Newly admitted nursing students’ viewpoints of training and the nursing profession

Susanne Lundell Rudberg (susanne.lundell.rudberg@ki.se)
Karolinska Institute

Margareta Westerbotn
Sophiahemmet University College

Max Scheja
Stockholm University

Hanna Lachmann
Red Cross University College of Nursing

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Abstract

Background: Students’ reasons for choosing nursing and their expectations of education and future career might have an impact on how they manage their studies. During upcoming training, the students need to acquire certain skills and competencies to become professional nurses able to handle complex situations. Therefore, it is of interest to understand students’ perceptions of upcoming education and their ideas about future occupation. This study aimed to investigate newly admitted nursing students’ viewpoints about training to become a professional nurse.

Methods: A descriptive cohort study was designed using interviews and questionnaires undertaken at one university in Stockholm, Sweden August 2015 to June 2017. All students starting the program were invited to participate. Qualitative and quantitative data were collected by using individual interviews (n=126) and questionnaires (n=158). Content analysis of the transcribed interviews was used to identify a theme. Sample percentages, mean score and standard deviation were calculated for data from questionnaires using descriptive statistics.

Results: Seven main categories were identified, 1. Nursing as role model, 2. Self-confidence in a new environment, 3. Develop nursing attitudes and skills, 4. Opportunities to impact the future, 5. Stimulating hands-on teamwork, 6. Don’t manage the task, 7. Surrounding factors prohibiting success. Additionally, students generally rated higher for positive emotions, and lower for negative on a 7 graded Likert scale. The finding indicated that the newly admitted nursing students in general had a strong intrinsic social orientation to learning.

Conclusion: As findings suggests, students put faith in their own ability and want to make a difference by altruistic reasons when entering the training. It is essential for educators to gain a deeper understanding of the visions of newly admitted students to nurture and empower their enthusiasm during training.

Background

In choosing a program, students can be influenced by several factors including social heritage and status that plays an important part [1]. High-school students perceive nurses as hard workers, performing arduous tasks but, due to less academic training, being poorly paid with limited autonomy and scant opportunities to take on leadership roles [2].

Reasons to become a nurse

There are both personal and career-related reasons for choosing a nursing program, with personal reasons often being more important [3]. Previous research suggests that altruistic motives are quite common among nursing students [3–6]. The altruistic motives have also been shown to be equally important as the opportunity for self-development [7]. Choosing to become a nurse can be based on both personal and career aspirations [3]. It has been found that there is a link between personal and environmental characteristics and motivations to select nursing as a career [8]. Professional status and qualities as well as job security tend to influence students’ career plans [3, 9]. Family, friends and social class, as well as personality traits and capacity, have a strong influence on young peoples’ Higher Education [HE] choices [1]. Moreover, having emotional and instrumental support from a family member working in health care also tends to influence students’ choice in this regard [7]. Thirteen percent of Swedish nursing students, aged 30–34 years, have at least one parent that is a registered nurse [RN] [10]. A common perception among young people is that caring for others is a highly valued attribute when choosing nursing as a career [2]. Studies have shown that students express that they have a personality that fits the nursing profession [6, 11].

Entering Higher Education

Nursing training focuses on professional as well as academic skills, aiming to train competent nurses who can adapt to unfamiliar circumstances in unfamiliar contexts [12] and deal with the complexity of modern health-care provision [13]. According to the Ministry of Education and Research [14], first-cycle study programs should develop the student’s ability to independently and critically assess, formulate and solve problems and be prepared to deal with changes in working life. Students should also develop their ability to gather and interpret information at a scholarly level, stay abreast of the development of knowledge, and to communicate their knowledge to others [14]. Students’ ability to successfully cope with these new experiences vary depending on a number of factors, e.g. socio-economic background, support from significant others and the ability to find a place to live [1]. In HE
students can experience stress due to inadequate sleep, poor nutrition, reduced leisure time, and in trying to balance course requirements and personal needs in earning money to pay rent [15]. The clinical practice, mandatory in nursing training, is something students have concerns about [16]. On entering the nursing program, students are often full of enthusiasm and eagerness to learn [17].

Motives and orientations to learning

Students individual motives, views and perspectives of university training and in HE could be summarized and conceptualized in terms of learning orientations [18, 19]. Beaty, [17, p. 86] concludes that “a learning orientation provides a useful construct for understanding a student’s personal context for study” and identify four distinct types of orientations to learning: academic, vocational, personal and social. According to Entwistle [19] can all types be divided into two sub-types, one where the student has an interest in the content of the course, and another where the student perceives the studying more as a means to an end. Since healthcare is becoming more advanced and specialized it will require high professional competence of tomorrow's RN:s [13, 20]. Skills, approaches and competencies specific to nursing, along with the ability to co-operate with other healthcare professions are essential for patient safety [21]. Nursing students’ expectations, perceptions and concerns when entering the nursing program are based on previous experiences, knowledge [22], and societal conceptions of nursing influenced by stereotypes communicated by media [23]. Therefore, it is of importance to investigate nursing students’ perception of upcoming education and future profession when entering HE.

This study was designed to investigate newly admitted nursing students’ viewpoints about training to become a professional nurse.

Methods

Participants and settings

The Swedish Nursing Program is a three-year program leading to a professional degree as an RN and a bachelor's degree. This study was conducted at a nursing education university located in Stockholm, the capital city of Sweden. Twice a year 110 students enrol in the program. All newly admitted students from autumn 2015 to spring 2017, four cohorts, were orally and in writing invited to participate in the study. Participation was voluntary and students signed an informed consent form.

Data collection

Data were collected during the first six weeks after enrolment as a part of a larger study using interviews and questionnaires. Individual, semi-structured interviews [24] (n=126) were carried out in an undisturbed room at the university by the first author. The interviews lasted 20 minutes on average and were designed to probe students’ perceptions, expectations and concerns about nursing education, the nursing profession and reasons for becoming a nurse. The interviews were audio recorded and transcribed verbatim as soon as possible [24, 25]. To supplement the interviews data were collected using questionnaires. Questionnaires were distributed via the university's learning platform to students who had signed an informed consent form (n=158). The questionnaire covered demographic data, experienced emotions [26], sleeping quality and general health. Students were asked to rate each question on a seven grade Likert-type scale, where 1 indicated 'Very/bad little' to 7 'Very good/much'. A total of 155 questionnaires were completed out of 158 distributed. On two occasions reminders were sent on to students via email.

Data analysis

Interviews were analysed using qualitative content analysis with an inductive approach [27]. The material was read several times to make sense of relevance as a whole [28]. Data were coded by the first author using NVivo 12 software. Meaning units were extracted and coded in an effort to stay close to the text, resulting in 50 sub-categories labelled with a phrase that described the content. This material was discussed in the research group until consensus was reached [25] and the following domains created: Conceptions, Expectations and Doubts. Codes were grouped into the domains and categorized by their contextual meaning. From the categorization, an abstraction was derived describing seven main categories [27]. Sample percentages, mean value and standard deviation were calculated for data from questionnaires using descriptive statistics (SPSS Statistics 26.0.)

Results
Demographics

The sample (n = 158) was made up of 87.3% women and 12.7% men with a mean age of 27.8 ± 8.5, range 19–55. The nursing program was their first choice for 90.5%, and 57% had family members working in health care. A total of 42.4% had previously attended HE, and 30% had completed a university degree in another subject area. A total of 33.5 % stated that they had no plans to work to earn money alongside studying, while 63.4 % planned to work less than 15 hours/week and 3.1 % planned to put in 16–40 hours of work.

Results from interviews

The results explore a range of conceptions, expectations and fears about becoming a nurse. The findings are presented as the main theme: Making a difference if managing to become a professional nurse with main category, category and domain describing students’ perceptions at the starting point, Table 1.

| Domain       | Category                        | Main category          | Theme                                                                 |
|--------------|---------------------------------|------------------------|----------------------------------------------------------------------|
| Conceptions  | Altruistic reasons              | Nursing as role model  | Making a difference if managing to become a professional nurse       |
|              | Personal interactions with nurses|                        |                                                                      |
|              | Meant to be due to individual characteristics | |                                                                      |
|              | Confident in personal capabilities | Self-confidence in a new environment | |
|              | Attempting something unfamiliar |                        |                                                                      |
| Expectations | Receiving robust education      | Develop nursing attitudes and skills | |
|              | Acquiring knowledge and attributes for nursing | |                                                                      |
|              | Getting lots of opportunities   | Opportunities to impact the future | |
|              | Affect people and environment   |                        |                                                                      |
|              | Anticipating good co-operation  | Stimulating hands-on teamwork | |
|              | Expectancy to work practically  |                        |                                                                      |
| Doubts       | Do wrong                        | Don’t manage the task  |                                                                      |
|              | Fear of failure                 |                        |                                                                      |
|              | Unmanageable requirements       | Surrounding factors prohibiting success | |
|              | Concerns about organizational shortcomings | |                                                                      |
|              | Uncertainties about choice      |                        |                                                                      |

Nursing as role model

The students perceived nursing as a meaningful and rewarding profession. Having an interest in people and helping them seemed to be important factors for choosing a nursing education as students expressed a strong interest in doing good and helping others for altruistic reasons.

I want do make a difference; I want to have a job where I am useful to other people

Female, aged 28
Students testified to have been inspired through *personal interactions with nurses* and other health care workers. These interactions were generally positive, but negative experiences were also voiced.

It is not exclusively a so-called female profession anymore, but it was probably what made me, that particular event, to meet them (two male nurses) there when in a hospital bed, it made me think that it was really an opportunity for me too, not only that other guys could be it (nurses) without wrinkling their noses, but that I myself could certainly have something to offer as a nurse as well, but at that time I was very young and had not decided yet

**Male, aged 27**

Students who had negative experiences described a desire to do better themselves. Having family members in health care professions seemed to influence students in two different ways: either they found it natural to follow the same path or they had decided early on not to take that path but later changed their mind. Students highlighted that being raised in a family with health care workers had affected their choice of career, but they emphasised that the choice was their own.

"I am from a "family in caregiving" myself, where my mum is a surgical nurse, my dad a surgeon, my brother a medical doctor, my aunt a medical doctor as well, so I have very, I have kind of grown up with it, and then I have studied a lot of other things previously"

**Female, aged 29**

Personality characteristics were connected to the choice of education, often explained as something *meant to be because of individual characteristics*. Having a personality as a nurse was something they had been told by others, but at the same time the students expressed that the choice was their own. Some students reported that they were supposed to become a nurse, almost like a professional calling.

"I have tried other things that were very different from the nursing profession and I felt that it was not my thing anyway. So, I wanted to try something that was like completely different, try something involving people."

**Male, aged 25**

**Self-confidence in a new environment**

The students testified to experiences of having to cope with new demands in a new and unfamiliar environment. Even students who previously had taken courses at the university level stressed that it took time to adapt to the new situation. However, they also expressed a strong belief in their own ability. Students being *confident in personal capabilities* described themselves as being able to handle stress, deal with difficulties confronting them and not worry about the unknown.

"You have to trust yourself, if coming here now and coming to this point so far, then why should you not manage it?"

**Female, aged 21**

The students became increasingly aware of their own responsibility as they realised that they had to do the work themselves based on the materials and tools provided by the university. The students’ experiences of health care varied, and some held conceptions of nursing mediated mainly through TV programs and newspapers. Students new to HE and health care were attempting to do something unfamiliar. They lacked the experience of being a student in a university context but had nevertheless applied to the program to try it out.

"I have more expectations of myself that I, I kind of have to cope with this, then so that I have to cope with it, then at what level, does not matter so much, but I have to cope with it, like I said"

**Female, aged 20**

**Develop nursing attitudes and skills**

The students were expecting to learn a great deal from their studies and *receive robust education*, providing them with skills required to work successfully as an RN. Recognizing that studying and work would be both challenging and promote personal development, the students expressed a vision that RNs have a great responsibility and status. They looked forward to *acquiring knowledge and attributes for nursing*, expecting this learning process to continue after graduation.
I want to know everything, you are so cool when you know everything, all this information, you can ask a nurse almost anything, she knows everything, almost

**Female, aged 22**

**Opportunities to impact the future**

The students frequently mentioned the wide range of different career opportunities available, expressing views that having a bachelor's degree in nursing guaranteed employment and opportunities to work globally in many areas. Some students saw the program as a stepping stone to something else, primarily targeting other areas than the nursing profession. Those who described the program as such an intermediate step said they would like to be admitted to another educational program to become, for instance, a deacon, midwife or specialist nurse.

There is such a range in areas of work ... you can develop in so many different areas, so that's probably the main reason why I want to become a nurse

**Female, aged 23**

**Stimulating hands-on teamwork**

Teamwork was foregrounded as a condition for successful learning in both education and work. The opportunity to learn during internship and to work together with others, both during and after education, was also emphasized. The students were anticipating good co-operation, working together, helping each other to create a good working atmosphere in both studies and professional work.

I find this to work in teams is inspiring, before I have worked with people, but usually been alone in my profession, but to be able to work with several, much more nursing staff, even if everyone aren’t nurses, it is still like is about nursing, so that part I think would be inspiring

**Female, aged 55**

Students also expressed an expectancy to work practically, looking forward to receiving practical experience and developing skills during internships. Generally, nursing was described as a practical profession not just involving sitting in front of a computer all day.

I think that the nursing occupation is a craft too, so I hope that I will be skilled in terms of craftsmanship, I actually want to be a good nurse, someone who is confident in what she does

**Female, aged 42**

**Fears of failing tasks**

The students voiced doubts and fears in relation to failing courses and doing something wrong in the clinical workplace. However, the implications of doing wrong varied in relation to context. While failing at university was seen as problematic, failing in the clinical context was seen as much more severe as this might cause harm or even death. Students commonly agreed that injuring a patient was one of the worst things that could happen.

I am also sometimes afraid of not passing the theory, failing exams and so on, but it does not feel as scary if I fail exams as if I should do something wrong in practice ... if I should do something wrong and hurt another person because I do not have the knowledge I need, or if I should make a mistake.

**Female, aged 22**

The fear of failure included both failing exams and missing important aspects of coursework at university as well as failing in the clinical setting, in providing information, instructions or in checking patients’ conditions. Such fears of making mistakes were regularly mentioned, even though the students were quite certain of their own capabilities. The degree to which students experienced anxiousness and nervousness because of fears of failing, varied in relation to previous experiences of HE. The students who had previous negative experiences, or had not studied for a long time, expressed higher levels of nervousness in the interviews.
You are always afraid that you will flunk something, I do not know, I have never flunked anything so far in my life, but it is always, I do not know, it is a horror, a nightmare scenario as well

**Male, aged 21**

**Surrounding factors prohibiting success**

One source of concern for the students was surrounding factors out of their control. This was expressed in terms of *unmanageable requirements*, worries about how to cope with demands from significant others, university and workplaces. Besides being in a new, unknown environment, the students had concerns about how their studying would impact personal finances, family and friends. Another concern was not being able to meet the requirements of teachers, supervisors and the healthcare organization.

Getting it together, family life, two children and studies, I used to work part time and now it's full time studies and my husband works full time, so it's probably more personal than the education itself, and the clinical practice, to make it work with the family, it feels like that is the biggest threat to me

**Female, aged 35**

*Concerns about organizational shortcomings* were repeatedly voiced, often together with the prospect of future change. This included whether future health care would provide decent working hours, working environments and salaries.

I think it's a lot about what you hear, that it's salary, bad wages and tough working conditions and stuff, maybe it's a tough occupation to get into

**Female, aged 23**

The students also expressed *uncertainties about choice*, involving fears of confronting unfamiliar contexts and demands and of not having the personal qualifications to work as an RN.

> *What happens if it is some kind of very tough situation, something very stressful, something like yes, very tense, if you cannot handle it as a person. How it will affect a workplace and its safety, can I keep working there if I react in a way that you should not really do, or if I do not dare or manage to get into this kind of situations, how does it affect my employment and stuff, it's kind of like that.*

**Female, aged 19**

**Results from questionnaires**

Data from all four cohorts showed that the students generally rated higher for positive emotions, and lower for negative, when entering the program, Table 2. There were no significate differences between the cohorts.
Table 2
Self-rated experienced emotions when entering the program (n = 158)

|                | Mean | Std. Deviation |
|----------------|------|----------------|
| Determined     | 5.36 | 1.406          |
| Committed      | 5.72 | 1.210          |
| Enthusiastic   | 5.49 | 1.281          |
| Interested     | 6.01 | 1.156          |
| Competent      | 4.24 | 1.495          |
| Challenged*    | 5.11 | 1.645          |
| Nervous        | 4.04 | 1.795          |
| Worried        | 3.70 | 1.825          |
| Irritated      | 2.41 | 1.481          |
| Stress         | 3.60 | 1.774          |
| Sleep*         | 4.83 | 1.418          |
| Health*        | 5.39 | 1.108*         |

*missing data: -1

Discussion

This study aimed to investigate newly admitted nursing students' viewpoints about training to become a professional nurse. Similar to previous findings, altruistic motives, opportunities for self-development as well as career aspirations were highlighted during the interviews [3–7]. Students emphasised enthusiasm, excitement, eagerness to learn nursing and start the training, consistent with a high average in ratings of positive emotions in line with previous research [17].

When the students described their motives to become a RN it seemed like several orientations had an equal impact on student's motivation to start the program. The phenomenon has been described as the complexity of learning orientations, meaning that an individual student's orientation is usually a complex mix of two or more different learning orientations [18]. Even so, all of the orientations of learning, including sub-types, were possible to identify when discussing reasons to become a RN, Table 3.
Table 3
Orientations connected to main categories

| Orientations | Interest  | Main category                                      |
|--------------|-----------|---------------------------------------------------|
| Vocational   | Intrinsic | Nursing as role model                             |
|              |           | Develop nursing attitudes and skills              |
|              |           | Opportunities to impact the future               |
|              | Extrinsic | Develop nursing attitudes and skills              |
|              |           | Opportunities to impact the future               |
| Academic     | Intrinsic | Self-confidence in a new environment              |
|              |           | Develop nursing attitudes and skills              |
|              | Extrinsic | Nursing as role model                             |
|              |           | Opportunities to impact the future               |
| Personal     | Intrinsic | Self-confidence in a new environment              |
|              |           | Develop nursing attitudes and skills              |
|              |           | Opportunities to impact the future               |
|              |           | Stimulating hands-on teamwork                     |
|              | Extrinsic | Nursing as role model                             |
|              |           | Develop nursing attitudes and skills              |
|              |           | Stimulating hands-on teamwork                     |
| Social       | Intrinsic | Nursing as role model                             |
|              |           | Self-confidence in a new environment              |
|              |           | Opportunities to impact the future               |
|              |           | Stimulating hands-on teamwork                     |
|              | Extrinsic | Nursing as role model                             |
|              |           | Develop nursing attitudes and skills              |
|              |           | Stimulating hands-on teamwork                     |

When the students described their motives to become a RN both individual vocational and personal learning orientations came to the fore as some of the students had planned their future career while others focused on personal development. The altruistic motives and the desire to contribute to society that was emphasised in line with high ratings of determination, commitment and enthusiasm. These finding indicated that the newly admitted nursing students in general had a strong intrinsic social learning orientation [19].

To have nursing as a role model derived both from interactions with health care personnel and the impact of family members [7, 9]. Almost two-thirds of the participating students had a family member in health care, compared to thirteen percent in available comparative data for one specific age group [10].

Highly self-rated feelings of being competent were supported by verbal statements demonstrating self-confidence in a new environment, as students expressed a belief in their own capability, both in education and in the upcoming role in the workplace. Looking across the students’ interview statements in relation to this topic, all four types of orientations to learning, including sub-types, could readily be identified [18, 19].
Self-rated experienced enthusiasm and interest, Table 2, were in line with the spoken statements that students expected to develop nursing attitudes and skills to become a professional RN. The professional status of an RN was often highlighted, students looked forward to gain both practical and academic skills of an RN. Self-improvement were often mentioned, which could be seen as indicating a strong personal orientation [18]. Personal development was also important, mentioned in terms like improving social or personal conditions and such views could be linked to students’ adopting an intrinsic social orientation [19]. The high ratings in feeling challenged, Table 2, could indicate that students are aware of their need for further knowledge.

Despite the student’s awareness of existing problems in today’s health care, the opportunities to impact the future were highlighted recurrently. Students belief in their capability to make a difference and the high self-rated results of feeling challenged, indicates that students have a strong intrinsic social orientation. Their self-awareness became clear during interviews, students described both their personal strengths and weaknesses. Even so, they expressed awareness of their need of further knowledge to become competent RNs. According to [22] the first-year experiences of HE is essential for the development of self-efficacy as an important aspect of the learning process. There was an outspoken confidence, that by acquiring academic, professional and personal knowledge, students would have the ability to make changes both in people’s life’s as well as in the organizational system. However, it has been shown that even if students believe in their own ability to cope with organizational issues, they may develop negative perceptions of the profession when influenced by the working environment and interactions with healthcare personnel [5].

In the category stimulating hands-on teamwork, students highlighted the ability to work in teams having expectations of being a part of a community. The students expressed an inner motivation to belong to a team working together, both as students and in their upcoming profession. The descriptions of the atmosphere, both at the university and in health care, were highlighted as enjoyable and desirable, were interpreted as a social intrinsic orientation [19].

Ratings of negative stress, nervousness, and fear, Table 2, correspond to what all students voiced, that is a fear of not managing the task, in both training and as an RN. Stress, depression and anxiety are commonly occurring negative affective states in young adults that can affect learning and success in a professional nursing program [15]. When describing negative emotions students talked about making clinical mistakes or failing exams. To do something wrong in a clinical setting leading to pain or even death in another human being was clearly considered much worse than failing an exam at the university [16].

The students spoke about surrounding factors prohibiting success in both personal life and in organizational structures. Worries about combining studies with social family life, and financial issues were seen as hindering factors. Outspoken doubts where a threat to both personal orientations and social orientations [18]. Despite this, self-confidence and a belief in their own opportunities became apparent when discussing fears. Life and/or work experiences has an impact on self-confidence during nursing training, but more research is needed on how this impacts students [16]. It has also been shown that understanding first year students, the nurse perspective and insight into their coping strategies are essential to supporting a positive learning journey [22]. Learning orientations encapsulate the complex nature of a student’s aims, attitudes, purposes for studying [18]. Further studies could explore students’ development of professional identities as RN:s.

**Limitations and strengths**

This study offered a broad sample of students starting the nursing program. The fact that the sample was from one university could be seen as a limitation. On the other hand, is Swedish nursing education regulated by national standards. All interviews were performed by the first author who worked as a lecturer at the university. It could be considered as a strength to have knowledge about the students’ environment although interviewing students as a teacher may lead to ethical issues. To reduce confounding factors the interviews were conducted when the students did not take courses where the interviewer had any examination responsibility.

**Conclusions**

This study indicates that first-year nursing students are self-confident but also aware of their shortcomings and have faith in their own ability to cope with both training and to make impact in their future occupation, strongly driven by intrinsic social orientations. They are looking forward to gaining competence and to developing a professional role, both academically and practically. All students mentioned fear of failing in theoretical as well as in clinical education, with the worst fear pertaining to harming a patient.
Since health care is evolving and greater demands will be placed on the future workforce the next generation of RNs need to have the confidence and competence to meet with these demands [21]. The students’ enthusiasm needs to be harnessed and be given opportunity to increase during education. In order to do that it is essential for educators to gain a deeper understanding of the visions of newly admitted nursing students.

Declarations

Ethics approval and consent to participate

The research was approved by Sophiahemmet University Research Board. Informed consent in writing was obtained from the participants. Information about the study was provided to participants and verbal consent was obtained before the interviews were conducted. This study was approved by the Regional Ethics Review Board, Stockholm (Registration number: 2015/894-31/5).

Consent for publication

Informed consent for publication was obtained from all participants.

Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available due to that the material may contain details about participants that might need to be anonymised but are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors’ contributions

HL designed the study. SLR performed interviews and conducted statistical analyses. SLR, HL, MW and MS drafted and revised the manuscript. All authors read and approved the manuscript.

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