for a patient's file. As I entered, I felt an uncomfortable atmosphere. The moment I walked out I heard my colleagues laughing. It sounded derogatory, as if they were ridiculing someone. In a flash I thought that it was directed at me...

This team really has a problem. A lot of frustration, distrust, a negative atmosphere and discontent. They pull each other into a downward spiral. Because of this discontent, there is an unwillingness to train new colleagues like me (nurse 2).

In addition to receiving support from colleagues, some nurses (*n*=9) reported that being able to support a colleague at times of high work pressure was essential, not least to increase their own job satisfaction.

This week I worked extra hard during the morning shift, so that I could offer to assist my colleagues. This was really appreciated and it was a positive experience for me (nurse 16).

The importance of positive feedback and support from supervisors was reported by 15 nurses. A supervisor who supported them and with whom they could discuss experiences with patients, colleagues or physicians, seemed invaluable.

It was a stressful and busy week. I took care of a few-months-old baby. The father was frustrated, because he had to wait two hours before he was attended to. His baby needed a drip, but unfortunately it did not flow correctly, and that made him even more frustrated. I did not know what to do anymore. The head nurse took me aside, and I could let off some steam for a moment. She then talked with the father, and fortunately he became less aggressive (nurse 6).

One nurse described that the relationship with her supervisor was pivotal for her self-confidence and enjoyment of work:

I received an email from my supervisor. She is leaving. I have had a good relationship with her, and her involvement and personal touch made me feel that there was someone really looking after me. And now she is leaving and I feel like I'm all on my own (nurse 2).

Negative support from the supervisor was described by 4 nurses.

This week I had my evaluation with my supervisor. There was only room for criticism during this conversation, no positive points were mentioned. I was very upset and I did not feel welcome anymore after that conversation (nurse 3).

Sharing experiences with colleagues and supervisors

The results of the quantitative questions showed that a majority of the experiences (62%) were discussed with colleagues. The experiences that were shared focused mainly on negative experiences with patients and unrealistic expectations. Only 19% of the experiences were discussed with supervisors and those experiences which were discussed focused mainly on negative experiences with colleagues and the team, professional development and excessive workload.

Competence
This theme was divided between accounts of demonstrating competence (display of competence) and accounts of feeling competent (own perception).There are descriptions of situations where novices expressed that they felt incompetent but still did what needed to be done. The majority of experiences were positive. Positive displays of competence, possessing nursing knowledge and being able to apply this knowledge in practice were described by 15 nurses.

When the doctor came in we noted that the patient's breathing was becoming increasingly shallow. 'I think you should start mouth-to-mouth resuscitation'. So I did, without any doubts, and with no experience. In the end the situation stabilized. They told me that I had done well and had remained very calm (nurse 2).

Negative displays of competence were reported by 6 nurses and were mostly related to maladministration of medication. These mistakes appeared to have an enormous impact.

I distributed the wrong medication on two of the three night shifts. I was really upset. I want to be attentive and neat in my work and then I make mistakes in that of all things (nurse 4).

Most participants (*n*=17) experienced challenging situations which they were nevertheless able to manage. Being able to manage a whole shift despite having responsibility for a large number of patients seemed to increase positive perceptions of personal competence Their perceptions were expressed in statements such as:

Twelve children is pretty tough. However, the night shift went quite well. That gave me a good feeling in any case, obviously I can handle it (nurse 2).

A number of nurses (*n*=13) recognized their limitations and they reported feelings of inadequacy when they were confronted with situations for which they felt ill-prepared. They frequently remarked that they worried they might make mistakes due to their limited knowledge and experience. Lack of confidence and unfamiliarity with the new ward also contributed to their anxiety and stress.

This weekend I had to care for a baby during the night shift. I could not understand what exactly was wrong with the baby. I just could not explain this case. You often stumble across these kinds of situations at the beginning of your career, because you have limited experience. But sometimes I find it difficult, because I actually expect it of myself to already have that knowledge. Otherwise I think I cannot provide good care (nurse 12).

Development
A common thread running through the diaries was the need for continuing professional development. Development was felt to be indispensable by all novice nurses (*n*=18) to improve their competences, self-confidence and feelings of autonomy. They expressed satisfaction with educational opportunities and career development which contributed

to their professional growth.

This week I followed some very interesting courses at work. I learned a lot and now I observe my patients with greater knowledge and depth (nurse 6).

Short and sweet: I have noticed that I am becoming more confident in my work on the ward compared to the very beginning. This is a very positive experience! (nurse 13).

In contrast, some nurses (*n*=4) reported that due to a lack of guidance from supervisors, they were unable to meet their learning goals.

I have not worked much with my supervisors in recent weeks. I have noticed that I don't learn much that way. I have '130' colleagues and, in my opinion, they often see training as a one-off activity and do not seem to want to invest a lot of energy in the process (nurse 15).

Organizational Context

This theme encompassed aspects of the organizational context, such as complexity of care, work pressure and unrealistic expectations. Being confronted with the complexity of care was reported by 10 nurses and reflected their awareness of responsibilities they were not yet able to meet.

Everything is complex, intense and exceptional in this hospital. The responsibility I carry as a novice is really absurd…I can hardly manage. I stagger through my shift, and when something unexpected happens (a very sick child, an admission) I 'collapse' (nurse 2).

Low work pressure was related to increased personal relaxation and having time for patients and students (*n*=12). These moments are associated with feelings of satisfaction and fulfillment.

It was a quiet week, so I could do many other things, such as training my student. I was very glad I had time to do this (nurse 1).

It is a less busy ward, and after a few days working on the new ward, I calmed down. I had more time for patients, instead of feeling stressed about not being able to finish everything (nurse 14).

The majority of participants (*n*=17) mentioned 'unreasonable' workloads, caused by staff shortages for instance, resulting in nurses not being able to provide adequate patient care. They reported feelings of exhaustion and an aversion to going to work.

I recently spent a few days on a ward where the workload was extremely high…I could not finish my work on time, and felt dissatisfied and had the feeling that I forgot a lot (nurse 4).

It have been so busy the last few weeks, that I have not felt like going to work anymore (nurse 10).

Some nurses criticized the organization for not providing adequate support and they believed it irresponsible to let young inexperienced float pool nurses work with severely ill patients. One of the nurses did not want to be part of an organization where quality of care could not be guaranteed. She felt powerless to change her unsatisfactory work environment and even considered leaving:

I'm really passionate about my work, except not in this environment. Perhaps we are all still too young, with not enough experience. This really is an absurd job. I'm leaving this hospital (nurse 2).

Many novice nurses experienced a mismatch between the expectations others had of them, and their ability to perform. They expressed feelings of anxiety about whether they could meet expectations, especially when they were responsible for a large number of patients. Some nurses described the reality of clinical practice as overwhelming and they described the workday as a routine in chaos. These 'unrealistic' expectations were both related to cognitive (*n*=9) and physical (*n*=15) overload.

They all expect a lot from me, while I'm actually still quite overwhelmed by the intensity and complexity of the ward (nurse 12).

The last couple of nights we had 26 patients on the ward. There were two emergency admissions, five post-operative patients, two psychiatric patients and two patients who had to have emergency surgery. The following day I could not sleep well because I was afraid I had forgotten something (nurse 5).

Existential

Confrontations with existential events were frequently reported. When faced with severely ill and dying patients, most nurses (*n*=16) reported that they were overwhelmed with strong emotions and that they did not know how to control their feelings. They felt unprepared to deal with end-of-life care and expressed their feelings of hopelessness and emotional distress. Confrontations with patients close to their own age, with life-threatening diseases, affected how they provided patient care.

There was a little boy with a brain tumor with metastases in the spinal cord. He is such a sweet and nice little boy. I wanted to talk to the parents, but I could not handle that emotionally. I just hope that all goes well with him (nurse 12).

There is a man on our ward who is a month younger than me. He has testicular cancer and probably metastases. I just delivered the care I would give to any other man in this situation. Yet something feels different because he is so young (nurse 9).

Some nurses (*n*=7) described experiencing feelings of guilt when they felt they had fallen short in the care for their patients, or negative feelings regarding their patients.

There was a patient who snapped at me all the time, so I did not think very positively about her. When I heard she had been resuscitated I was very shocked. I immediately felt guilty about the fact I had thought negatively about her (nurse 4).

Goals

Goals can be work-related and personally-related. Work-related goals were reported by 13 participants and were about career opportunities and professional development. A minority of the nurses (*n*=5) reported personal goals, such as the desire to buy a house or start a family. Goals are regarded as a part of their ongoing chosen direction within their professional and personal life plan.

I'm trying to figure out what will be my next step professionally. I am hesitating between studying to be a Nurse Practitioner or a Physician Assistant. I'm going to approach my teacher about the precise criteria and will discuss this with my head nurse (nurse 18).

I really want a permanent contract because my boyfriend and I want to buy a house (nurse 7).

Finding a good balance between work and private life seemed important for these novice nurses. Both positive (*n*=8) and negative (*n*=9) experiences with achieving a work-life balance were mentioned.

Everything in my new house is in place. I was also busy with my studies. Fortunately, the work was a good distraction and it all went well! (nurse 8).

I have problems separating work and my private life. I have discussed this with my colleagues. Even the most experienced nurses are worn out when they come home and dream about their work. This is exactly what I experienced (nurse 2).

The other young nurses and I work a particularly high proportion of night shifts. I know that night shifts are part of the job, but right now I work so many night shifts that my social life is suffering (nurse 18).

Autonomy

The experiences reported related to autonomy revealed that many novice nurses (*n*=15) were confronted with situations in which they felt they had control over their work and that they felt satisfied with these experiences. Many of the descriptions related that feelings of control included authority in patient care, the power to make decisions in a relationship with the patient and the freedom to take clinical decisions and actions.

Last week there was an acute situation and I was all alone. What I had hoped for happened: I remained calm, found the problem, solved it and was ultimately able to calm my supervisor, who was very stressed (nurse 15).

In many situations, however, this enjoyment was overshadowed by a lack of control or loss of control over work. Many nurses (*n*=15) reported that they were not on top of their patient care and felt insecure about the demands on them.

I often don't feel completely sure about my work. I am afraid that I'm making mistakes and forgetting things regarding my patients. I have the feeling that other nurses do everything right and I still make some mistakes (nurse 4).

Fit

This theme includes novice nurses' positive feelings, such feeling well suited to the profession, being content in their work (*n*=14), and negative feelings, such as wondering whether it is the right job for them and feelings of discontent (*n*=10).

I'm very happy with my work. I really like the nursing profession. The role of a nurse suits me well, because I like working with people, helping them, listening to them and reassuring them (nurse 12).

This week I've often questioned whether this is the job I actually want to do for the rest of my life. I've found it difficult to feel enthusiastic about my job (nurse 6).

DISCUSSION

Previous research suggests that novice nurses have to endure a lot in their early careers. To really understand what situations they are confronted with, it is essential to let them express these first experiences. In the diaries the nurses reflected on their own actions, which allowed them to reconstruct and make sense of that experience. The importance of reflections has been emphasized in earlier studies (Benner, 1984; Bulman, Lathlean & Gobbi, 2012; Takase, Yamamoto, Sato, Niitani & Uemura, 2015). To our knowledge, this study is the first to assess longitudinally which experiences really matter to novice nurses when they start working in clinical practice. Personal and professional experiences, both positive and negative, turned out to be important in their transition from student nurses to professional staff nurses. Our results showed that the positive experiences generally outweighed the negative ones.

Relatedness experiences were reported most frequently. Support and positive feedback from patients, physicians, colleagues and supervisors appeared to be crucial for novices starting work in a highly complex environment. Positive experiences with patients and the perception that they really made a difference to them turned out to contribute to their personal and professional identity development. However, the patient-related experiences were predominantly negative. Novices experienced aggressive behavior, feelings of not being respected and even sexual harassment. Both positive and negative experiences with patients seemed to be related to self-confidence and self-concept. This finding supports the argument that there is a connection between nurses' views of themselves, what they achieved for their patients and the respect they received from their patients (Pask, 2003). Compliments and respect from doctors also boosted their self-confidence. However, relatedness-experiences with physicians were also predominantly negative. The participants reported situations where physicians would refuse to come when summoned to life threatening situations, treated them with disrespect and even bullied them. Earlier studies indicated that positive perceptions and compliments from physicians made novice nurses feel respected and contributed to job satisfaction

(Kovner et al., 2016; Numminen, Ruoppa, Leino-Kilpi, Isoaho, Hupli & Meretoja, 2016) and negative experiences were associated with feelings of uncertainty and even plans to leave the profession (Heinen et al., 2013; Vogelpohl, Rice, Edwards & Bork, 2013). Support from colleagues and supervisors was reported to be essential for their self-confidence and their professional identity. Even though not all experiences were discussed with colleagues (62%), the diaries revealed that talking about experiences was important to enable novices to handle the ups and downs on the ward. Experiences with colleagues and team were mainly positive: they experienced support in demanding and critical situations. Some novices explained that good working relationships and feeling welcomed in the team seemed to be more important than the patient group they were working with. These findings are in line with (Olson, 2009), who found that supportive and empathetic relationships with colleagues play an important role in how at home novice nurses feel in their profession, and how confident they feel with how they perform. Our findings also support the conceptual framework proposed by (Duchscher, 2009), which suggested that novice nurses' transition process during their first 12 months of practice needs extensive collegial support. Negative experiences with colleagues and the team were reported less often and were mostly caused by high work pressure. Negative experiences, such as horizontal violence and bullying, are usually expressed in the form of psychological harassment, intimidation, humiliation and the sense of abandonment. Nevertheless, these experiences were crucial for the novices' wellbeing and enjoyment of their work. When the support expected does not materialize, this may lead to decreased self-confidence and enjoyment of work (Duchscher, 2009). Despite the fact that support from supervisors was found to be essential, only a minority of the experiences (19%) were discussed with them. This may be due to a variety of issues, such as absence or inaccessibility of supervisors, an unsafe work environment or fear of a negative assessment. This is consistent with young nurses' experiences in the study by (Flinkman & Salantera, 2015), who described that supervisors and nurse managers were distant and rushed, and did not always understand the problems of practical nursing work.

Experiences related to competence were predominantly positive, both in terms of having and using competence, and novice nurses' own perceptions of their competence. Negative experiences were mainly related to personal perceptions of their knowledge and skills. Novice nurses experienced situations in which they felt incompetent but nevertheless did what had to be done Even when they acted correctly, they felt very insecure in many situations, and when they made mistakes, for example in administering medicine, it affected their self-confidence enormously. The development of competence proved to be complex and versatile, as it comprises a wide range of attributes such as skills, self-confidence and experience. Our study results also indicated that novice nurses gain competences not only by practicing, but also by observing and learning from more experienced role models. This accords with previous studies which found that to practice nursing competently, nurses need to gather knowledge, experience and confidence (Hengstberger-Sims et al., 2008; Takase et al., 2015).

The findings indicated that all novice nurses experienced development and growth during their first year as a nurse. They appreciated the challenges of learning new nursing skills through training and supervising students. Wangensteen, Johansson and

Nordstrom (2008) noted that novice nurses experienced their first year as a nurse as a period of growth and development, enabling them to adjust to the responsibilities of their new role as nurses. Pool, Poell, Berings and ten Cate (2015) found that continuing professional development appeared to be more intensive for younger nurses, relative to older age groups, with age and tenure highly related.

Experiences concerning the organizational context were mainly negative, and seemed to affect novice nurses' wellbeing tremendously. They expressed many concerns with their work environment, including the high complexity of care, unacceptable workloads and staffing shortages. Nursing work was described as cognitive, emotional and physically very demanding, resulting in dissatisfaction, stress and exhaustion. They mentioned that they were given too much responsibility and that their anxieties were ignored by the organization. Moreover, being unfamiliar with a ward or patient group seemed to increase feelings of uncertainty and stress. They also expressed feelings of impotence to change these unsatisfactory work environments. These findings are in line with other studies on this subject (Duchscher & Cowin, 2006; Flinkman & Salantera, 2015).

Despite the fact that caring for severely ill and dying people is an essential part of nursing, participants frequently voiced feelings of distress and helplessness when they were exposed to these traumatic events. The first patient death experiences, especially with young patients, prompted thoughts of their own mortality. These emotional demands also affected their professional attitudes towards patients, and sharing these experiences with colleagues and receiving support was essential for dealing with these existential events. These findings are in line with Al Awaisi et al. (2015), Anderson et al. (2015) and O'Shea and Kelly (2007), who showed that early encounters with dying patients can be highly stressful and are dreaded.

The transition from student to staff nurse, and from adolescence to adulthood, is accompanied by both work-related (career) and personal (e.g. romantic relationship) goals. Unfortunately, experiences related to the work-life balance were generally negative. Heavy workload, too many nightshifts and existential demands affected novice nurses' personal lives. A lack of balance, whereby the demands of work and personal life are mutually incompatible, is often associated with lower mental and physical wellbeing, and even with higher levels of burnout and turnover intentions (Boamah & Laschinger, 2016; Leong & Crossman, 2015; Yamaguchi, Inoue, Harade & Oike, 2016).

With regard to autonomy, the results showed that being in control of their work seemed to be crucial for novice nurses' professional development. When they experienced that they could handle their work responsibilities, especially in heavy workload and complex patient situations, it gave them a tremendous boost to their self-confidence and the sense of becoming nurses. However, they experienced a lack of control in many situations. This can be attributed to the fact that novice nurses are mainly concerned with finding a place in the organization and with learning clinical competences, and that the acquisition of autonomy is still a long way off. This is supported by Katrinli, Atabay, Gunay and Guneri (2009), who found that autonomy is closely related to job involvement, personal responsibility and organizational identification.

The majority of the experiences related to fitting the profession were positive. Despite feelings of doubt being expressed in some situations, most novices felt that they had made the right choice and really well suited to nursing. This is in contrast with previous studies which found that early experiences in clinical practice did not meet novice nurses' expectations (Flinkman& Salantera, 2015; Kovner et al., 2016).

Strenghts and limitations

This study's longitudinal design and the number of diaries collected were strengths. Another was its open character, with a focus on novice nurses' 'lived experiences'. Conducting the research in only one hospital can be considered a limitation.

CONCLUSION

This study showed that novice nurses go through a transition process with many challenging, existential and stressful situations, and that they adopt different strategies to deal with them. It turned out that one of these strategies was to share their experiences with colleagues and head nurses. This is supported by the finding that relatedness was by far the most important and frequently reported theme in the diaries. Therefore, it is vital to ensure that novice nurses work in a safe environment which enables them to share their experiences and ask for help in stressful situations. In addition, encouraging support from their teams and supervisors may contribute to a better transition from nursing student to staff nurse, and develop professional identity. The next step is to analyse which experiences are most related to novices' commitment to the nursing profession.

Relevance to clinical practice

Positive work experiences in the first year of practice seem highly important for remaining motivated. Relational networks appear to be very important. The descriptions in the diaries showed that novices mostly receive positive support from their colleagues and the team. Only few experiences with supervisors are reported. Given the type of negative experiences of many nurses, this seems an important omission. Negative perceptions of their own competence, confronting situations with death and severe illnesses, negative experiences with physicians, these are all situations that ask for support from a supervisor. The experiences with supervisors that are mentioned are mostly positive, so it seems to be especially a problem of the perceived availability of the supervisor, not of the quality of the relationship. The presence and support of supervisors and mentors are inevitable to keep novice nurses motivated for the profession.

APPENDIX A

Description of themes and sub-themes

Identified subtheme	*Description of subtheme*	*Reported subthemes (n)*	*Nurses that reported the subtheme (n/%)*	*Authentic example*
RELATEDNESS				
Positive experiences with patients	Positive experiences with patients, e.g. getting compliments, nice conversations	25	13/72%	'My patient complimented me on my good care and said: "you will make it!" That was very sweet of her to say. It confirms that you are doing well'
Negative experiences with patients	Negative experiences, e.g. aggression, disrespect from patients	52	14/78%	'I took care of a patient who responded very harshly, so I asked her to speak to me more respectfully. She then told me that I had to become more resilient'
Support from physician	Feeling supported by the physician, e.g. compliments, solving problems together	17	9/50%	'After my very busy shift, the physician complimented me on my attitude and work'
Lack of support from physician	Physicians who refuse to come, insulting, rude or arrogant behaviour	22	10/56%	'On Monday the professor visited the ward and told us that he was not at all satisfied with the weekend's policy. Then he left and I had to figure it out by myself'
Support from colleagues/team	Receiving practical (heavy workload) or emotional (existential events) support from colleagues. Feeling welcomed in the team	127	17/94%	'I had a very nice week, mainly due to my team and my colleagues. I'm enjoying my work more'
Lack of support from colleagues/team	Disloyal behaviour, bullying, gossip	60	15/83%	'During such a busy week I feel that some colleagues are really irritated. The composition of the team also plays a major role'
Provide support to colleagues	Providing practical (heavy workload) or emotional (existential events) support to colleagues	13	9/50%	'I took over a shift from my colleague, because her child went to school for the first time. I think it's important to stand in for each other'
Support from supervisor	Understanding and support from supervisor regarding development, workload and team atmosphere	44	15/83%	'Last week I had my annual interview with my supervisor. She gave me the opportunity to discuss all my frustrations about gossip on the ward. I appreciated that a lot'
Lack of support from supervisor	Lack of understanding and support from supervisor regarding development, workload and team atmosphere	6	4/22%	'I had an annoying conversation with my supervisor. She said that she does not see me very often on the ward, so she cannot see my progress and growth'

COMPETENCE				
Display of competence	Showing that they possess the required competences by actually applying them in practice	107	15/83%	‘This week I had a patient with an IDUC who suddenly experienced a lot of pain. I suspected immediately that something had snapped in the bladder, because he’d had an operation. I deflated the IDUC balloon and pushed it a little further in. I then refilled the balloon, and the patient felt no more pain’
Lack of display of competence	Showing lack of required competences, making mistakes	10	6/33%	‘On a late shift I had one patient who needed oxygen due to a pulmonary embolism. I made a mistake and connected the patient to air, not oxygen. I regretted it enormously when I learned of this later, I was in real shock’
Positive perception of own competence	Having the feeling that they acted correctly, that they possess the required competences	81	17/94%	‘I felt competent and confident enough to handle this patient. It was even a kind of adrenaline kick! Because I feel that I am growing as a nurse and that experience was just what I needed!’
Negative perception of own competence	Feelings of falling short and lacking the required competences	49	13/72%	‘I must say that sometimes I do not know things. I would like to know everything and sometimes I feel so stupid and a novice who knows nothing’
DEVELOPMENT				
Development	The ability to develop in the profession by working in practice and following courses	173	18/100%	‘During my first day I experienced that I really like to learn. I long for new challenges and knowledge’
Lack of development	Not being able to meet learning goals	5	4/22%	‘Unfortunately, I have not yet been able to learn a lot from the nursing activities performed by my colleagues and supervisors’
ORGANIZATIONAL CONTEXT				
Complexity of care	Taking care of patients with complex care needs, comorbidity; high clinical responsibilities	22	10/56%	‘I was taking care of very ill and complex patients. This was a valuable experience, but also very demanding. After the shift I was completely exhausted’
Positive work pressure	Workload is experienced as pleasant; time to provide the care they want to deliver	20	12/67%	‘I had a very quiet, uneventful week. We had time for our patients and could provide good care’
Negative work pressure	Workload is too great; lack of time to provide good care and be there for patients	52	17/94%	‘I had very busy shifts, and had to make choices and get my priorities right. I could not finish all my work’
Unrealistic cognitive expectations	They are expected to do things they cannot actually know	25	9/50%	‘The complexity of care made me very insecure, because I had hardly trained on this ward. There are patients with

				very different illnesses and I have not performed many nursing actions myself'
Unrealistic physical expectations	Excessively busy wards, too many patients and insufficient staff, so they cannot provide the required care	33	15/83%	'I was all alone on the ward and took care of 12 patients. Some of them had just undergone an operation. It was very busy and soon I realised that I could not manage to coordinate and provide the required care on my own'
EXISTENTIAL				
Existential: confrontation with illness, death and suffering	Very ill or dying patients, bad news conversations	83	16/89%	'A young woman was transferred to our ward from the ICU. All her fingers and toes were dead, caused by a urosepsis. It was really terrible to see'
Existential: confrontation with youth	Contact with young patients, patients of their own age	14	9/50%	'I notice that I find it hard when I meet patients of my age. It grieves me to see them that way, because I know that most of them are not likely to survive'
Existential: confrontation with feelings of guilt	Feelings of guilt, because they had forgotten to do something, made mistakes or were unkind to a patient	18	7/39%	'When I was changing a bed, the patient fell out of his chair and his head hit the ground. I was very upset and felt very guilty'
GOALS				
Work-related goals	Future career plans	51	13/72%	'It is very instructive to be a supervisor for the first time. I hope to start with the training course soon'
Personal goals	Future plans for private life	13	5/28%	'Now that I am creating my own place at home, I notice that I would like to have a permanent contract'
Positive work-life balance	There is a balance between work and private life: it's all going well	15	8/44%	'My new partner and I are very busy finding a house. So sometimes it's just nice to be back here at work'
Negative work-life balance	There is no balance between work and private life, e.g. caused by high demands, both in private life and at work	32	9/50%	'The previous weeks I was busy at work and busy at home, it was a big headache'
AUTONOMY				
Control	Feelings of control over work or private life	60	15/83%	'Last week I worked late weekend shifts. This was new to me, but I think I had it all well under control'
Lack of control	Not knowing what to do, no control over work or private life	40	15/83%	'I got totally stuck. I took on 3 patients who needed a lot of care, and I really did not know what to do anymore'

FIT				
Fit	Being content with the profession and feeling that the work suits them well	34	14/78%	‘It is very nice to discover that I had made the right choice and that I am happy with my work. I have never experienced this in previous jobs. I work with pleasure and that affects the care I provide’
Lack of fit	They doubt whether nursing is the right job for them	18	10/56%	‘At the moment I do not like my job at all. I wonder if there are other jobs that would suit me better’

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7 CHAPTER

The importance of contextual, relational and cognitive factors for novice nurses' emotional state and affective commitment to the profession

A multilevel study

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Manuscript under review

ABSTRACT

Aim
This study explored the effects of contextual, relational and cognitive factors derived from novice nurses' work experiences on emotions and affective commitment to the profession.

Background
With an increasing demand for well-trained nurses, it is imperative to investigate what aspects of work experiences most affect their commitment in order to develop effective strategies to improve work conditions, work satisfaction, emotional attachment and affective commitment.

Design
A repeated measures within subjects design.

Methods
From September 2013 – September 2014 eighteen novice nurses described work-related experiences in unstructured diaries and scored their emotional state and affective commitment on a scale. The themes that emerged from the 580 diaries were quantified as contextual, relational and cognitive factors. Contextual factors refer to the complexity of care and existential events; relational factors to experiences with patients, support from colleagues, supervisors and physicians; cognitive factors to nurses' perceived competence.

Results
The multilevel analysis showed that complexity of care, lack of support and lack of competence have a direct negative effect on novice nurses' affective commitment, whereas received support has a positive effect. Confrontations with existential events and experiences with patients had no direct effect on affective commitment. Except for complexity of care, all contextual, relational and cognitive factors were significantly related to negative and positive emotions.

Conclusion
To retain novice nurses in the profession, it is important to provide support and feedback. This enables novice nurses to deal with the complexity of care, and feelings of incompetence, and to develop a professional commitment.

INTRODUCTION

Over the past decade, the concept of professional commitment and nurse retention has received considerable attention in the nursing literature (Chang, Shyu, Wong, Friesner, Chu & Teng, 2015; Numminen, Leino-Kilpi, Isoaho & Meretoja, 2016; Spence Laschinger, Leiter, Day & Gilin, 2009). The increasing shortage of nurses is a major concern in most Western countries (Aiken, Clarke, Sloane, Sochalski & Silber, 2002; Robson & Robson, 2016; Sabanciogullari & Dogan, 2015) and is caused to a large extent by an ageing workforce approaching retirement, and a decreased propensity among young people to choose a nursing career (De Cooman et al., 2008; Hasselhorn, Tackenberg & Müller, 2003). Research on this topic showed that it is a great challenge for hospitals to recruit and retain adequately prepared nurses. Professional commitment is considered as one of the most important factors to retain nurses in their profession (Gould & Fontenla, 2006; Parry, 2008; Teng, Lotus Shyu & Chang, 2007).

Almost three decades ago, the conceptualization of organizational and professional commitment was extensively described by Allen and Meyer (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer, Allen & Smith, 1993). Based on the identification of various approaches to the conceptualization and measurement of commitment, they proposed a three-component model of organizational commitment as a psychological state. The components in the model reflect (1) a ***desire*** (affective commitment), (2) a ***need*** (continuance commitment) and (3) an ***obligation*** (normative commitment). Affective commitment reflects a sense of belonging, a desire to maintain membership in the organization or the profession. Continuance commitment refers to the need to remain due to the financial consequences of leaving, and normative commitment refers to a moral obligation to stay (Meyer & Allen, 1991). Of the three components of commitment, affective commitment is most related to work experiences, as well as the degree of identification with the organization or the profession. Affective commitment develops as work experiences become more compatible with employees' feelings of competence and their need to feel comfortable in the profession, both physically and emotionally (Allen & Meyer, 1990; Meyer & Allen, 1991). With regard to nursing, previous research showed that nurses who are emotionally attached to the profession have stronger beliefs in the goals and values of the hospital and have higher levels of enjoyment of being a member of it (Nesje, 2017; Ruiller & Van Der Heijden, 2016). Nurses with high affective commitment experience greater work satisfaction and lower levels of work-related stress, are more devoted to their jobs and identify more closely with the profession (Lu, Chang & Wu, 2007; Schmidt, 2007). From the perspective of the profession and the organization, Velickovic et al. (2014), underlined the essential role of affective commitment as the preferred type of relationship with employees. They found that affective commitment was predicted, inter alia, by positive professional identification and intrinsic job satisfaction.

Nursing not only requires skills and cognitive knowledge, it also requires the ability to cope with high emotional demands (McVicar, 2003; Zheng, Lee & Bloomer, 2016). Emotionally charged work experiences are often related to wellbeing, motivation and commitment (Bacon, 2017; Donoso, Demerouti, Garrosa Hernández, Moreno-Jiménez & Carmona Cobo, 2015). A qualitative study conducted by De Almeida Vicente, Shadvar and Lepage (2016), investigated work-related stressors among paediatric nurses.

The nurses in this study reported that job satisfaction and commitment were highly related to emotionally charged work experiences. Because affective commitment is most strongly related to nurses' work experiences, including their emotional state and their identification with the profession, we have decided to focus on these outcome variables in the current study, i.e. positive and negative emotions and affective commitment to the profession.

Background

In the Netherlands, as in most Western countries, the number of nurses who consider leaving the profession due to heavy workload and cognitive and physical exhaustion is growing fast (werkdruk/nl-nl/artikelen/nieuws/2016/46/werknemers-in-zorg-ervaren-hoge-werkdruk/werkdruk). The increasing complexity of care and the associated high competence requirements turn out to lead to work stress, discontent and disaffection among nurses. Although loosely defined in the literature, following Guarinoni, Motta, Petricci and Lancia (2014) and based on the daily experiences of nurses (Ten Hoeve, Kunnen, Brouwer & Roodbol, 2017), complexity of care is related to the concepts of difficulty, multifactorial influences, diversity, multiplicity (co-morbidity), uncertainty and high demands on personal competences, skills and knowledge. Recent reports indicate that 50% of nurses working in hospital settings have considered quitting their jobs (FNV/Zorg en Welzijn/Ziekenhuisbarometer, 2016). Keeping well-trained and motivated nurses in the profession is not only a huge challenge but also a dire necessity. With an ageing patient population with high comorbidity and complex care demands, the need for good professionals will only increase. Therefore it is inevitable that well-trained nurses be recruited and retained. This might be achieved by creating a work environment that leads to a high degree of commitment with their profession. Within the literature on professions, professional commitment is not only described as being beneficial for employees, but also for the survival of a profession (Hughes, 1984). Existing knowledge suggests that emotionally charged work experiences have a major influence on novice nurses' commitment and, as a result, their intention to remain in the profession (Gardiner & Sheen, 2016; Thoresen, Kaplan, Barsky, Warren & De Chermont, 2003). Given the aforementioned increasing demand for well-trained and well-prepared nurses, it is imperative to investigate what factors derived from daily and emotional experiences mostly affect their emotional state and affective commitment to the profession. Therefore this study investigates the relationship between contextual, relational and cognitive factors and emotions or commitment. The factors are derived from intensively described work experiences in diaries. As far as we know, no study has examined, on a longitudinal basis, the direct effects of these factors derived from work experiences on emotions and affective commitment among novice nurses. These associations and effects must be elicited to develop effective strategies to improve nurses' working conditions, work satisfaction, emotional attachment and affective commitment. Figure 1 presents the theoretical framework for this study.

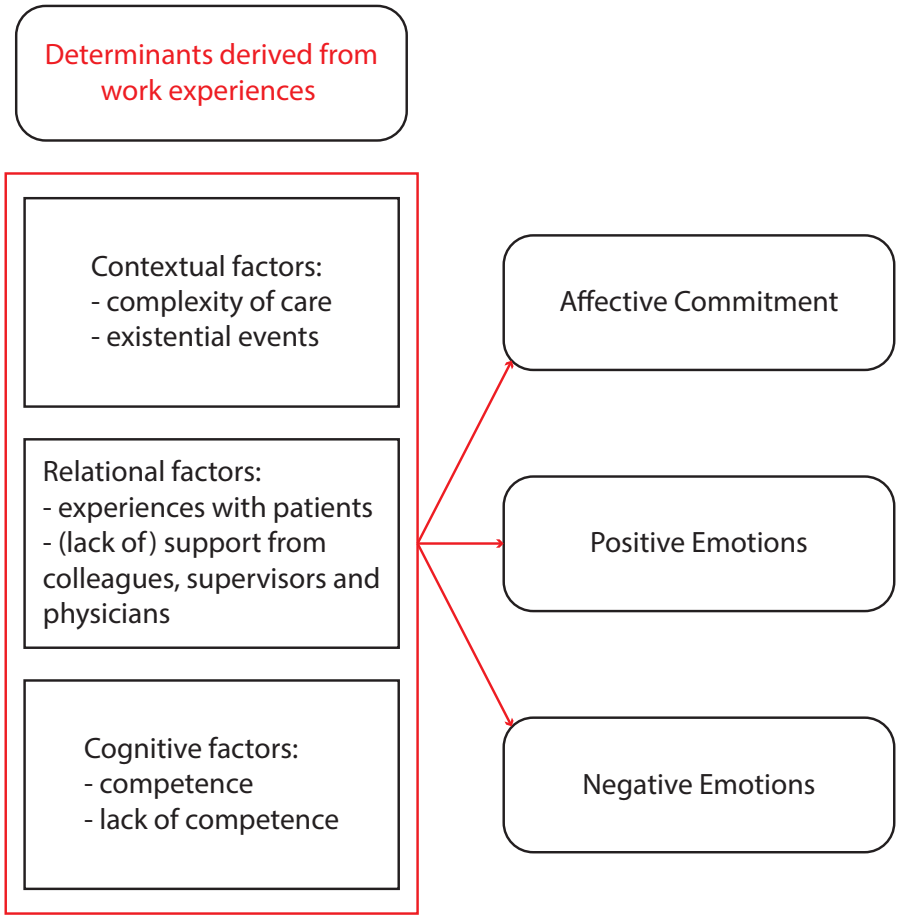

Figure 1 -
Hypothesized direct effects of work experiences on affective commitment and emotions

THE STUDY

Aim
The aim of the study was to investigate whether contextual, relational and cognitive factors derived from novice nurses' work experiences have a direct effect on positive and negative emotions, and on affective commitment.

Design
A repeated measures within subjects design was applied. More specifically, a multilevel design with repeated (diary) measurements nested in novice nurses.

Participants and data collection
A convenience sample of novice nurses working at one University Medical Centre was recruited. The inclusion criteria were a Bachelor's degree in nursing, aged under 30 and with no more than one year's work experience. Participants were recruited in cooperation with the head of nursing at the in-patient departments. The nurses who met the inclusion criteria and were willing to participate (n = 18) were invited to a meeting where they were informed in detail about the purpose of the study and the associated workload. Using the Qualtrics package, data were collected from weekly measurements

between September 2013 and September 2014. The nurses were asked to describe in their diaries a work-related experience which was really important to them. After completing the diaries, the nurses completed a short survey measuring emotional state, i.e. whether they felt positive or negative emotions regarding the described experiences, respectively. Affective commitment to the profession was measured with three items, derived from the Repeated Exploration and Commitment Scale in the domain of Education (RECS-E; Van der Gaag & Kunnen, 2013), e.g. 'I stand by my choice for this profession'. The Cronbach's alpha indicated good internal consistency of the scale (α = .85). Nurses responded on a scale from 1 ('not at all') to 6 ('very much').

Procedure

The diaries (n = 580) were thoroughly read by three researchers to obtain a contextual understanding of the described experiences. The data were inductively explored using content analysis to identify themes as they 'emerged' from the data. The statements within each theme were read, discussed and compared critically. Subsequently, based on the themes and subthemes identified, the texts were deductively coded using the ATLAS.ti package. Three researchers independently coded the diaries, which were then compared to obtain inter-coder reliability and to avoid obtaining only the subjective judgements and interpretations of one researcher (Pope & Mays, 2008). Where there was disagreement, the 'mismatches' were discussed and codes were renamed, merged or deleted. The themes that emerged from the diaries were relatedness, competence, autonomy, organizational context, existential events, development, goals and fit. Subsequently, the codes were quantified and frequencies were calculated. In the diaries (n = 580) a total of 1321 experiences were described and coded. Experiences about relatedness were most frequently described (28%), followed by competence (19%), development (13%), organizational context (11%), existential events (9%), goals (8%), autonomy (8%) and fit (4%). In the current study we derived factors from the themes and explored the direct effects of contextual factors (complexity of care, existential events), relational factors (experiences with patients, support from colleagues, supervisors and physicians) and cognitive factors (competence) on emotions and affective commitment to the profession. These factors are similar to the themes and are derived from the most frequently described experiences in the diaries. The described experiences were both positive and negative and were also coded that way (e.g. presence or lack of competence). Table 1 provides the description of the themes.

Table 1 - Description of subthemes

Identified subtheme	*Definition/Description of subtheme*
Contextual factors	
Complexity of care	Complexity of care is the perception of the nurse regarding the demands and responsibilities as a consequence of multifactorial influences, e.g. multi-morbidity, more specialized medical treatments and technologies.
Existential events	Existential events or experiences are direct confrontations with the illness, suffering and death of patients.
Relational factors	
Positive experiences with patients	Positive nurse-patient relationships. For example, receiving compliments from their patients regarding their professional activities, having nice conversations with their patients.
Negative experiences with patients	Negative nurse-patient relationships. For example, nurses feel disrespected by their patients, confrontation with aggressive behaviour and sexual harassment.
Support from colleagues, supervisors and physicians	Receiving practical or emotional support from colleagues. For example, receiving support in order to deal with a heavy workload, receiving emotional support with existential experiences, feeling welcome in the team. Feeling supported by supervisors regarding transcending issues, such as atmosphere in the ward, workload or career aspirations. Positive nurse-physician relationships. For example, receiving compliments from a physician, experiencing good cooperation and problem-solving with physicians.
Lack of support from colleagues, supervisors and physicians	Lack of support from colleagues, e.g. disloyal behaviour, bullying, gossip. Not feeling supported by supervisors regarding transcending issues, such as atmosphere in the ward, workload or career aspirations. Negative nurse-physician relationships. For example, nurses feel ignored by physicians who refuse to come, insults, rude and arrogant behaviour.
Cognitive factors	
Competence	Having the feeling that they acted correctly, that they possess the required competences.
Lack of competence	Having the feeling of falling short and lacking the required competences.

Ethical considerations

Approval for the study was obtained from the Ethical Committee Psychology of the University. Oral and written information about the research was provided to the participants, and they signed a consent form. Participants were informed that participation was voluntary and that they could withdraw from the study at any time without consequences.

Data analysis

Because of the hierarchical data structure with two levels, i.e. repeated measurements nested in persons, multilevel analysis was conducted using MlWiN 2.33 (Rasbash, Browne, Healy, Cameron & Charlton, 2015). Thus, the dataset had a two-level structure: weekly measurements (at level 1) nested within individual nurses (at level 2). Random intercept models were estimated with a maximum likelihood (ML) method, centred around the grand mean. By leveraging previous literature, we tested in advance the effect of positive and negative emotions on affective commitment. Subsequently the direct effects of contextual, relational and cognitive factors were tested on the three outcome variables. The models were built stepwise with commitment, positive and negative emotions as outcome variables, respectively. For each outcome variable, the multilevel analysis started with a random intercept-only model (null model) without including predictor variables. The next two models tested the two contextual factors, i.e. complexity of care (model 1) and existential experiences (model 2), respectively. Finally, relational (experiences with patients, support) and cognitive factors (competence) were tested (model 3). The intraclass correlation coefficient represents how much variance is determined by individuals, relative to the total variance. The explained variance at each level was calculated as the ratio of the divided variance of each level compared to the variance of the null model. Whether the nested model fit significantly improved after adding the predictors was tested with a decrease in the deviance (-2 residual log pseudo-likelihood), i.e. $\chi 2$-test. The difference in deviance is the value of the test statistic with a $\chi 2$-distribution ($\alpha = .05$) and differences in parameters matched the number of degrees of freedom (Hox, 2010; Snijders & Bosker, 2012.).

RESULTS

Descriptive statistics

The participants ($n = 18$) were all female and ranged in age from 21 to 26 years (mean 23.1; SD=1.4). They differed with regard to preliminary training (fulltime or dual), clinical experience (0-12 months), and staffing position (staff nurse or float pool nurse). Table 2 shows all characteristics. The eighteen nurses completed 580 diaries (range per participant 19-50, mean per participant 35). This means 580 measurement points at level 1.

Table 2 - Participant characteristics (n = 18)

	% (n)	Mean (SD)
Gender female	100 (18)	
Age		23.06 (1.43)
Preliminary education		
Full-time	61 (11)	
Dual	39 (7)	
Clinical experience		
1-12 months	56 (10)	
No experience	44 (8)	
Position		
Staff nurse	*44 (8)*	
**urology/plastic surgery*	11 (2)	
**trauma surgery*	11 (2)	
**pediatrics*	5 (1)	
**internal medicine*	5 (1)	
**surgery*	5 (1)	
**ear, nose & throat*	5 (1)	
Float pool nurse	*56 (10)*	
**central pool*	*40 (4)*	
**pool pediatrics*	*40 (4)*	
**pool internal diseases*	*20 (2)*	

N.B. We did not expect clustering at the ward level because the nurses worked on different wards; therefore we ignored the third level.

Commitment

Table 3 shows the results of the multilevel analysis with commitment as outcome variable. The random intercept model has an intercept of 4.623, indicating the average level of commitment expressed by the average nurse on average over time. The intraclass correlation coefficient (ICC) of this model is 0.44, reflecting that 44% of the variance is at the nurse level compared to the total variance. This means that 44% of the total variance is accounted for by clustering at the nurse level and multilevel analysis is appropriate. In model 1, complexity of care is significantly negatively related to commitment and the model fit improves significantly ($\chi 2(1) = 4.50$, $p < .05$). In model 2, confrontations with existential events was not related to commitment and the model fit did not significantly improve. In the final model support from colleagues, supervisors and physicians was positively related to commitment, whereas complexity of care, lack of support and perceived lack of competence were negatively related to commitment. Experiences with patients did not affect commitment. Model 3 improved significantly ($\chi 2(6) = 15.56$, $p < .05$).

Table 3 - Multilevel analysis of the predictors of affective commitment

	Model 0 B (SE)	Model 1 B (SE)	Model 2 B (SE)	Model 3 B (SE)
Fixed effects				
Intercept	4.623* (0.121)	4.634* (0.121)	4.632* (0.122)	4.646* (0.123)
Contextual factors				
Complexity of care		-0.270* (0.127)	-0.270* (0.127)	-0.275* (0.126)
Existential events			0.011 (0.066)	0.015 (0.067)
Relational factors				
Positive patient experience				0.031 (0.121)
Negative patient experience				-0.005 (0.086)
Support				0.104* (0.049)
Lack of support				-0.135* (0.066)
Cognitive factors				
Competence				0.019 (0.057)
Lack of competence				-0.206* (0.083)
Variance				
Measurement (level 1)	0.319 (0.019)	0.253 (0.088)	0.316 (0.019)	0.307 (0.018)
Nurses (level 2)	0.253 (0.088)	0.253 (0.019)	0.253 (0.088)	0.254 (0.088)
Model fit				
Deviance statistic (-2*Log-likelihood)	1039.139	1034.638*	1034.612	1019.050*
X2 (df)		4.50*(1)	0.026(1)	15.56*(6)
Number of estimated parameters	3	4	5	11

Note. *p ≤ .05 (estimate/SE ≥ 2.00).

Positive emotions

Table 4 shows the results of the multilevel analysis with positive emotions as outcome variable. The random intercept-only model has an intercept of 3.525. The ICC of this model is 0.098, which means that 9.8 % of the variance is at the nurse level compared to the total variance. Model 2 compared to model 1 does significantly improve model fit ($\chi 2(1) = 17.06$, $p < .05$). Confrontation with existential experiences is negatively related to positive emotions. The final model compared to the second model improved significantly again ($\chi 2(6) = 186.61$, $p < .05$). The final model showed that positive experiences with patients, support from colleagues, supervisors, physicians and perceived competence were positively related with positive emotions. Positive emotions were negatively influenced by confrontation with existential events, negative experiences with patients, lack of support from colleagues, supervisors and physicians, and perceived lack of competence.

Negative emotions

Table 5 shows the results of the multilevel analysis with negative emotions as outcome variable. The random intercept-only model has an intercept of 3.008. The ICC of this model is 0.035, which means that 3.5 % of the variance is at the nurse level compared to the total variance. The model fit of all the models improved significantly. Complexity of care, confrontation with existential events, negative experiences with patients, perceived lack of support from colleagues, supervisors and physicians, and perceived lack of competence were positively related to negative emotions. This means that these variables can enhance negative emotions. On the other hand, positive experiences with patients, perceived support from colleagues, supervisors and physicians, and perceived competence were negatively related to negative emotions. This means that these variables can decrease the level of negative emotions.

Model comparisons

Compared to the models on positive and negative emotions, experiences with patients and confrontation with existential events did not contribute to commitment, whereas the experiences with patients have an impact on the level of positive and negative emotions. Complexity of care, lack of support from colleagues, supervisors and physicians, and lack of perceived competence had a negative impact on commitment, but also on negative emotions. It seems that the 'negative' factors (i.e. care complexity, lack of support, perceived lack of competence) had more impact on the level of commitment than the 'positive' factors (positive support). Complexity of care did not have an impact on positive emotions.

Table 4 - Multilevel analysis of the predictors of positive emotions

	Model 0 B (SE)	Model 1 B (SE)	Model 2 B (SE)	Model 3 B (SE)
Fixed effects				
Intercept	3.525* (0.136)	3.544* (0.139)	3.664* (0.140)	3.731* (0.113)
Contextual factors				
Complexity of care		-0.440 (0.346)	-0.431 (0.341)	-0.472 (0.292)
Existential events			-0.741* (0.178)	-1.055* (0.155)
Relational factors				
Positive patient experience				1.118* (0.282)
Negative patient experience				-1.572* (0.201)
Support				0.565* (0.115)
Lack of support				-1.453* (0.153)
Cognitive factors				
Competence				0.481* (0.133)
Lack of competence				-0.712* (0.193)
Variance				
Measurement (level 1)	2.409 (0.144)	2.400 (0.143)	2.331 (0.139)	1.704 (0.102)
Nurses (level 2)	0.253 (0.111)	0.262 (0.114)	0.256 (0.111)	0.127 (0.061)
Model fit				
Deviance statistic	2182.199	2180.596*	2163.540	1976.935*
(-2*Log-likelihood)				
X2 (df)		1.60(1)	17.06*(1)	186.61*(6)
Number of estimated parameters	3	4	5	11

Table 5 - Multilevel analysis of the predictors of negative emotions

	Model 0 B (SE)	Model 1 B (SE)	Model 2 B (SE)	Model 3 B (SE)
Fixed effects				
Intercept	3.008* (0.095)	2.964* (0.098)	2.829* (0.094)	2.708* (0.073)
Contextual factors				
Complexity of care		1.058* (0.336)	1.033* (0.329)	1.073* (0.278)
Existential events			0.854* (0.171)	1.155* (0.146)
Relational factors				
Positive patient experience				-1.339* (0.268)
Negative patient experience				1.411* (0.190)
Support				-0.416* (0.108)
Lack of support				-1.512* (0.147)
Cognitive factors				
Competence				-0.255* (0.125)
Lack of competence				-0.846* (0.181)
Variance				
Measurement (level 1)	2.349 (0.140)	2.304 (0.137)	2.220 (0.132)	1.610 (0.096)
Nurses (level 2)	0.086 (0.054)	0.096 (0.057)	0.070 (0.047)	0.007 (0.019)
Model fit				
Deviance statistic (-2*Log-likelihood)	2154.975	2145.209*	2121.096	1924.539*
X2 (df)		9.77*(1)	24.11*(1)	196.56*(6)
Number of estimated parameters	3	4	5	11

DISCUSSION

The findings of this study shed light on the impact of contextual, relational and cognitive factors derived from real-life experiences on novice nurses' emotional state and affective commitment to their profession. More specifically, this study explored to what extent within individuals, work commitment and emotions change over time as an effect of contextual, relational and cognitive factors derived from specific work experiences. These work-related experiences are accompanied by positive and negative emotions. The nature of the factors derived from the experiences that were tested in our models started with the organizational context, then focused on the relationships with patients and colleagues, and finally the focus was more and more on nurses' own competences.

With regard to contextual factors, experiences related to complexity of care had a direct negative effect on affective commitment and were positively related to negative emotions. When novice nurses start working in a hospital setting, they undergo a transitional phase from student nurse to being a practising professional. This process of transition is often accompanied by high demands on nurses and they have to deal with shorter patient stays, and more specialized medical treatments and technologies. In their daily practice they are confronted with severely ill and complex patients whose care requires high-level decision-making skills. Complexity of care is the perception of nurses regarding the demands and responsibilities as a consequence of multifactorial influences, such as patients with co-morbidity and multi-problematic status, geriatric syndromes, physical disability and diagnostic instability (Guarinoni et al., 2014). Nowadays, patients who are admitted to hospital often have multiple disorders, or a simple condition with difficult complications. The treatment of special or complex conditions requires a lot of knowledge and makes great demands on the novices' responsibilities as a nurse. Further, unlike more experienced nurses, they cannot rely on routine. The findings of other studies with novice nurses indicated that they are involved in multiple demanding patient situations that put high demands on their critical clinical judgements (Bjerknes & Bjork, 2012; Dyess & O'Sherman, 2009; Wangensteen, Johansson & Nordstrom, 2008). As a consequence, the increasing complexity of care turned out to result in higher work pressure, work stress, job dissatisfaction and decreasing commitment (Bakker, Le Bland & Schaufeli, 2005). In our study, existential experiences such as confrontations with illness, death and suffering were significantly related to emotions but had no direct effect on novice nurses' affective commitment. They were not only related to negative emotions, as could be expected, but also to positive emotions. This could prove that taking care of these patients and the perception that they really made a difference to them had positive implications and gave a boost to their self-confidence. Although this was not explored in this study, it is plausible that novice nurses' benefited from these experiences and that they could learn from them. This is supported by Taubman-Ben Ari and Weintraub (2008) who found a positive correlation between caring for dying patients and a sense of self-esteem and meaning in life. The study by Donoso et al. (2015) also indicated that nurses' early confrontations with death and emotional demands had a positive influence on motivation and wellbeing (positive affect) among nurses.

Relational factors, such as support from colleagues, supervisors and physicians, or the lack of support, was significantly related to both positive and negative emotions, and

to the level of commitment. Perceived positive feedback and support had a significant and positive effect on positive emotions and affective commitment, and were significantly and negatively related to negative emotions, while perceived negative feedback and lack of support were accompanied by negative emotions and were significantly and negatively related to positive emotions and commitment. When an individual nurse perceived more support, her level of commitment increased, indicating that commitment changes are positively related to changes in perceived support over time. These results are in line with previous studies (Chen, Yang, Gao, Liu & De Gieter, 2015; Ruiller & Van der Heijden, 2016), which found that personal workplace support was strongly and positively related to nurses' affective commitment and that interpersonal exchanges in the daily work situation are crucial. The role of organizations and management, and support of and trust among colleagues and supervisors, also proved to improve nurses' work satisfaction and organizational commitment (Hsu, Chiang, Chang, Huang & Chen, 2015; Parker, Giles, Lantry, & McMillan, 2014). If the relationships with colleagues, supervisors and physicians are not based on trust and respect, it can be assumed that novice nurses will develop low levels of work enjoyment and self-confidence. Lack of support and hostility have also been documented as associated with work stress, job dissatisfaction and attrition (MacKusick & Minick, 2010; Young, Stuenkel & Bawel-Brinkley, 2008). Moreover, good relationships with colleagues, supervisors and physicians have been shown to have more influence on novice nurses' affective commitment than relationships with their patients. Although emotionally charged relationships with patients turned out to be important issues that were significantly related to positive and negative emotions, they appeared to have no influence on affective commitment. As nurses, especially in hospital setting, provide care for patients who are suffering from severe and life-threatening illnesses, it is inevitable that nurse-patient relationships are permeated with emotions (Hefferman, Quin Griffin, McNulty & Fitzpatrick, 2010). In contrast with our findings, the results of previous studies indicated that experiences with patients were not only related to emotions, but also to nurses' commitment or intention to leave the profession. The nurses in the study by Santos, Chambel and Castanheira (2015) who perceived that they had a significant impact on their patients' lives and wellbeing, felt more committed to their profession. On the other hand, emotional distress and feelings of hopelessness seemed to reduce affective commitment and increase intentions to leave clinical practice (Mackusick & Minick, 2010).

Regarding cognitive factors, perceived competence and lack of competence, the results showed that novice nurses' experiences related to lack of competence had a significant direct effect on both positive and negative emotions, and on affective commitment, whereas positive experiences with competences were only significantly related to emotions, not to commitment. Feelings of failure and lack of knowledge are likely to undermine work pleasure and self-esteem. Nurses must be competent and need to improve their competences constantly in order to provide the best possible care for their patients. Evidently, the nurses in our study felt that they were significantly lacking the necessary knowledge and skills required to provide good care. This lack of competence among novice nurses is often associated with being ill-prepared for clinical practice, and being unable to link their theoretical knowledge to the real experiences in the clinical setting. This 'theory-practice gap' is widely discussed in the literature (Bjerknes & Bjork 2012; Duchscher & Cowin, 2004; Monaghan, 2015). Not being able to meet professional

expectations is a plausible predictor for high levels of stress (Brown & Edelmann, 2000; Ross & Clifford, 2002). Previous studies showed that perceptions of competence are significantly associated with job satisfaction and professional commitment (Bratt & Felzer, 2011; Numminen, Leino-Kilpi, Isoaho & Meretoja, 2015). It is obvious that novice nurses need to develop their competence by learning from clinical practice and by observing role models and receiving feedback. Informal workplace learning and professional support could help novice nurses to be better prepared for the clinical setting and to deal with complex care situations. Previous studies indicated that feedback, peer-to-peer intervision, being linked to a work supervisor and scheduled evaluation times are indispensable strategies to achieve this (Chang, Wang, Huang & Wang, 2014; Parker et al., 2014). The finding of the study by Takase, Yamamoto, Sato and Niitani (2015) showed that the self-reported competence of less experienced nurses was positively correlated to learning from others. This is in line with other studies that indicated that in order to enable novices to maintain and develop their competences, support from colleagues and supervisors is essential, also to keep them committed to the profession (Clark & Holmes, 2007; Marks-Maran et al., 2013).

Strengths and limitations

The longitudinal design and the number of measurement points (n = 580) of real-life described daily experiences are strengths of the current study. The factors investigated in this research are not based on survey scales but emerged from the diaries kept by the novice nurses. Conducting the research in only one hospital and the number of participants (n = 18) could be considered limitations.

CONCLUSION

In summary, we can conclude that contextual, relational and cognitive factors derived from work experiences are highly related to novice nurses' affective commitment and emotional state. Negative work experiences, i.e. complexity of care, lack of support and perceived lack of competence, reduced affective commitment more than positive experiences, i.e. presence of support and perceived competence, increased the commitment. The level of commitment suffers the most from lack of support from colleagues, supervisors and physicians, perceived lack of competence and experiences characterized by complexity of care. Interestingly and unexpectedly, experiences with patients, whether or not seriously ill or dying, did not appear to affect commitment, although they were significantly related to both positive and negative emotions. Complexity of care had a negative impact on affective commitment and enhanced negative emotions. The results of our study emphasize the significant importance of support and feedback to enable novice nurses to deal with the complexity of the work environment and to develop professional commitment. Therefore, these aspects are paramount in retaining novice nurses in the profession.

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8 CHAPTER

General Discussion

INTRODUCTION

The development of the professional identity of both students and novice nurses was taken as the starting point of this thesis. In the careers literature, professional identity is described as one's professional self-concept, based on attributes, beliefs, values, motives and experiences (Ibarra, 1999; Arthur, 2008). Developmental psychologists place the concept of identity in a wider context. Recent theories of identity development in general, emphasize the interactional character of identity, meaning that it emerges in the interaction between the individual and the context (Bosma & Kunnen, 2001; Schwartz, Donnellan, Ravert, Luyckx & Zamboanga, 2013). Moreover, professional identity cannot be dissociated from one's personal identity, which develops over time.

Both Erikson (1959) and Marcia (1966) described identity development from a psychosocial point of view. Erikson distinguishes eight stages of psychosocial development that an individual should pass through from infancy to late adulthood and maturity. In the fifth stage, adolescence, issues related to identity versus role confusion are determinative. In the sixth stage, early adulthood, issues related to intimacy versus isolation are crucial. In both phases friends, peers and role models become increasingly important (Erikson, 1959).

Arnett (2014) uses the term 'emerging adulthood', which encompasses late adolescence and early adulthood (approximately 18–26). One of the characteristics of emerging adulthood is the exploration of possible educational directions and different occupational futures. In emerging adults, both school and work are determinative for the development of personal identity. Over the course of college years and their first job experiences, young people's self-concept and psychological well-being improve and they gain a more distinct identity. They seek shared activities and, even more importantly, shared beliefs and values (Arnett, 2014). Marcia (1966) conceptualized identity development as consisting of two main processes: exploring different alternatives (the process of exploration) and committing to a particular identity alternative (commitment). The concept of commitment refers to the presence of goals, values and beliefs, among other factors, that provide meaning to life (Kunnen & Metz, 2013). Once people have established their identities, they are ready to make long-term commitments to others (Erikson, 1959).

Both nursing students and novice nurses are in the phase of emerging adulthood, a period of exploration and identity development which includes their professional identity. In the nursing literature, professional identity is defined as 'the values and beliefs held by the nurse that guide her/his thinking, actions and interaction with the patient' (Fagermoen, 1997, p. 435). In other words, professional identity refers to what it means to be and act as a nurse in relation to the work environment. Work experiences, not only with patients, but also with colleagues, supervisors and other healthcare professionals, are essential for their identity formation (Gregg & Magilvy, 2001). The construction of a successful professional identity is often related to job satisfaction, career success and commitment (Clarke, Brown & Hailey, 2009; Clements, Kinman, Legetter, Teoh & Guppy, 2015; Hall, Zhu & Yan, 2002). Moreover, professional identity develops over time and throughout an educational programme or a professional career. Thus, student nurses

develop their identity during their educational programme and during clinical placements (Brown, Stevens & Kermode, 2012; Walker et al., 2014). Novice nurses transition from being a nursing student to a professional practising nurse. This transition is often described as the struggle for a new professional self and a new professional identity (Arrowsmith, Lau-Walker, Norman & Maben, 2016; Bjorkstrom, Athlin & Johansson, 2008). Striving for this new identity is often linked to experiences in the clinical setting, where young nurses are confronted with new challenges and responsibilities (Bjerknes & Bjork, 2012; Duchscher, 2009; Leong & Crossman, 2015).

This thesis first discussed the public image of nursing and its association with nurses' self-concept and professional identity development based on a literature review (Chapter 2). Following this, professional identity development in student nurses was examined in a longitudinal study: first, a cross-sectional study was performed to explore students' perceptions of nursing at the beginning of their education (Chapter 3); second, we examined if, when and why these perceptions change over time (Chapter 4); and, finally, we performed a qualitative study to determine factors that affect students' decisions to leave or complete the educational programme (Chapter 5). The professional identity development of novice nurses was then examined in two additional studies: first, a longitudinal diary study was conducted to gain a greater understanding of novices' first lived experiences in a clinical setting (Chapter 6) and, subsequently, we performed a multilevel study to explore the impact of work experiences on their commitment to the profession (Chapter 7). This final chapter reflects on the main findings of the studies described in this thesis and discusses the methodological issues. We will finalize this chapter by considering the implications for education and practice, making recommendations for future research, before some concluding remarks.

MAIN FINDINGS

Students

Nursing students demonstrate a wide range of pre-existing perceptions of nursing. They choose nursing for various reasons, such as a strong desire to become a nurse, wanting to care for people, and job opportunities (McLaughlin, Moutray & Moore, 2010; Wilkes, Cowin & Johnson, 2015). It appears that student nurses begin their training programme with a fairly well-formed sense of nursing, although previous research has also shown that there is a noticeable gap between students' expectations and the reality of education and the clinical learning environment (Magnusson & Amundson, 2003; Papathanasiou, Tsaras & Sarafis, 2014). Unrealistic expectations of nursing may be an obstacle to identifying with the profession, and thus may lead to dissatisfaction and voluntary withdrawal from the programme (Brodie et al., 2004; O'Donnell, 2011).

Perceptions of nursing

In this thesis, the perceptions of Dutch nursing students enrolled in a Bachelor's of Nursing programme were examined. At the beginning of their four-year programme, we measured newly enrolled students' orientations and attitudes towards nursing to gain insight into their perceptions of their future career (Chapter 3). The results of our study showed that, in general, students' perceptions were mainly positive, and the caring and

empathetic aspects of nursing were especially highly appreciated. Moreover, perceptions of the professional competences required of nurses, the professional roles nurses fulfil and the career opportunities the profession has to offer were highly valued. With regard to issues related to family and personal life, only a minority of the students (14%) seemed to experience problems with finding a balance between their studies and private life at this stage of their educational programme.

Previous research has shown that personal and environmental characteristics predict students' perceptions of nursing, especially gender, preliminary training and healthcare work experience (Cowin & Johnson, 2011; Miers, Rickaby & Pollard, 2007). This is in close agreement with our findings, which revealed that students with some experience of nursing in a healthcare setting, who had chosen nursing as first-choice programme and who aimed to make a career in nursing were far more positive towards nursing than their counterparts. These important characteristics should be kept in mind when recruiting and assessing new students.

Changing perceptions

We found that beginning students' perceptions of nursing were mainly positive, especially with regard to the caring aspect, as well as competences and professional roles. Positive perceptions may be indicators for study success, as a positive attitude is seen as a prerequisite for effective learning and has also been linked to satisfaction and study motivation (Vanhanen & Janhonen, 2000a, 2000b). However, almost 45% of our students dropped out during the first two years of the programme. Therefore, we explored what happened to students' perceptions of nursing during these first two years (Chapter 4). Did their perceptions of nursing change, and, if so, when and why did these changes occur? Moreover, did these changes affect their motivation to complete the programme?

We found that students' perceptions changed significantly during the first two years of training. In general, students' scores on questions related to knowledge, skills and the professional roles of nurses, such as 'Nurses participate in the development of healthcare policies' and 'Nurses integrate health teaching into their practice' increased over time, while scores on questions related to empathic behaviours, such as 'Nurses protect patients in the healthcare system' and 'Nurses value time at the bedside caring for patients', decreased. Exposure to the process of nurse education and clinical placements seemed to shift students' focus from being idealistic, altruistic and empathic to being knowledgeable, with a focus on competences, skills and role development. As they advance in their training programme and complete their first clinical placements, students obviously discover that nursing is a profession with high practical and academic demands. The most striking change concerned students' perceptions of empathy.

The results of our study showed that the empathetic aspect of nursing was considered far less important at the end of their second year of training. Apparently, students no longer perceived issues that were related to protecting and standing up for patients to be an essential part of nursing. A possible explanation might be that hospital care is becoming increasingly medicalized, leaving little time for the empathetic side of nursing. We also found that finding a balance between studies and private life became more important, with the strongest change after six months of training. Apparently, as they

progress in their training, students discover that the demands of the educational programme and clinical placements were harder to reconcile with their private life than expected.

Career choice, attrition and retention

In agreement with the findings of previous studies about career choice (Crick, Perkinton & Davies, 2014; McLaughlin et al., 2010), we found that the main reasons students decide to become nurses are the caring aspect of the profession, having role models in their environment and the great variety of jobs the profession has to offer (Chapter 5). Most participants had sought a career that involved caring and having contact with people ('You must feel the need to help people … you must feel empathic'). Direct experience of the profession – due to having friends or family members who were nurses – was perceived as a great source of influence on choosing a nursing career ('My aunt is a nurse and two of my three cousins are studying nursing. It really runs in the family'). Nursing was also perceived as a career which offered job security, job opportunities and a variety of jobs ('I chose this programme because I can always find a job in healthcare'). All in all, it seems that students start their nursing education with clear and well-formed expectations and perceptions of their future profession.

Concerning attrition, we found that students who considered withdrawing attributed this to problems with the programme, the theory-practice gap and clinical placements. Feelings of dissatisfaction with the education programme were associated with the quality of the programme and a lack of support from teaching staff. The perceived theory-practice gap caused a lot of stress and feelings of unpreparedness for clinical practice. A consistent issue was the students' concerns about lacking the knowledge to deliver good care. Poor-quality clinical placements were mostly related to not being able to complete learning goals and the feeling of not being welcomed in the team. Students expressed feelings of disappointment after they were exposed to the clinical environment. Perceived lack of practical and emotional support from colleagues and mentors was by far the most important reason for attrition. This accords with other research in this field which has suggested that student nurses need feelings of belongingness during clinical placements and they need support from their mentors (Jack et al., 2017; Materne, Henderson & Eaton, 2017).

Despite these considerations regarding withdrawal, intrinsic and extrinsic motivations seemed to be strong enough to cause them to decide to stay in the programme. Intrinsic factors, such as a strong desire to become a nurse, wanting a nursing diploma and perseverance were of decisive importance. Support from family, friends, tutors and school staff were the most important extrinsic factors that motivated them to remain in the programme. Satisfaction with the programme and perceived support from teaching staff kept them motivated to complete their degree. Clinical placements were especially valued when they perceived enthusiasm and support from their mentors and their team. Working in a friendly and supportive team and being welcomed proved to be more important than the patient group or clinical field. These findings are in accordance with previous studies which found that clinical placement experiences in a favourable environment play a role in creating and enhancing identification with the profession, and in retaining students (Lamont, Brunero & Woods, 2015; Materne et al., 2017).

Identification with the profession is also defined as a key predictor of commitment (Stinglhamber et al., 2015).

In summary, we found that the first two years of education are important for nursing students' identity development, and are also decisive for their commitment and motivation to complete their programmes. Students' decisions to continue or withdraw are strongly related to both classroom and clinical placement experiences. The role of teaching staff and mentors is invaluable in motivating students during their education and placements.

Novice nurses

When novice nurses start working in clinical practice, they enter a period of transition to a new role and professional identity. This new professional identity emerges mainly from work experience, interactions with patients and cooperation with colleagues, supervisors and physicians. Identity develops through these interactions and confrontations with challenging events in the work environment. Novice nurses are usually in 'emerging' adulthood, a stage of life where they have to balance the demands of work and personal life. They are confronted by ongoing professional and emotional developmental processes. Previous studies have reported that support and guidance from more experienced nurses and supervisors was invaluable in teaching them how to deal with emotionally stressful events (Howarth, Holland & Grant, 2006; Jewell, 2013). In addition, the need to feel accepted in the team was found to be an important condition for an effective transition from student to professional nurse (Howarth et al., 2006; Kelly & Courts, 2007). Professional identity in nursing is often related to job satisfaction, motivation, commitment and retention (Cowin, Craven, Johnson & Marsh, 2006; Neilson & Jones, 2012), which, in turn, are associated with support from and collaboration with inter-professional peers and supervisors (Andrew, 2012; Clements et al., 2015).

First experiences in the clinical setting

The results of our diary study, in which novice nurses described their first lived experiences in a clinical setting, demonstrated that the relationships with patients, colleagues, supervisors and physicians were highly important (Chapter 6). We found that negative relational experiences lead to low job satisfaction and less well-being. Many nurses reported frustrating work relationships with physicians. They reported feeling ignored and belittled and complained of not being treated like professionals. Moreover, they had negative confrontations with patients, experiencing harsh criticism, insults and humiliating remarks. Situations where novice nurses perceived a lack of support from colleagues and supervisors and where they experienced bullying and intimidation turned out to be crucial to their sense of well-being and enjoyment of their work. These negative experiences were mostly due to high work pressure and low staffing.

In contrast, positive relational experiences led to increased self-confidence, well-being and work pleasure. Our results showed that Interpersonal moments with patients, especially being able to do something for them, had a positive impact on job satisfaction and work motivation. Good working relationships with other nurses, feeling welcomed in the team, and feeling supported by the team and supervisors also contributed to enjoying work. These positive relationships outweighed the negative ones. Some nurses reported

that good relationships with their colleagues and supervisors were crucial for their well-being and job satisfaction, and were even more important than the patient group they were working with. Supportive relationships were found to play an important role in enhancing their self-esteem, professional performance and feelings of fitting into the profession.

Issues related to the work environment, such as high work pressure, high complexity of care and unrealistic demands, were also frequently described. These experiences were associated with feelings of dissatisfaction, exhaustion and not being able to provide adequate patient care. In addition, confronting existential events were accompanied by strong emotions and a sense of losing control of feelings. The nurses reported feeling unprepared to deal with end-of-life care and they expressed their feelings of hopelessness and emotional distress. One of the strategies to deal with these stressful existential situations was to share their experiences with colleagues and supervisors.

In contrast to the above-mentioned negative experiences, we found that many nurses experienced challenging situations which they were nevertheless able to manage. Being responsible for a large number of patients and succeeding in delivering good-quality care increased positive perceptions of personal competence. A common thread running through the diaries was the need for and satisfaction with continuing professional development. Having educational opportunities and opportunities for career development were described as being essential for their personal and professional growth.

In summary, this study showed that the transition from student nurse to professional staff nurse is a challenging process involving many existentially confronting and stressful situations. Novice nurses have to deal with many challenging and demanding experiences in their daily practice. Positive work experiences, primarily support from colleagues and supervisors, seemed indispensable to guide them through this period of transition from student to nurse professional.

Emotional state and commitment

The study reported on in Chapter 7 focused on the effects of work experience on novice nurses' emotions and commitment to the profession. The results showed that relational experiences, existentially confronting events and working in complex care situations had a strong impact on their emotional state and commitment. Positive emotions and the level of commitment suffer the most from lack of support from colleagues, supervisors and physicians, perceived lack of competence and experiences characterized by complexity of care. Perceived lack of support increased the nurses' negative emotions and had a strong effect on positive emotions and commitment, while perceived positive feedback and support had a strong effect on nurses' positive emotions and commitment. We also found that when an individual nurse perceived more support, their level of commitment increased, indicating that changes in level of commitment are positively related to changes in perceived support. These results are in line with previous studies (Chen, Yang, Gao, Liu & De Gieter, 2015; Ruiller & Van der Heijden, 2016), which found that personal workplace support was strongly and positively related to nurses' affective commitment and that interpersonal exchanges in the daily work situation are crucial.

The perceived lack of competence of novice nurses is often associated with feelings of failure and being unable to link their theoretical knowledge to actual experiences in the clinical setting (Bjerknes & Bjork, 2012; Clark & Holmes, 2007; Duchscher & Cowin, 2004). These experiences also increased negative emotions and decreased positive emotions and the nurses level of commitment. In addition, complex care situations turned out to have a direct negative effect on nurses' emotional state and commitment.

We found that relational experiences with patients did not appear to affect their commitment, although they were significantly related to both positive and negative emotions. The same applied to existential events, such as the sudden death of a young patient. These experiences reduced positive emotions and increased negative emotions, but they did not affect commitment to the profession. As nurses, especially in hospital settings, provide care for patients who are suffering from severe and life-threatening illnesses, it is inevitable that nurse-patient relationships are permeated with emotions. These findings correlate well with the literature (Heffernan, Quin Griffin, McNulty & Fitzpatrick, 2010; Santos, Chambel & Castanheira, 2015).

In summary, we found that despite the negative experiences, none of these novice nurses gave up or expressed feelings of long-standing exhaustion or burn-out. All of them seemed to manage to deal with challenging work situations. However, perceived support from colleagues and supervisors seemed indispensable to remaining committed. Thus, the presence and support of colleagues and supervisors are indispensable to ensuring novice nurses remain motivated to continue in the profession.

Public image, identity development and commitment

The results of the studies that were discussed in Chapter 2 revealed that, despite the professionalization of nurse education and practice, the image of nursing is still diverse and incongruous, and is predominantly based on misconceptions and stereotypes. Nursing is still mainly portrayed as a female profession, which involves having a subordinate position and playing a supportive role to physicians. The literature showed that this public image is closely linked to nurses' self-concept, professional identity development and commitment to the profession (Gregg & Magilvy, 2001; Takase, Kershaw & Burt, 2002). Commitment can be considered as an intrinsic aspect of being a nurse. The importance of commitment in managing the demands of education and practice has been highlighted in previous research (Clements et al., 2015; Panaccio & Vandenberghe, 2009).

In this thesis, we found that the public image of nursing was not an issue for students and novice nurses. Some students mentioned it indirectly in the interviews, but they did not seem to have any problems with a distorted image or low professional status. Novice nurses only mentioned problems with their professional status in cooperation with physicians. The diaries revealed that the majority of the nurses felt belittled by physicians, and complained of not being treated as professionals. Negative experiences with patients were related to verbal harassment and criticism, never to problems with image or their professional status. One explanation for this could be that these students and nurses had already chosen the profession, and therefore had already incorporated, often unconsciously, issues related to public image.

METHODOLOGICAL CONSIDERATIONS

Research design

The strength of this thesis is its longitudinal nature and the combination of different methodologies and approaches. The literature review, which was fundamental for our discussion paper (Chapter 2), provided an overview of factors that were related to the image and professional identity of nurses. The main outcomes of this review provided the starting point for the follow-up studies among students and nurses.

In the cross-sectional study we were able to explore student nurses' orientation and attitudes towards their future profession (Chapter 3). The quantitative and qualitative follow-up studies provided more insight into students' changing perceptions and their commitment to nursing (Chapters 4 and 5). Longitudinal data on students' perceptions of nursing are very scarce, therefore, the results of our study added value to the body of knowledge concerning nursing students' perceptions of nursing and their professional identity development. The transition from student to nurse has been described in various studies, but as far as we know, this is the first diary study that provides insight into novice nurses clinical experiences on a longitudinal basis (Chapter 6). To analyse which work experiences were related to emotional states and commitment, a repeated-measures within-subjects design was applied. The results of this follow-up multilevel study enhances our understanding of which work experiences have the greatest influence on the level of commitment of novice nurses (Chapter 7).

Strengths and limitations

The results of the studies included in this thesis should be interpreted with their strengths and limitations in mind. While these strengths and limitations were described in detail in the separate chapters of the thesis, a short synopsis of the main issues is presented below.

With regard to the studies of nursing students, one strength was the large sample size and high response rate (88%) at the first time point, which implies high representativeness and good generalizability. The longitudinal character, with four time points within a two-year period covering the same cohort of students, can also be considered a strength. By using a prospective design, we were able to explore students' perceptions of nursing at the beginning of the programme and throughout the first two years of their education. The strength of the qualitative follow-up study is that we not only included students who continued, but also interviewed students who withdrew from the programme.

Regarding the studies of novice nurses, one strength was the character of the data collection, with unstructured written diaries that focused on novice nurses' 'lived experiences'. Other strengths were the longitudinal design, the number of diaries that were collected (n = 580) and the mixed method approach, whereby, after completing the diaries, the nurses also completed a short survey measuring their emotional state and level of commitment to the profession.

In addition to these positive aspects, however, there are also some limitations. When we started this research, the Nursing Attitude Questionnaire (NAQ) was considered to be reliable and valid (Bolan & Grainger, 2009; Grainger & Bolan, 2006; Toth, Dobratz & Boni, 1998). However, during the research we discovered its limitations: no factor analysis had been performed to test its construct validity. Therefore, we reduced the NAQ items to a smaller number of coherent subscales and tested the factorial structure of the reduced instrument. The reliability of the subscales ranged from good to acceptable, implying that the validity and reliability of the revised instrument needs further psychometric testing.

Another limitation of that study was that only 123 students completed the survey each time, which might suggest that the perceptions captured in it are not representative of the whole study group. Moreover, the qualitative follow-up study, only included two students who had withdrawn from the programme. This was mainly due to the fact that students who dropped out were so disappointed that they were not willing to participate. Moreover, it was difficult to contact these students. Regarding nurses, conducting the research among eighteen novices in only one hospital can be considered a limitation.

IMPLICATIONS FOR EDUCATION AND CLINICAL PRACTICE

This thesis expands our knowledge of the reasons why students and nurses complete their educational programme and remain in the profession, respectively. In addition, factors that are related to these issues are discussed; for example, preparedness for practice and the importance of support and good relationships with peers and supervisors. With the growing shortage of and the increasing demand for well-educated nurses, policymakers and nurse managers must be informed about factors that contribute to students' and nurses' professional identity development, their commitment to the profession and their intention to remain in it.

Education

Universities of applied sciences in the Netherlands play a pivotal role in preparing student nurses for clinical practice by teaching them the competences that are needed for a successful transition. Despite these efforts, student nurses often feel unprepared during clinical placements, which sometimes leads to disappointment and attrition from the programme. Therefore, based on our findings, as described in Chapters 3, 4 and 5, we would like to make the following recommendations:

1) Knowledge of student perceptions of nursing from the very beginning may be vital to study success. One way to investigate this is to assess students before they begin their programme. Recruitment and selection interviews between teachers or experienced nurses and potential students may assist in better understanding early commitment to the profession.

2) We found that having some experience of nursing, indicating nursing as

the first choice of study and a desire to make a career in nursing were predictors of positive orientation and attitude towards nursing (Chapter 3). These issues could be discussed in the selection interviews.

3) Students will be better prepared for complex care situations if they are provided with opportunities to interact with professional nurses at an early stage in the education programme.

4) Better preparation of students for clinical practice can be attained by inviting experienced nurses to explain what the nursing profession actually entails.

5) To be aware of the occurrence of problems during clinical placements, teaching staff and mentors need to cooperate more closely and discuss the problems with the students, which will also assist in keeping them motivated.

6) Study success will be enhanced if teachers and mentors pay more attention to the individual perceptions and problems of first and second-year students, both in the classroom and during clinical placements.

7) Study success also depends on the competences of teachers. Therefore, it is crucial that they have recent experiences in clinical practice.

8) There is insufficient information about the reasons for drop-out. Exit interviews with all students who have withdrawn, or intend to withdraw, could provide important information about what could be done to help them remain in the programme.

Clinical practice

This thesis showed that novice nurses are confronted with complex and challenging workplace situations, which cause feelings of uncertainty, decreased job satisfaction and decreased commitment to the profession. The perceived support from their colleagues, supervisors and physicians is essential to help them deal with the high demands of clinical practice. The following recommendations, based on our findings as described in Chapters 6 and 7, are intended to enhance novice nurses' transition from student to professional staff nurse:

1) Experienced nurses, supervisors and physicians must take into account that novice nurses struggle with a gap between their theoretical knowledge and practical skills. More attention to this theory-practice gap may help novice nurses to grow in their profession and develop a strong professional identity and affective commitment.

2) It is essential that novice nurses are given the opportunity to discuss their experiences with their colleagues and supervisors and express their emotions, in order to deal with complex and existentially confronting workplace situations.

3) Novice nurses must be supported by colleagues and supervisors at the beginning of their working careers, with the aim of increasing work pleasure, job satisfaction, self-confidence and commitment to the profession. This could, for example, be achieved by implementing moments for peer intervision and informal supervision on a structural basis.

4) Intervision and supervision must be primarily focused on positive experiences, after which omissions and errors can be addressed.

5) To address disrespectful behaviour from patients, colleagues and physicians, there is a strong need for empowerment among novice nurses. One possibility would be to offer them courses in these areas.

In summary, in anticipation of nursing shortages, it is essential to retain students and nurses by preparing them well for the profession and ensuring a work environment that enhances professional development, satisfaction and commitment to the profession. Individual guidance, both at university and in practice, is necessary to achieve this. Offering praise or, in passing, asking students and young nurses how they are doing, does not take much time. In the long term, paying attention will be worth it because more people will remain in the profession. In addition, to increase recruitment and retention of students and nurses, policymakers, nursing organizations, nursing management, staff nurses, mentors and teachers should work in greater cooperation to achieve this.

FUTURE RESEARCH

Globally, the shortage of well-trained nurses and high turnover rates have become issues of importance. Hospitals and other healthcare institutions in the Netherlands are also struggling with deficiencies in nursing numbers. Therefore, future studies on the recruitment and retention of nursing students and newly graduated nurses should focus on gaining a deeper understanding of what motivates them to remain in an educational programme and/or the profession.

1) With regard to the recruitment of students and nurses, research on the image of nursing among secondary school students may provide important insights into the reasoning behind their potential career choice.

2) To discover what impedes students' identity development and, subsequently, their motivation to remain in a programme, an intervention study could be implemented that especially focuses on support. We suggest that teachers and mentors, individually or together, plan interviews with the students in the intervention group every three months during the first two years to discuss the students' emotional and cognitive needs. Every six months, the intervention group and a control group should complete questionnaires to explore whether there are differences in their perceptions of nursing.

3) Another option that might appeal more to young people would be sending them an App on a weekly or fortnightly basis to explore their needs.

4) The Nursing Orientation Tool and the Nursing Attitude Questionnaire, both of which we used in our studies, could be used for this purpose. However, to gain a more complete picture of students' perceptions of nursing in relation to commitment, it is advisable to develop and validate a suitable instrument. To obtain a good picture of the course of study, this research might also be done throughout the four-year study programme.

5) To gain information about how novice nurses' identity development is shaped after their first two years in practice, it is recommended that a follow-up study with the same cohort of nurses be performed.

6) To better guide young nurses in their transition process, it is essential to understand when they need support from daily mentors or supervisors. A monthly questionnaire that measures novice nurses' emotions and commitment could be used to assess when support is needed. Exceptional scores could be used as an indicator for supervisors to intervene.

7) Based on the experiences that emerged from the diaries, a questionnaire could be developed to explore which experiences predict retention, attrition or even burn-out among nurses. This questionnaire could be used in hospitals and other healthcare settings on a national or international level. In this way, policymakers, managers, educators will be provided with essential information that can assist them to increase nurse retention.

8) Besides recruitment and retention, it is recommendable to focus also on nurses' job satisfaction, well-being and opportunities to develop in their career, because these issues are strongly related to commitment.

9) Patients could also provide indispensable information about the care they received and perceived during their stay in the hospital. We suggest the development of a questionnaire or the use of an existing validated instrument to measure patient satisfaction with different aspects of nursing care. This may also make them aware of the work and responsibilities nurses have.

10) In terms of the Dutch discussion of different nursing levels, such as level 4 (in Dutch MBO) and level 6 (in Dutch HBO), it is advisable to explore issues related to perceptions, attitudes and image. Mutual respect and understanding may contribute to work pleasure and, ultimately, to commitment to the profession and the organization.

CONCLUDING REMARKS

This thesis showed that both students' and nurses' professional identity development is a diverse and continuing process, and is intertwined with many environmental characteristics. Challenging and existentially confronting experiences in clinical practice are strongly related to their well-being, job satisfaction and commitment to the profession. A variety of intrinsic (perseverance and a strong desire to become a nurse) and extrinsic (support from family, friends, colleagues) motivations contribute to students and nurses remaining in the profession. In particular, support in the clinical environment is crucial because a sense of belonging and the feeling of being accepted as part of a team has proved to be critical to the professional identification process and commitment of both students and novice nurses. Team spirit seems to be the essence of being a nurse. Together Each Achieves More!

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APPENDICES

English summary

Nursing shortages are an increasingly serious problem across continents. Several factors have been identified as contributing to these shortages, such as an ageing workforce that is retiring, an ageing patient population that needs more nursing care, and the increasing complexity of care that requires more nurses with specific expertise. Similar to other countries, there is a considerable shortage of nurses in the Netherlands, and the situation is predicted to worsen (V&VN, 2017). Student nurse attrition and nurses' intentions to leave the profession are a growing concern. School institutions, policy makers and health care managers are not only confronted with the financial and educational impact of attrition rates, but also with the consequences of nursing shortages on patient outcomes. In order to meet the demands of a complex and dynamic health care environment, a well-trained nursing workforce is indispensable. The attractiveness of the profession and good working conditions may be helpful in recruiting and retaining nursing students and graduated nurses.

The aim of this thesis was to gain more insight into the reasons why students and nurses choose for a nursing career, and what motivated them to leave or stay in nursing. Exploring the experiences of both students and nurses may enhance the understanding of which demands from education and practice are determinative for study and work satisfaction, career success and commitment to the profession.

The thesis covers eight chapters: a general introduction, a discussion paper, five chapters describing the results of empirical studies (three of students, two of novice nurses), and a general discussion.

Chapter 1, the general introduction, provides information about 1) the theoretical concepts related to professionalization and professional identity development in nurses, 2) the image of nursing in a historical perspective, 3) reforms in nurse education programmes, and 4) the changing demands on the competences of nurses in clinical practice. This chapter concludes with providing main reasons for this study, research questions and an outline of the thesis.

Chapter 2 discusses the state of the art regarding the public image of nursing, nurses' self-concept and professional identity in a global context. The input for this discussion paper was provided by a literature review, that was performed to retrieve studies that discussed the role of the public image of nursing and its influence in the manner the development of professional identity takes shape. Main findings show that the public image of nurses does not always match their professional image, and that nurses derive their self-concept and professional identity from this image. In addition, education and work environment highly contribute to nurses' self-concept and professional identity. Students and nurses learn from their experiences at school and in clinical practice. Through the interaction with other students and nurses they learn professional nursing work, which also contributes to their personal and professional growth.

Next, we investigated how student nurses' develop their professional identity by measuring their perceptions of nursing during the first two years of their educational

programme. Subsequently, we analyzed the relationships between these perceptions and intentions to leave or complete the programme. In Chapter 3 we provide the outcomes of the questionnaire study among student nurses at the beginning of their four-year Bachelor's programme (n = 1244). The questionnaire consisted of a) the Nursing Orientation Tool (Vanhanen, Hentinen & Janhonen, 1999), b) the Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998), and c) background information. The Nursing Orientation Tool (NOT) measured students' orientation towards nursing using three subscales: caring, nursing expertise and life orientation. Caring is based on students' meaningful caring and nursing experiences either in their families or in working life. Nursing expertise is based on professional nursing experience, and life orientation is based on the need to keep a balance between family life and studies. The Nursing Attitude Questionnaire (NAQ) measured students' attitude towards nursing, using two subscales: nursing agency and advocacy & empathy. Nursing agency can be regarded as the link between nursing science and nursing practice. In other words: the capability to apply nursing knowledge in practice situations. Advocacy & empathy refers to the extent that nurses speak out and speak for their patients, and act on the unmet needs of patients. The background questions were related to gender, age, preliminary training, living status, having professional experience, having chosen nursing as their first-choice programme, career aspiration, and having experienced past problems with study programmes. The findings showed that, in general, students had a positive orientation and attitude towards nursing. We found that students most agreed with items related to the advocacy & empathy subscale (86%) and least agreed with items related to the life orientation subscale (14%). Apparently, students start their programme with altruistic views on nursing, and do not seem to experience problems with finding a balance at this stage of their educational programme. Multiple regression analyses show that the highest value predictors of a positive orientation and attitude were: 1) having nursing experience in a healthcare setting, 2) having chosen nursing as their first-choice programme, and 3) aiming to make a career in nursing.

In chapter 4 we assessed students' changes of perceptions over time and whether these changes were related to intentions to withdraw from the educational programme. One of the main reasons for investigating this was the high percentage of dropouts in the first two years of education (almost 45%) in our research cohort (2011–2013). The study measured the orientation and attitudes of the same cohort of students on three follow-up measurement points during the first two years of their four-year programme. We only included those students who completed the questionnaire every time (n = 123). We found significant changes in students' perceptions of caring, life orientation, nursing agency and advocacy & empathy. Nursing expertise was the only aspect that showed no significant changes over time. The most striking changes concerned students' perceptions of life orientation and advocacy & empathy. Students' perceptions of life orientation issues became more important from the beginning of their educational programme until the end of year two, with the biggest change during the first six months. This indicates that finding a balance between studies and private life was found to be significantly more important as they progressed in their programmes. With regard to advocacy & empathy, the results showed a significant time effect with a strong decrease at the end of the second year. Apparently, students no longer perceived that issues related to protecting and standing up for patients are an essential part of nursing work.

In addition, we explored, at the end of the second year, whether and why students ever considered withdrawing from their programme and what factors affected their motivations to stay. Our results showed that 24% of the students considered withdrawing. Reasons for attrition were mostly related to dissatisfaction with the curriculum and unsatisfying clinical placements. However, intrinsic and extrinsic motivations were strong enough for these students to stay on. Even though these were important findings, there still was insufficient understanding of students' personal reasons for attrition and retention.

Therefore, Chapter 5 explores, from a qualitative perspective, students' reasons to choose a nursing career, their conceptualization of nursing, and the intrinsic and extrinsic factors which affected their decisions to leave or complete their course. The students who were interviewed (n = 17) all participated in the longitudinal quantitative survey, the results of which are described in chapters 3 and 4. A purposive sampling method was used based on the results of the survey: 1) students who never considered withdrawing from their programme, 2) students who considered withdrawal but continued, and 3) students who stopped. In general, we found that the main reasons for choosing nursing as a career involved the caring aspect, job possibilities, the stimulating influence of friends and family and the desire to become a nurse. Students' perceptions of nursing were mainly conceptualized by the possession of nursing competences, and the caring aspect, including empathy and the delivery of social and emotional support. Main reasons for attrition mentioned by the students who dropped out and those students who considered stopping were dissatisfaction with the training programme, the perceived theory-practice gap, and poor quality clinical placements. Feelings of dissatisfaction with the training programme were associated with the quality of the programme and a lack of support from teaching staff. The perceived theory-practice gap caused increased stress and feelings of unpreparedness for clinical practice. Poor quality clinical placements were mostly related to not being able to complete learning goals and not feeling welcome in the team. Perceived lack of practical and emotional support from colleagues and mentors was by far the most important factor for attrition. On the other hand, satisfaction with the organization and support from teaching staff were mentioned to be motivations to continue. The most important motivations were positive experiences with clinical placements, especially related to support and feeling welcome in the team. Their colleagues and team were even more important for some students than the patient group with whom they worked. Finally, students mentioned perseverance and the drive to become a nurse as important intrinsic factors to complete their programme.

Together, the results of these three studies, as reported in chapters 3, 4 and 5, indicate that student nurses develop their professional identity through interactions with teachers and fellow students, and through experiences during clinical placements. Their perceptions of nursing changed over time and these changes might lead to disappointments and considerations to leave the programme. Practical and emotional support from teaching staff and mentors appeared to be indispensable to motivate them to continue.

In addition, we explored novice nurses' professional identity development, by analyzing and interpreting their first lived experiences in a clinical setting and the correlations

between these experiences and their emotional state and level of commitment to the profession. Chapter 6 provides an overview of novice nurses' first lived experiences in a hospital setting in order to gain greater understanding of the nature of the situations they were confronted with. During one year eighteen nurses wrote unstructured diaries in which they described a work experience that really mattered to them. The mean age of the participants was 23 years, they were all female, had a Bachelor's degree in nursing, and had no more than one year of work experience. In the written unstructured diaries (n = 580) a total of 1321 experiences were reported, both positively and negatively-linked. Experiences with a mainly positive connotation were about relationships with colleagues and supervisors, their (perceived) possession of the required competences, the opportunity to develop in their career, feelings of autonomy, and fit (identification with the profession). Novice nurses' positive experiences with colleagues, team and supervisors were related to good working relationships, feeling welcome in the team, and feeling supported. Supportive relationships showed to play an important role in enhancing their self-esteem, professional performance, and feelings of fitting in the profession. Positive experiences with perceived competencies, the possibilities of professional development, feelings of autonomy and fitting the profession all turned out to enhance their professional identity and gave a boost to their self-confidence and the sense of becoming professional nurses. Experiences with mainly negative connotations were about relationships with patients and physicians, the organizational context (work load, complexity of care and unrealistic expectations), existential events (confrontations with illness, suffering and death) and personal and work-related goals, in particular the presence or absence of a work-life balance. Experiences with patients were mostly related to aggressive and disrespectful behaviour, and sexual harassment. With regard to physicians, situations were reported in which the nurses felt disrespected and ignored, and were even bullied by them. Negative experiences with existential events, the work-life balance and organizational context, in particular work load and complexity of care, were associated with uncertainty, feelings of guilt, lower mental and physical well-being, and even with turnover intentions. Novice nurses have to deal with these experiences in their daily practice, in order to stay motivated. One of the strategies to achieve this was to share their experiences with colleagues (62%) and, to a much lesser extent, with their supervisor (19%). In summary, this study shows that the transition from student nurse to professional staff nurse is a challenging process, with many existential and stressful situations. Especially the presence and support from colleagues and supervisors are indispensable to keep novice nurses motivated for the profession.

Chapter 7 reports the correlations between novice nurses' work experiences and their emotional state (positive and negative) and level of affective commitment to the profession. We coded the themes that emerged from the 580 diaries as contextual factors (complexity of care and existential events), relational factors (experiences with patients and perceived support from colleagues, supervisors and physicians), and cognitive factors (competence). The factors were derived from the most frequently reported experiences, and were coded as either positive or negative (e.g. support or lack of support). With regard to emotions the results of the multilevel analysis showed that positive experiences with patients, perceived support and perceived competence increased positive emotions. Negative patient experiences, perceived lack of support, confrontations with existential events and perceived lack of competence were negatively related to positive

emotions. Complexity of care, existential events, negative experiences with patients, perceived lack of support, and perceived lack of competence were positively related to negative emotions. Positive experiences with patients, perceived support, and perceived competence decreased the level of negative emotions. We found less significant correlations between nurses' experiences and commitment. Perceived support from colleagues, supervisors and physicians was the only factor that was positively related to commitment. Complexity of care, perceived lack of support, and perceived lack of competence decreased the level of commitment. In short, this study shows that negative work experiences reduce novice nurses' affective commitment to the profession more than positive experiences increase the commitment. The most important finding was the significant importance of positive support from colleagues and supervisors to help novice nurses to deal with complex and stressful situations and to develop a professional commitment.

The findings of chapters 6 and 7 show that the transition from student nurse to professional staff nurse is a challenging and demanding process. Professional identity development of novice nurses is strongly influenced by experiences gained during working in clinical practice. Many of these experiences also affected their emotional state and commitment to the profession. Support from colleagues and supervisors seemed indispensable to guide novice nurses through this period of transition and to remain in the profession.

Finally, in Chapter 8, the main findings of the studies described in this thesis are discussed and placed within a broader context. This chapter also provides methodological considerations and implications for education and clinical practice. Overall, the findings in this thesis suggest that, to reduce nursing shortages, it is essential to enhance students' and nurses' job satisfaction and commitment to the profession. This can be achieved, ***inter alia***, by making sure they are well prepared for the profession and guaranteeing a safe and supporting work environment. Support in the clinical environment by colleagues and supervisors is fundamental to recruit and retain a motivated, well-trained nursing workforce.

Nederlandse samenvatting

Tekorten aan verpleegkundigen vormen wereldwijd een toenemend probleem. Verschillende autonome moeilijk te beïnvloeden factoren liggen ten grondslag aan deze tekorten, zoals een pensioengerechtigd personeelsbestand, een vergrijzende patiëntenpopulatie die meer zorg nodig heeft, en de toenemende complexiteit van de zorg door toegenomen medische mogelijkheden die meer verpleegkundigen met speciale expertise vereist. Net als in andere landen is er ook in Nederland een aanzienlijk tekort aan verpleegkundigen, en dit tekort zal naar verwachting alleen maar toenemen (V&VN, 2017). Niet alleen door de genoemde factoren, maar ook door uitval onder studenten verpleegkunde en voortijdige uittreding van verpleegkundigen. Instellingen voor beroepsonderwijs, beleidsmakers en managers in de gezondheidszorg worstelen met de gevolgen van dit misschien deels vermijdbare verloop voor de kwaliteit van de patiëntenzorg. Om te kunnen voldoen aan de eisen van een complexe en dynamische zorgomgeving is een goed opgeleide verpleegkundige beroepsgroep onontbeerlijk. De aantrekkelijkheid van het beroep en goede werkomstandigheden kunnen behulpzaam zijn bij het werven en vasthouden van studenten verpleegkunde en gediplomeerde verpleegkundigen.

Het doel van dit proefschrift was om meer inzicht te krijgen in de redenen waarom studenten en verpleegkundigen kiezen voor een carrière in de verpleging, wat de redenen zijn om voortijdig te stoppen en wat hen motiveert om te blijven. Om meer inzicht te krijgen in de factoren die bepalend zijn voor studie- en werktevredenheid, loopbaansucces en verbondenheid met het beroep (commitment) zijn ervaringen van studenten en verpleegkundigen aan nader onderzoek te onderworpen.

Het proefschrift bestaat uit acht hoofdstukken: een algemene inleiding, een discussion paper, vijf empirische studies (drie bij studenten verpleegkunde en twee bij beginnende verpleegkundigen), en een afsluitende discussie.

Hoofdstuk 1, de algemene inleiding, geeft een overzicht van: 1) de theoretische concepten met betrekking tot professionalisering en de ontwikkeling van een professionele verpleegkundige identiteit, 2) het imago van de verpleging in historisch perspectief, 3) hervormingen in verpleegkundige curricula, en 4) de veranderende eisen die de klinische praktijk stelt aan de verpleegkundige competenties. Tot slot worden de doelstelling, de onderzoeksvragen en de thema's van dit proefschrift toegelicht.

Hoofdstuk 2 bespreekt, vanuit een internationaal perspectief, de stand van zaken van het maatschappelijk beeld van de verpleging, het zelfbeeld en de professionele identiteit van verpleegkundigen. Een literatuuronderzoek naar de rol van het maatschappelijk imago van de verpleging en de invloed hiervan op de ontwikkeling van de professionele verpleegkundige identiteit lag ten grondslag aan deze studie. De belangrijkste uitkomsten van het literatuuronderzoek laten zien dat het beeld dat de maatschappij heeft van de verpleging niet altijd overeenkomt met het professionele imago dat verpleegkundigen zelf hebben van hun beroep. Bovendien blijkt dat verpleegkundigen hun zelfbeeld en professionele identiteit grotendeels ontlenen aan het algemeen maatschappelijke imago. Onderwijs (theorie) en werkomgeving (praktijk) blijken ook sterk bij te dragen aan het zelfbeeld en de professionele identiteit van verpleegkundigen. Studenten leren op

school en tijdens hun stages wat verpleegkunde is en verpleegkundigen leren dit tijdens het werken in de (klinische) praktijk. Met name door de interactie met andere studenten en verpleegkundigen leren ze wat het is om een professioneel verpleegkundige te zijn, hetgeen ook invloed heeft op hun persoonlijke en professionele groei.

Om inzicht te krijgen in hoe de professionele identiteit van verpleegkunde studenten (HBO-V) zich ontwikkelt hebben we hun beeld en percepties van het verpleegkundig beroep gemeten tijdens de eerste twee jaren van hun opleiding. In aansluiting hierop hebben we de relaties geanalyseerd tussen deze percepties en hun intenties om met de opleiding te stoppen of te blijven.

Hoofdstuk 3 laat de uitkomsten zien van een vragenlijstonderzoek onder verpleegkunde studenten aan het begin van hun vierjarige Bachelor opleiding (n = 1244). De vragenlijst bestond uit a) de Nursing Orientation Tool (Vanhanen, Hentinen & Janhonen, 1999), b) de Nursing Attitude Questionnaire (Toth, Dobratz & Boni, 1998), en c) achtergrond informatie. De Nursing Orientation Tool (NOT) meet hoe studenten zich oriënteren op hun studie met behulp van drie subschalen: caring, nursing expertise en life orientation. Çaring is gebaseerd op de ervaringen die studenten hebben met het zorgen voor mensen, zowel persoonlijk als beroepsmatig. Nursing expertise heeft betrekking op hun professionele verpleegkundige ervaringen, en life orientation gaat over het vinden van een balans tussen privéleven en studie. De Nursing Attitude Questionnaire (NAQ) meet de attitude van studenten ten opzichte van het verpleegkundig beroep met behulp van twee subschalen: nursing agency en advocacy & empathy. Nursing agency kan worden beschouwd als de schakel tussen wetenschap en praktijk. Met andere woorden: het vermogen om verpleegkundige kennis toe te passen in praktijk situaties. Advocacy & empathy verwijst naar de mate waarin verpleegkundigen opkomen voor hun patiënten, en tegemoetkomen aan hun onvervulde behoeften. De achtergrondvragen hadden betrekking op geslacht, leeftijd, vooropleiding, woonsituatie, professionele ervaring, of verpleegkunde de studie van hun eerste keuze was, carrière ambities en of ze eerder studieproblemen hadden gehad. De resultaten laten zien dat studenten over het algemeen een positieve houding hebben ten aanzien van het verpleegkundig beroep. We vonden dat studenten het meest instemden met vragen die betrekking hadden op de subschalen advocacy & empathy (86%) en het minst met vragen die betrekking hebben met de subschaal life orientation (14%). Blijkbaar beginnen studenten aan hun studie met altruïstische opvattingen over verpleging en lijken ze geen problemen te ondervinden met het vinden van een balans tussen studie en privé. Uit meervoudige regressieanalyses blijkt dat de volgende variabelen voorspellers van een positieve oriëntatie en attitude zijn: 1) het hebben van verpleegkundige ervaring in de gezondheidszorg, 2) verpleegkunde als eerste studiekeuze, en 3) de ambitie om een verpleegkundige carrière te hebben.

In Hoofdstuk 4 hebben we gekeken naar de veranderingen in hun percepties over de tijd, en of deze veranderingen verband hielden met voortijdige studie uitval. Een van de belangrijkste redenen om dit te onderzoeken was het hoge percentage uitvallers in dit studie cohort (2011-2013) tijdens de eerste twee jaren van hun opleiding (bijna 45%). In dit onderzoek is gekeken naar de oriëntatie en attitude van eenzelfde cohort studenten gemeten op drie opeenvolgende meetmomenten. We hebben voor de analyse van de resultaten alleen die studenten geïncludeerd die de vragenlijsten op elk meetmoment

hebben ingevuld (*n* = 123). We zagen significante veranderingen in hun percepties van het verpleegkundig beroep met betrekking tot caring, life orientation, nursing agency en advocacy & empathy. Nursing expertise was het enige aspect dat in de loop van de tijd geen significante veranderingen te zien gaf. De meest opvallende veranderingen hadden betrekking op life orientation en advocacy & empathy. Aspecten die met life orientation te maken hadden werden belangrijker, met de grootste stijging na de eerste zes studiemaanden. Dit geeft aan dat het vinden van een balans tussen studie en privé leven significant belangrijker wordt naarmate ze vorderen in hun studie. Met betrekking tot advocacy & empathy vonden we een aanzienlijke verandering over de tijd, met een sterke daling aan het einde van hun tweede studiejaar. Kennelijk vonden studenten niet langer dat zaken die te maken hebben met het beschermen van of het opkomen voor patiënten een essentieel onderdeel zijn van het verpleegkundig beroep. Aan het eind van het tweede studiejaar hebben we bovendien gevraagd of en waarom zij ooit hebben overwogen om te stoppen met de studie en welke factoren van invloed waren op hun motivatie om door te gaan. De uitkomsten laten zien dat 24% van deze studenten had overwogen om te stoppen. De redenen om te stoppen waren voornamelijk gerelateerd aan ontevredenheid met het curriculum en de stages. Intrinsieke en extrinsieke motivaties waren echter sterk genoeg voor deze studenten om door te gaan. Hoewel dit belangrijke bevindingen waren, hadden we nog steeds onvoldoende inzicht in de factoren die van invloed zijn op het feit dat verpleegkunde studenten voortijdig stoppen of doorgaan met hun studie.

In Hoofdstuk 5 hebben we daarom, vanuit een kwalitatief perspectief, onderzocht waarom studenten voor een verpleegkundige carrière kiezen, wat voor hen de essentie van verpleegkunde is, en welke intrinsieke en extrinsieke motivaties hun beslissing om hun studie te verlaten of te voltooien hebben beïnvloed. De studenten die we hebben geïnterviewd (*n* = 17), hebben allemaal deelgenomen aan de longitudinale kwantitatieve studie, waarvan de resultaten zijn beschreven in hoofdstuk 3 en 4. Een doelgerichte steekproefmethode werd gebruikt op basis van de uitkomsten van de vragenlijsten: 1) studenten die nooit hebben overwogen om te stoppen, 2) studenten die dit wel hebben overwogen maar desondanks zijn doorgegaan, en 3) studenten die daadwerkelijk zijn gestopt. Over het algemeen waren de belangrijkste redenen om voor een carrière in de verpleging te kiezen: het zorgaspect (kunnen en willen zorgen voor mensen), mogelijkheden op de arbeidsmarkt, de stimulerende invloed van familie en vrienden, en de uitdrukkelijke wens om verpleegkundige te worden. Als essentiële kenmerken van het verpleegkundig beroep werden vooral de vereiste verpleegkundige competenties en het zorgaspect genoemd, waaronder empathie en het geven van sociale en emotionele ondersteuning. Studenten die waren gestopt en zij die dit hadden overwogen noemden als voornaamste redenen hiervoor dat ze ontevreden waren over de opleiding en de stages, en de slechte aansluiting van hun theoretische kennis op de praktijk van alledag. Ontevredenheid met de opleiding hadden vooral te maken met de kwaliteit van het curriculum en het gebrek aan steun van hun docenten. De ervaren leemte tussen theorie en praktijk veroorzaakte veel stress en zorgde ervoor dat ze zich onvoldoende voorbereid voelden op het werken in de klinische praktijk. Onbevredigende stages hadden vooral te maken met het niet kunnen behalen van hun leerdoelen en zich niet welkom voelen in het team.

Het ervaren gemis aan praktische en emotionele steun van collega's en mentoren waren verreweg de belangrijkste redenen voor de studenten om te overwegen om te stoppen. Aan de andere kant werden ze door positieve ervaringen met de opleiding, de organisatie en steun van docenten gemotiveerd om door te gaan. Vooral positieve ervaringen met de stages, en dan met name steun en zich welkom voelen in het team, bleken hierbij bepalend. Voor sommige studenten waren hun collega's en het team zelfs belangrijker dan de patiëntengroep waarmee ze werkten. Tenslotte werden doorzettingsvermogen en de uitdrukkelijke wens om verpleegkundige te worden genoemd als belangrijke intrinsieke factoren om hun studie af te maken.

Samenvattend laten de uitkomsten van deze drie studies, zoals beschreven in hoofdstukken 3, 4 en 5 zien dat verpleegkunde studenten hun professionele identiteit ontwikkelen door interacties met docenten en medestudenten, en door ervaringen die ze opdoen tijdens de stages. Hun percepties van het verpleegkundig beroep veranderen tijdens de opleiding en deze veranderingen kunnen leiden tot teleurstellingen en overwegingen om te stoppen met de opleiding. Praktische en emotionele steun van docenten en mentoren blijken onmisbaar te zijn om studenten te motiveren om door te gaan met hun studie.

In twee vervolgstudies hebben we de professionele identiteitsontwikkeling van beginnende verpleegkundigen onderzocht aan de hand van hun eerste praktijkervaringen, en de invloed die deze ervaringen hebben op hun emoties en commitment met het beroep.

Hoofdstuk 6 schetst een beeld van deze eerste ervaringen en de situaties waarmee verpleegkundigen worden geconfronteerd in de klinische praktijk. Gedurende een jaar hebben achttien beginnende verpleegkundigen in (twee-)wekelijkse dagboekjes een werkervaring beschreven die echt belangrijk voor ze was. De gemiddelde leeftijd van de deelnemers was 23 jaar, ze waren allemaal vrouwelijk, werkten op verschillende verpleegafdelingen van een Universitair Medisch Centrum, hadden een bachelor diploma (HBO-V), en hadden niet meer dan één jaar werkervaring. In de ongestructureerde dagboekjes (n = 580), werden in totaal 1321, zowel positieve als negatieve, ervaringen beschreven. Ervaringen met een voornamelijk positieve connotatie gingen over relaties met collega's en leidinggevenden, hun (gepercipieerde) bezit van de vereiste competenties, ontplooiingsmogelijkheden, gevoelens van autonomie en identificatie met het beroep. Positieve ervaringen met collega's, team en leidinggevenden hadden te maken met goede werkrelaties, steun en zich welkom voelen in het team. Ervaren steun bleek belangrijk te zijn voor hun gevoel van eigenwaarde, hun professionele gedrag en identificatie met het beroep (het gevoel dat het beroep bij hen past). Ook positieve ervaringen die gingen over competenties, ontplooiingsmogelijkheden, autonomie en identificatie met het beroep bleken hun professionele identiteit te vergroten en bleken bovendien goed voor hun zelfvertrouwen. Werkervaringen met voornamelijk negatieve connotaties gingen over relaties met patiënten en artsen, de organisatorische context (werkdruk, complexiteit van de zorg en onrealistische verwachtingen), existentiële gebeurtenissen (confrontaties met ziekte, lijden en dood) en persoonlijke en werk gerelateerde doelen, met name de aan- of afwezigheid van een balans tussen werk en privé leven. Negatieve ervaringen met patiënten waren meestal gerelateerd aan agressief en respectloos gedrag en seksuele intimidatie. Met betrekking tot artsen beschreven verpleegkundigen

situaties waarin ze zich niet gerespecteerd en zelfs genegeerd voelden. Negatieve ervaringen met existentiële gebeurtenissen, de balans tussen werk en privéleven en de organisatorische context, met name de werkdruk en de complexiteit van de zorg, werden geassocieerd met onzekerheid, schuldgevoelens, verminderd mentaal en fysiek welbevinden en zelfs met intenties om het beroep te verlaten. Om gemotiveerd te blijven, is het belangrijk dat beginnende verpleegkundigen in de dagelijkse praktijk leren omgaan met deze uitdagende situaties. Een van de strategieën om dit te bereiken was om hun ervaringen te delen met hun collega's (62%) en, in veel mindere maten, hun leidinggevende (19%). Samenvattend laat deze studie zien dat de transitie van verpleegkunde student naar professioneel verpleegkundige een uitdagend proces is, dat gepaard gaat met veel existentiële en stressvolle situaties. Vooral de aanwezigheid en steun van collega's en leidinggevenden zijn onmisbaar om beginnende verpleegkundigen gemotiveerd te houden voor het beroep.

In hoofdstuk 7 hebben we de correlaties onderzocht tussen de eerste werkervaringen van beginnende verpleegkundigen en hun positieve en negatieve emoties, en het niveau van hun affectieve commitment met het beroep. We hebben de thema's die uit de dagboekjes naar voren kwamen gecodeerd als contextuele factoren (complexiteit van de zorg en existentiële gebeurtenissen), relationele factoren (ervaringen met patiënten en steun van collega's, leidinggevenden en artsen) en cognitieve factoren (competentie). We hebben deze factoren afgeleid van de meest frequent genoemde ervaringen en zowel positief als negatief gecodeerd (bijvoorbeeld steun en gebrek aan steun). De uitkomsten van de multilevel analyses laten zien dat positieve emoties werden versterkt door positieve ervaringen met patiënten, steun en het gevoel dat over de vereiste competenties te beschikken. Terwijl positieve emoties werden verminderd door negatieve ervaringen met patiënten, gebrek aan steun, confrontaties met existentiële gebeurtenissen en ervaren gebrek aan competenties. Negatieve emoties werden versterkt door negatieve ervaringen met patiënten, gebrek aan steun, ervaren gebrek aan competenties, de complexiteit van de zorg en existentiële gebeurtenissen. Negatieve emoties verminderden door positieve ervaringen met patiënten, steun en ervaren competenties. Met betrekking tot commitment vonden we minder significante correlaties. Het niveau van commitment werd alleen verhoogd door de ervaren steun van collega's, leidinggevenden en artsen. Complexiteit van de zorg, gebrek aan steun en ervaren gebrek aan competenties veroorzaakten een daling van het commitment.

De uitkomsten van deze studie laat zien dat negatieve werkervaringen meer invloed hebben op het niveau van commitment dan positieve werkervaringen. De belangrijkste bevinding was dat steun van collega's en leidinggevenden onontbeerlijk is om beginnende verpleegkundigen te leren omgaan met complexe en stressvolle situaties.

De resultaten van hoofdstuk 6 en 7 laten zien dat de transitie van student naar professioneel verpleegkundige een uitdagend en veeleisend proces is. De professionele identiteitsontwikkeling van beginnende verpleegkundigen wordt sterk beïnvloed door ervaringen die zij opdoen in de klinische praktijk. Veel van deze ervaringen hadden invloed op hun positieve en negatieve emoties en hun commitment met het beroep. Steun van collega's en leidinggevenden blijkt van onschatbare waarde om beginnende verpleegkundigen te begeleiden tijdens hun transitie en ze te motiveren om in het beroep te blijven.

In hoofdstuk 8, de algemene discussie, worden de belangrijkste bevindingen van dit proefschrift in een bredere context geplaatst. Verder worden methodologische overwegingen bediscussieerd en aanbevelingen gedaan voor opleiding, klinische praktijk en toekomstig onderzoek.

Concluderen kunnen we zeggen dat studenten verpleegkunde en beginnende verpleegkundigen grote behoefte hebben aan goede begeleiding en steun, met name in de klinische praktijk. Om het toenemende tekort aan verpleegkundigen tegen te gaan, is het essentieel om de tevredenheid en het commitment van zowel studenten als verpleegkundigen te vergroten. Dit kan onder meer worden bereikt door ervoor te zorgen dat ze goed zijn voorbereid op het beroep en werken in veilige omgeving met voldoende aandacht en begeleiding. Steun van collega's en leidinggevenden in de praktijk is van fundamenteel belang voor het aantrekken en behouden van een gemotiveerde en goed-opgeleide beroepsgroep.

List of publications

Marjolein van Offenbeek, Yvonne ten Hoeve, Petrie Roodbol, Mettiena Leemeijer.
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A discussion paper.
Journal of Advanced Nursing 2014, 70 (2), 295-309

Yvonne ten Hoeve, Gerard Jansen en Petrie F. Roodbol.
Zelfbeeld en professionele identiteit van de verpleegkundige; een literatuurstudie.
Onderwijs en gezondheidszorg 2014, 38 (4), 3-6

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Nurse Education Today 2016, 40, 111-117

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Nurse Education Today 2017, 48, 19-24

Yvonne ten Hoeve, Stynke Castelein, Gerard Jansen, Petrie Roodbol.
Dreams and disappointments regarding nursing: student nurses' reasons for attrition and retention. A qualitative study design.
Nurse Education Today 2017, 54, 28-36

List of conferences

September 2008
Oral presentation 'Practical Experience with Task Differentiation: the Contribution of Nurse Practitioners to the Care of Breast Cancer Patients in Dutch Hospitals'.
International Council of Nurses Conference (ICN), Toronto, Canada.

June 2009
Oral presentation 'Skill mix in Nursing Homes'.
International Council of Nurses Conference (ICN), Durban, South Africa.

September 2010
Poster presentation 'The public image of the nursing profession: how does it influence the self-concept of nurses and the way they present themselves?'
International Perspectives in the History of Nursing Conference. University of London, Egham, Surrey, United Kingdom.

August 2012
Oral presentation 'The Visible Link; A new concept of home nursing in the Netherlands'.
International Nursing History Conference; Nursing History in a global perspective. Kolding, Denmark.

November 2013
Oral presentation 'Dutch nursing students' orientation and attitudes towards nursing at the beginning of their education'.
17th International Nursing Research Conference, Lleida, Spain.

May 2014
Oral presentation 'Tevredenheidonderzoek bij wijkverpleegkundigen en huisartsen; verschillen en overlap in werkterrein'.
Nait Soezen Conference, Groningen, the Netherlands.

September 2014
Oral presentation 'Dutch nursing students' orientation and attitudes towards nursing at the beginning of their education'.
14th European Doctoral Conference in Nursing Science, Maastricht, the Netherlands.

November 2014
Oral presentation 'Dutch nursing students' motivations to choose a career in nursing'.
18th International Nursing Research Conference, Vitoria-Gasteiz, Spain.

Oktober 2015
Invited workshop 'De professionele identiteit van de verpleegkundige/verpleegkundig specialist'.
7de Jaarcongres V&VN/VS, Arnhem - Papendal, the Netherlands.

May 2016
Oral presentation 'Predicting factors of nursing students' positive orientation and attitude towards nursing'.
2nd Annual International Conference on Nursing, Athens Institute for Education and Research (ATINER), Athens, Greece.

June/July 2016
Oral presentation 'Professional identity development in novice nurse: a diary study'.
Nursing Science Congress; Bridging the gap between science and practice, University Medical Center Groningen, the Netherlands.

June/July 2016
Workshop 'De professionele identiteitsontwikkeling van jonge verpleegkundigen'.
Nursing Science Congress; Bridging the gap between science and practice, University Medical Center Groningen, the Netherlands.

October 2016
Invited keynote 'Positionering en professionele identiteitsontwikkeling van de Verpleegkundig Specialist: kansen en belemmeringen'.
8e jaarcongres V&VN/ VS, Arnhem - Papendal, the Netherlands.

November 2016
Oral presentation 'Nursing students' changing orientation and attitudes towards nursing during education: a two year longitudinal study'.
20th international Nursing Research Conference, La Coruna, Spain.

December 2016
Oral presentation 'Nursing students' changing orientation and attitudes towards nursing during education: a two year longitudinal study'.
The 1st Lifelong Learning, Education & Assessment Research Network (LEARN) symposium, UMCG, Groningen, the Netherlands.

May 2017
Oral presentation 'Student nurses' changing perceptions of nursing: a two year longitudinal study'.
3rd Annual International Conference on Nursing, Athens Institute for Education and Research (ATINER), Athens, Greece.

Curriculum Vitae

Yvonne ten Hoeve (1954) was born in Enschede, the Netherlands. After graduating from high school (Rijks HBS-A) she moved to Groningen to start her studies at the University of Groningen. She obtained her Bachelor's degree in Danish Language and Literature and her Master's degree in General Literature Studies. At the Open University she obtained a Short Higher Education diploma in Business Administration, economical aspects. Yvonne has been working at the University Medical Center Groningen since 1989, initially as a supervisor in medical administration at the University Center Psychiatry. In 1999 she shifted her focus on doing research and she participated in several research projects on the role development and positioning of Nurse Practitioners and Physician Assistants in the Netherlands. During this research she became interested in the nursing profession, in particular the positioning, the image and the professional identity of nurses. In 2011, she began her PhD research on the professional identity development of nursing students and newly graduated nurses. At the moment, she is working as a researcher at the Department of Health Sciences – Nursing Research, UMCG.

Yvonne ten Hoeve (1954) is geboren te Enschede. Na het behalen van haar diploma aan de Rijks Hogere Burgerschool (HBS-A) verhuisde ze naar Groningen om te gaan studeren aan de RUG. Ze behaalde haar Bachelor diploma (kandidaats) in de Deense Taal en Letterkunde en haar Master diploma (doctoraal) in de Algemene Literatuurwetenschap. Aan de Open Universiteit behaalde ze het diploma Kort Hoger Onderwijs Bedrijfskunde, economische aspecten. Yvonne werkt sinds 1989 bij het Universitair Medisch Centrum Groningen, aanvankelijk als leidinggevende van de medische administratie bij het Universitair Centrum Psychiatrie. In 1999 verlegde ze haar aandacht naar het doen van onderzoek en ze participeerde in verschillende onderzoeksprojecten naar de rolontwikkeling en positionering van Nurse Practitioners/Verpleegkundig Specialisten en Physician Assistants in Nederland. Tijdens dit onderzoek raakte ze geïnteresseerd in de verpleegkundige beroepsgroep, in het bijzonder de positionering, het imago en de professionele identiteit van verpleegkundigen. In 2011 begon ze aan haar promotieonderzoek naar de professionele identiteitsontwikkeling van studenten verpleegkunde en beginnende verpleegkundigen. Momenteel werkt ze als onderzoeker bij de afdeling Gezondheidswetenschappen – Verpleegkundig Onderzoek van het UMCG.

Dankwoord

De belangrijkste uitkomst van mijn onderzoek is dat steun van anderen onontbeerlijk is om gemotiveerd en met plezier je werk te blijven doen. Dit is ook in hoge mate op mij van toepassing geweest tijdens het doen van onderzoek en het schrijven van dit proefschrift. Zonder de steun en positieve feedback van mijn omgeving zou dit intensieve proces van de afgelopen jaren voor mij een stuk zwaarder en absoluut een stuk minder leuk zijn geweest. Ik heb de eer gehad om samen te werken met een groot aantal zeer inspirerende mensen met wie dit proefschrift tot stand is gekomen.

De leden van de begeleidingscommissie, prof. dr. P.F. Roodbol, prof. dr. S. Castelein, dr. G.J. Jansen en dr. E.S. Kunnen, wil ik hartelijk bedanken voor hun deskundige en plezierige begeleiding. Onze bijeenkomsten waren niet alleen heel constructief, maar ook heel gezellig. Jullie steun en feedback hebben ervoor gezorgd dat ik dit promotietraject zonder al teveel stress heb kunnen afronden. Wat heb ik geboft met zo'n fijn team! Ik had me geen betere begeleiders kunnen wensen.

Allereerst heel veel dank aan mijn leidinggevende, tevens eerste promotor, prof. dr. P.F. Roodbol. Petrie, het klinkt als een cliché, maar zonder jou was dit proefschrift echt niet geschreven. Toen ik in september 1999 bij het toenmalige opleidingsinstituut in dienst kwam om je te assisteren bij jouw promotieonderzoek had ik nooit kunnen bedenken dat er vele jaren later een proefschrift van mijn hand zou verschijnen. Wat is er veel gebeurd sinds die tijd! Jouw promotieonderzoek naar taakherschikking tussen artsen en verpleegkundigen was het startpunt van onze samenwerking. We hebben samen veel verschillende onderzoeksprojecten op het gebied van taakherschikking aangepakt en afgerond, gedeeltelijk samen met collega's van de faculteit Bedrijfskunde van de RUG. In 2008 spoorde jij me aan om een abstract in te dienen over mijn onderzoek naar de rol van de verpleegkundig specialist in de zorg voor borstkanker patiënten. Ik weet nog hoe ontzettend blij ik was toen het abstract werd geaccepteerd en ik een presentatie (mijn eerste buitenlandse!) mocht geven op een congres van the International Council of Nurses/Advanced Nursing Practice in Toronto, Canada. Vanaf dat moment heb ik me vrijwel volledig gestort op het doen van onderzoek, waarbij je mij altijd onvoorwaardelijk hebt gesteund en gestimuleerd. Jij gaf ook het startschot voor mijn promotieonderzoek en jouw benoeming in 2012 tot hoogleraar verplegingswetenschap maakte het mogelijk dat je mijn eerste promotor werd. Nogmaals, zonder jouw stimulans had dit boek er niet gelegen en had ik dit dankwoord niet hoeven schrijven. Ik wil je heel erg bedanken voor de mogelijkheden en de vrijheid die je mij tijdens mijn promotietraject hebt gegeven.

Veel dank gaat ook uit naar mijn tweede promotor, prof. dr. S. Castelein. Stynke, jij werd als onderzoeker aangesteld bij het Universitair Centrum Psychiatrie (UCP), toen ik er ongeveer vertrok. Maar we zijn elkaar, dankzij Petrie, weer tegen het lijf gelopen in 2014. Je vertelde me tijdens een bijeenkomst dat je geïnteresseerd was in mijn onderzoek en graag wilde meedenken. Het klikte meteen tussen ons en ik ben nog steeds heel blij met onze samenwerking, waar een paar mooie publicaties uit zijn voortgekomen. We hebben wat af gediscussieerd en geanalyseerd! Af en toe zag ik het niet meer zitten, maar jouw stugge volharding, enthousiasme, expertise en humor zorgden ervoor dat ik weer verder kon. Ik stel het ook zeer op prijs dat je mij hebt betrokken en nog steeds betrekt bij

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