University of Hertfordshire UH

Document Version: Accepted Version

Link to the final published version available at the publisher:

Causes of ATtrition in CHIldren's NursinG (CATCHING): an exploratory mixed method study

Authors

Dr. Stephen McKeever [a]
Stephen.McKeever@lsbu.ac.uk
Senior Lecturer in Children's Nursing

Dr. Lisa Whiting [b]
L.Whiting@herts.ac.uk
Professional Lead, Children's Nursing, University of Hertfordshire

Dr. David Anderson [c]
Lecturer in Child Health, City University of London
Anderson-1@city.ac.uk

Professor Alison Twycross [a]
Head of Department, Department of Children's Nursing, London South Bank University
a.twycross@lsbu.ac.uk

Affiliation addresses

[a] Department of Children's Nursing, School of Health and Social Care, London South Bank University, 103 Borough Road, London, SE1 0AA, United Kingdom

[b] Health and Social Work, University of Hertfordshire, Hatfield, Hertfordshire, AL10 9AB, United Kingdom

[c] Nursing Division, School of Health Sciences, City University of London, Myddleton Street, London, EC1R 1UW, United Kingdom

Corresponding author

Dr. Stephen McKeever
Department of Children's Nursing,
School of Health and Social Care,
London South Bank University
Email
Stephen.McKeever@lsbu.ac.uk

Telephone
+44 (0) 207 815 8342

Abstract
Professional, financial and ethical reasons necessitate nursing improves its understanding of student attrition. Previous studies identify causes of attrition as multifactorial. However, few studies focus on children's nursing. This study aimed to explore causes of pre-registration children's nursing attrition.

Exploring causes of attrition was achieved through quantitative and qualitative approaches. Three years of quantitative data relating to attrition rates and causes was obtained. These data informed semi-structured interviews of children's nursing students, from four London universities. These students had faced challenges and either 'left' (n=5) or 'stayed on' (n=13) their pre-registration programme.

Most attrition occurred in the first year of programmes and was primarily due to academic failure or personal circumstances; clinical placements also played a role. Emergent themes were *'expectations of pre-registration children's nursing'*; '*realities of a pre-registration children's nursing course'*, and *'factors that influence students leaving or staying on the course'*. Many participants reported a reluctance to disclose issues while on their course. Support to continue on the programme was frequently obtained away from university and students described relying on self-determination to complete programmes.

Findings indicated several areas of potential improvement for student support including targeted interventions focusing on a student's first year and reducing variation in support services provided.

Highlights:
- Primarily children's student nurse attrition is due to personal or academic challenges
- Support mechanisms are pivotal to students remaining on a programme of study.
- Personal tutors are a key element in proving support to students.
- Pre-course candidates require a realistic picture of children's nursing.

Causes of ATtrition in CHIldren's NursinG (CATCHING): an exploratory mixed method study

Introduction
There is a professional, financial and ethical responsibility within nurse education to address student attrition (Urwin et al., 2010) Improved understanding of the phenomenon is required (Glossop, 2001; Hamshire et al., 2012) so that the increased knowledge can facilitate the development of strategies to enhance student nurse retention (McLaughlin et al., 2008). There is growing body of literature focussing on pre-registration student nurse attrition both within the United Kingdom [UK] (Glogowska et al., 2007; Glossop, 2001; Hamshire et al., 2012; O'Donnell, 2011; Pryjmachuk et al., 2009; Williamson et al., 2013) and abroad (Abele et al., 2013; Andrew et al., 2008; Harris et al., 2014). However, few studies have specifically focussed on children's nursing or been conducted following the introduction of England's degree based courses. Through a mixed method approach, this study aimed to enhance understanding of attrition within pre-registration children's nursing programmes.

Background Literature
Attrition is defined as: *"non completion of a training programme for whatever reason"* (Jinks et al., 2014 p1). Student nurse attrition has been previously identified as multifactorial, with a number of potential causes identified (Orton, 2011). Practice experience, gender and age are recurrent themes identified as contributing to pre-registration student nurse attrition.

Practice is an implicit and essential part of any pre-registration nursing programme. Thus, student preparation and experiences gained are fundamental to their overall success. Hamshire et al. (2012) study interviewed 16 students who left their pre-registration programme; the research revealed several reasons why students left their programme. Clinical experience was a key factor, three main areas in relation to this were revealed: *"ineffective placement organisation"*; *"problematic placement journeys"*; *"disappointing clinical experiences"* (Hamshire et al., 2012 p184). A systematic review by Eick et al. (2012) also identified that although practice related reasons were not the only factor leading to student attrition, clinical experience was consistently mentioned as having an impact. However, Williamson et al. (2013) highlighted that clinical placements can be a positive driving force that aid student engagement with nursing.

McLaughlin et al. (2010) Belfast based study sent questionnaires to 384 students in the first month of their pre-registration nursing programme to assess their views of gender identity and its relationship to nursing. Programme end student attrition rates for males and females were collated. McLaughlin et al. (2010) concluded that male students were more likely to leave pre-registration nursing programmes suggesting the female dominated nursing profession led to stereotyping with particular perceptions of 'male nurses' being held – leading to male students feeling uncomfortable and not wholly accepted. Similar findings have been found in other studies (Eick et al., 2012; Mulholland et al., 2008).

Attrition is inevitably a complex problem and current literature does not reveal one responsible factor. Lack of support, academically and in practice, has been identified as influencing students' decision about whether or not to leave their programme (Wray et al., 2010). There are also a range of issues specific to individual students including their personality traits (Deary et al., 2003; McLaughlin et al., 2008); age (Mulholland et al., 2008; Pryjmachuk et al., 2009);

ability to deal with stressful situations (Deary et al., 2003) and levels of self-efficacy (McLaughlin et al., 2008).

A study by Glogowska et al. (2007) involved semi-structured interviews of UK adult nursing students who stayed (n=30) and those who withdrew from courses (n=19). 'Push' factors which drive students away from a course were; 'challenges of academic work', 'burden of other demands', 'financial strain', 'lack of support', 'negative early experiences' and 'illness/injury' (Glogowska et al., 2007 p. 67). Whilst 'pull' factors that help to retain students were: 'determination/stubbornness', 'commitment to chosen profession', 'informal and formal support' (Glogowska et al., 2007 p. 71).

Children's nursing

Whilst little research has specifically focussed on children's nursing students' attrition, Wright and Wray (2012) undertook focus groups with this professional group during the latter part of their first academic year to ascertain their views of the nursing programme. Wright and Wray (2012) postulated that the students' expectations of the programme did not always match reality and that this could influence their decision about whether or not to continue with their studies. Pryjmachuk et al. (2009) demonstrated there was an increased likelihood of attrition if a student was studying a children's nursing programme postulating this could be because children's nursing tends to attract younger applicants.

Background information to Health Education England North Central East London [HEE NCEL]

Within the geographical area, four Higher Education Institutions [HEIs] (City, Hertfordshire, London South Bank [LSBU] and Middlesex universities), provide pre-registration children's nursing programmes. These HEIs use a range of strategies aimed at reducing student attrition and collate student exit information. However, there is a lack of specific detail about the reasons why students leave programmes. To gain further insight into children's nursing programmes attrition, this project was commissioned and funded by HEE NCEL. On project completion a report was submitted to HEE NCEL (McKeever et al., 2016).

Aim

To explore the causes of attrition within pre-registration children's nursing programmes across four HEIs in HEE NCEL.

Methods

For this study, exploring causes of attrition was achieved through quantitative and qualitative approaches. This mixed method approach was underpinned by Creswell (2009). Ethical approval to conduct the study was obtained from LSBU Research Ethics Committee (UREC 1511).

Quantitative data collection

The four HEIs submit annual activity accounts to an online portal. Requests were made for retrospective attrition data for pre-registration children's nursing programmes from 2011 - 2014. This permitted examination of attrition in relation to each HEI as well as year of leaving and reasons. Raw data were obtained and imported into Excel. Data integrity extraction, and construction of figures, was achieved using bespoke Excel macros. Due to variations in

commissioned numbers, data was presented as percentages and grouped as totals across HEIs.

Qualitative data collection

Semi-structured interviews were undertaken with pre-registration children's nursing students and included those who had 'left' or 'stayed' programmes. The 'left' group were people who had discontinued a BSc or postgraduate diploma [PGDip] pre-registration children's nursing course; the 'stayed' group were current students who remained on their programme despite significant challenges. In an attempt to maximise sample variation, targets of 50 'left' and 15 'stayed' students were set. This intend be representative of reasons for leaving the course as well as having varied demographic factors.

Initial contact with potential participants was via course directors using email, or posted, invitations that included a participant information sheet. Once interest was established a mutually convenient time and place was negotiated to conduct the interview by the main researcher. Prior to interview, informed written consent was obtained.

Semi-structured interviews schedules

Semi-structured interview schedules were developed for 'left' and 'stayed' participants. Questions were developed from the quantitative data, available literature, the researchers' experiences working with pre-registration children's nurses, and insights from existing exit interview data. Interviews obtained demographic information before progressing to discuss factors participants enjoyed and challenges faced.

All interviews were recorded and transcribed verbatim. Transcripts were reviewed for accuracy by the interviewer (SM) before being imported into NVivo for Windows. Content analysis was used to analyse data, drawing on Creswell's (2009) five-step approach. Whilst listening to each transcript, interview comments relating to the study's aim were referenced into a new or existing nodes. Nodes were refined as coding progressed through subsequent transcripts. All references contained in each node were cohorted together into overarching themes. Data analysis was undertaken by one researcher (SM). To minimise researcher bias, 20% of data was reviewed and coded by the principal investigator (AT).

Results

Quantitative

Percentage attrition, in relation to commissioned places, varied across the four universities (Figure 1) and according to academic year and course. LSBU attrition rate from BSc programme was stable at between 24.9-26.6%. This was similar to City University (23.4-27.4%). With smaller numbers of commissioned places, greater percentage variations were seen for Middlesex (9.5 - 30.1%) and Hertfordshire (9.5-26.1%). Attrition from PGDip courses was low (6.7 - 13.0%), but it is of note that this programme only commenced in 2013.

To examine the point, and reason, students left their BSc course, HEI data were combined. Figure 2 demonstrates attrition was highest in year one. Predominant reasons being academic failure, personal circumstances and wrong career choice. Years two and three showed a gradual reduction in attrition. The peak in exit awards in academic year two could be due to

students retaking modules, but being unsuccessful following assessment submission. Successive

Figure 1 Percentage attrition according to university and course from three sampled years.

Figure 2 Mean attrition (2011–2014) across four universities according to academic year

Semi-structured interviews with students who had 'Left' or 'Stayed'

Five (2.8%) of the 176 former students contacted were subsequently interviewed (Figure 3). Most did not respond to interview invitations; seven former students declined, another eight initially appeared interested but did not respond to the interview arrangement request. Response rates from students who remained on a programme were higher. Thirty-eight were approached and 13 (34.2%) were interviewed.

Figure 3 Flow chart of potential participants who had 'Left' or 'Stayed'

Demographics

Most participants described English as the language spoken at home. Participants were young (median age at course commencement 22 years [IQR 19.25, 25.75]. The majority of participants came from two of the four university sites (Table 1). However, 'stayed' students were primarily from one university, whereas, the other university yielded participants who were in both 'left' and 'stayed' categories. Primary reasons for leaving or having difficulties on the course were personal or medically related. Only one participant was enrolled on a PGDip programme preventing an exploration of different factors relating to students on BSc or PGDip programmes.

Table 1 Demographics of participants interviewed (N=18)

Emergent themes

Analysis of semi-structured interviews revealed three themes (Figure 4). Pseudonyms are used throughout to maintain participants' anonymity. When describing themes, positive and negative elements are explored.

Expectations of pre-registration children's nursing
The participants' expectations were categorised into three sub-themes:

Figure 4 Themes and subthemes emerging from the data

- Desire to be a children's nurse
- Previous work experience
- Their expectations of the course.

Factors influencing their desire to be a children's nurse
Some participants were uncertain about why they wanted to be a children's nurse. However, the media was frequently cited as an influential factor

> *"When I was little and I used to watch Children's Hospital when I was five"* (Lisa, Left)

A long-standing desire to be a nurse and/or direct experience of receiving care in hospital was mentioned on a number of occasions:

> *"I think I've always known I wanted to be a children's nurse. I was always very interested in looking after children from a young age."* (Gina, Stayed)

> *"I was in hospital because I relapsed so I spent quite a few years around medical professionals and it was always the nurses that I was like, 'Yes, I want to do this."* (Sandy, Stayed)

Some participants reported friends or relatives in healthcare. Others were in employment they could not see themselves continuing long-term:

> *"My friend is a nurse, but she's an adult nurse. She did encourage me to go into nursing so that was another factor."* (Olive, Stayed)

> *"My job really bored me at* [supermarket chain]*, it was really just facing up, filling the shelves, profits, you know, like, push at Easter, Christmas etc., and it's all about making more and more money all the time."* (Regina, Left)

Prior work or voluntary experience
Although a few participants had no prior healthcare or other related experience, many reported that they had, this was both paid and voluntary/care work:

> *"I've worked as a special needs teaching assistant, I've worked in a children's home for children with autism. I've worked as a nanny."* (Kim, Stayed)

"I was caring for my mum. My mum suffered from bi-polar disorder." (Penny, Stayed)

Expectations and preparation for children's nursing

Interestingly, programme expectations could be limited and were often overshadowed by actually getting a place on the course:

"I didn't go in there having any expectations. It was a whole new world and I didn't really know what I was getting myself into. I just thought it would be such a happy and caring career. I love children so much." (Olive, Stayed)

When expectations were voiced, participants recognised the course would be 'hard':

"I knew it would be hard work. I think I didn't envisage just how tough the study would be." (Gina, Stayed)

But despite this, little or no preparation had been undertaken:

"I just thought I will handle it when it comes, but as preparation wise, not really no, not really before coming on the course. I didn't really do any preparation at all." (Holly, Stayed)

There was a lack of appreciation of the academic work involved in a children's nursing course; one participant vocalised that she thought she was a *"caring person"* (Olive, Stayed), that it would all come naturally to her. Most participants had undertaken prior courses, but acknowledged that there was an unexpected "step up" after commencing their university programme. Others had concerns about not being '*academic*':

"I hadn't honestly contemplated the academic side of it as much as the physical side." (Gina, Stayed)

The participants undertook some specific preparatory work for their course, mentioned they had purchased/borrowed textbooks related to anatomy/physiology, writing, clinical skills and maths/drug calculations. Additionally, the internet, university open days and existing nurses/students also proved useful sources of information.

Realities of a pre-registration children's nursing course

Whilst some participants showed appropriate insights into what children's nursing programmes involved others found the reality quite different.

Placements

Most participants enjoyed this aspect of the programme:

"Practice felt most natural. I felt like I was actually doing what I went to uni for and it felt like I was being a nurse when I was in practice, so that wasn't easy but it was easy in a way that I didn't find it really challenging like the academic side." (Sandy, Stayed)

However, poor mentorship or lack of student support could mean placements became anxiety inducing. For some this led to a sense of powerlessness which was compounded when the participant submitted a complaint but felt nothing had changed or perceived unjust treatment:

"First placement in the hospital at the end of the year one was three months of hell... one nurse in particularly who was just a bully." (Gina, Stayed)

"I think it's hard as a student to, kind of, find your boundary of you can say something and stand up for yourself, or whether you've got the right to say something as a student " (Nicola, Stayed)

Some participants discussed struggling with the realities of delivering care that sometimes deviated from university theory; the converse to this was that placement helped to contextualise taught content:

"How can you write these assignments about giving quality care and then you're given six patients, and you haven't got any time to give quality care?" (Nicola, Stayed)

"It felt like, because our placement was May, up until then it was theory, and when you go to placement, everything made sense." (Holly, Stayed)

Theoretical content

Many participants struggled with the level of study. Without prior knowledge, topics such as biology, science, maths, research, and academic writing, were particularly challenging. The practical aspects of the programme were more positively received; simulated practice and skills sessions were highlighted as an 'easier' aspect of the course with students embracing this interactive and participatory learning as it provided them with clinical skills. However, formal assessment of practice could be anxiety provoking and stressful:

"I knew what I was doing, I just couldn't deal with the pressure, and I was doing some of those skills in practice every single day, yet put in that situation I just couldn't deal with the pressure of people looking at me." (Sandy, Stayed)

Some students identified having difficulty concentrating during lectures and learning from classroom discussions or debates. This was especially relevant if English was not a first language or in large cohorts:

"I don't know whether I'd feel as comfortable about putting my hand up in a group of over 100, you know what I mean, in one of these lecture theatres." (Regina, Left)

Assessments

Assessments were viewed as integral to the programme and were less demanding if the participant could draw on previous experiences and knowledge. However, having multiple assignment submissions, coupled with other course or personal pressures, could make achieving deadlines problematic:

"Being in placement and having three assignments to do-, no, two assignments to do and then after coming out of placement you've got another assignment that's coming up. It's going to be due on the same day as well that was tough, like, juggling everything." (Freya, Stayed)

Some participants took responsibility for not working hard enough. However, others would have appreciated further guidance:

"Completely my fault that was just a dumb thing that I did. Didn't hand it in at all." (Amy, Left)

Living in London

For some participants adjusting to university, and London life, presented achievable challenges. Elements that helped were living close to the university, being involved in non-university activities and a sense of camaraderie had developed between course members. However, travelling long distances to university or placement could influence study, finances or personal life. Often participants made decisions on where to live based on money - housing close to university could be prohibitively expensive, therefore, participants opted to live further away in cheaper accommodation. For those living in halls, proximity to university/placement and choice of cohabitants were important elements in reducing isolation.

> *"I was in halls … [location 30 mins travel from university], and my flatmates, one of them, I think he was 30, he didn't speak any English, he was doing his PhD. They were all post-grads a lot older than me, didn't want [to socialise], they'd done that, so I didn't make my friendship group there."* (Sandy, Stayed)

Financial aspects such as accommodation, living costs, travel, childcare, frequently required people to obtain work and this could affect studying:

> *"Financial stress played in a lot, so I had to be doing my weekend jobs. So I wasn't getting time to study enough, and childcare costs, if I wanted to send the kids into childcare, like, every day is going to cost a lot."* (Ivy, Stayed)

Personal health and caring responsibilities

During their studies, it was not unusual for participants to suffer from physical or mental illness. Some of these issues were not present at the start of the course and took time to diagnose - this contributed to poor academic or placement performance:

> *"I hadn't absorbed my diagnosis straight away it then hit me like a ton of bricks in second year along with trying to get my head around the diagnosis I was then desperately trying really hard to try and keep my academic studies up and placement and it was just too much."* (Elaine, Stayed)

> *"I found it was quite hard because at the time, [partner] did a couple of big hospital admissions, and [step daughter] was quite unwell at that point, and there were times that I was quite literally being pulled in five or six directions."* (Debbie, Left)

Factors that influence students leaving or staying on the course

A decision to stay or leave the course usually involved taking several factors into account. For many participants the support they received was an important element.

Academic staff

Most participants mentioned support from their personal tutor and suggested that this could positively influence participants staying on programmes. However, some lacked an understanding of the personal tutor role and a reluctance to follow that avenue of support. When participants did engage with their personal tutor they were often surprised by help received:

> *"What shocked me was just how understanding [personal tutor] was and how much he wanted to actually help and how much support there actually was…..That just made me feel 100 times better."* (Holly, Stayed)

Aspects that were valued from personal tutors were availability through email, regular group or one-to-one meetings and taking a holistic approach to issues. Inconsistences in personal tutors led to some participants feeling unsupported – areas that were a particular source of frustration included personal tutors appearing not to know university procedures, not communicating effectively, not making regular contact with students.

On placement, link lecturers were seen as people who could address issues, they then became a source of assistance with course or placement requirements:

> "My link lecturer is really good, because I had some issues on the placement and she sorted them out, she's quite good. I'll go to her if I've got problems." (Julie, Stayed)

Support from lecturers, module coordinators and course directors was also valued. This was positively reported when staff were knowledgeable about university policies, listened to students and gave their time.

> "Lecturers here, they're so amazing because they get to know you on a personal level as well. They know your weakness and your strength." (Freya, Stayed)

Learning support

Many participants accessed university support systems, including academic and library services. However, a lack of awareness could mean a delay in receiving assistance:

> "In my final year for my dissertation I went to the education support place just to go through my dissertation and she was really helpful…..but second year I didn't know anything about these people." (Sandy, Stayed)

Health services

Universities provided services that were beneficial for some, but other participants often required support from external sources - flexibility of placements to accommodate these appointments was a key aspect of recovery. General Practitioners [GPs] were also a primary point of contact, however, those participants who moved away to attend university, returned home to see GPs with whom they had an established relationship:

> "[To see a GP], I had to commute from uni and I hated it because I had to come home to sort that out. That was another stress because I was like, 'When do I do my work because I've got to go home?'" (Holly, Stayed)

Occupational health was an accessible service which offered a gateway to counselling or other facilities. However, occupational health could vary and appeared to depend on individual staff - this led some participants to feel they were not getting appropriate support:

> "If you don't feel like you can connect with that person then it's quite difficult to talk to them, I used to go home and say, you know, 'I'm looking after all these children and I'm trying my best but actually, who's here to look after me?'." (Elaine, Stayed)

Family, friends and relationships

For most participants a positive source of support came from family, partners and friends:

"Family support, there has been huge family and friends' support. I think that is what's really got me through the course." (Penny, Stayed)

Establishing course friendships was fundamental for some participants. These new friends understood current academic and placement pressures. Friendships were easier if classes were small and allowed students to get to know each other:

"Great friends. They've been encouraging. My friends outside of the course wouldn't understand me as much as these friends understand me so they've been quite good in that sense, and honest as well." (Olive, Stayed)

In addition, having access and discussing issues with students further along in the course, through a formalised buddy system, was beneficial.

Hiding
Many participants felt unable to disclose issues to university, placement or colleagues. For some this stemmed from not wanting to feel or be treated differently and believing that others were not having the same difficulties:

"I just kept quiet. I thought, because, all I'm seeing, everyone is having it easy and I'm struggling so I thought, 'You know what? Keep quiet and hope for the best." (Freya, Stayed)

"I wouldn't think to contact the uni for support if I had problems." (Julie, Stayed)

Some struggling participants developed elaborate methods of hiding personal or academic problems. Lisa described how she had *"totally made up a version of events"*. A particular fear was 'interrupting' programmes - the prospect of new colleagues, 'forgetting' skills or knowledge, financial consequences and inherent qualifying delays, all led to non-disclosure.

Self-determination and resilience
Many participants felt that wanting to succeed, together with their self-determination and resilience was really important. Whilst this was not always present at the beginning of the course, self-determination came from wanting to demonstrate to themselves that they could complete their programme:

"I've just spent three years of my life doing this, I can't just quit on the fourth year and get nothing out of the three years. That's how I look at it, I know some people can quit and think, but I can't." (Nicola, Stayed)

Discussion
This study explored causes of attrition within pre-registration children's nursing programmes across four London HEIs. Quantitative aspects revealed attrition varied according to university and year. Most attrition occurred in the first year and was primarily due to academic failure or personal circumstances. Eighteen interviews (5 'left', 13 'stayed'), revealed emergent themes of 'expectations of pre-registration children's nursing', 'realities of a pre-registration children's nursing course' and 'factors that influence students leaving or staying on the course'.

Although Pitt et al. (2012), identified academic performance as an influencing factor for pre-registration nursing student attrition, most previous studies are not UK based. Glossop (2001) cited academic challenges as the second most common reason for students leaving their programme whilst Last and Fulbrook (2003) highlighted academic problems as the sole contributing factor to attrition. This UK based study strengthens our understanding that academic failure is a primary reason for children's nurses leaving programmes and highlights the importance of providing appropriate support mechanisms.

Quantitative data revealed personal circumstances as the second most common reason for leaving a programme. However, when this aspect was examined in the semi-structured interviews, many participants were reluctant to disclose issues encountered on the course. When students did engage with university services, large variations in the support received existed. Similar to work by Glogowska et al. (2007), factors identified often demonstrated a dichotomy between having a positive or negative influence - from a university perspective, there was often an inconsistency in the support services provided. Support to continue on the programme was often obtained away from universities and students often relied on self-determination.

Decisions to stay or leave a programme were frequently multifactorial. Insights gleaned from those who left were similar to those who stayed and thus did not deliver clear differentiations. This lack of a single factor is mirrored by Glogowska et al. (2007) work that focussed on adult nursing students and revealed that there were a spectrum of issues underpinning decision-making about leaving or staying on a course. Some participants had little control over staying or leaving; this was particularly relevant for those with episodes of physical or mental illness. Some participants struggled as demands of caring responsibilities or outside relationships impacted on their ability to complete the programme.

Placements are a key area of student satisfaction (Eick et al., 2012; Hamshire et al., 2012). Being in clinical practice was often what students expected to be doing prior to starting the course. Appropriately organised placements, accompanied by strong mentorship, undoubtedly enhanced the student learning experience - without this, views of the nursing programme could be negative to the point where Gina described a placement as 'hell'.

Pryjmachuk et al. (2009) found that being slightly older meant that students were more likely to complete their course. Participants in this current study started their programme at a median age of 22 years. This is consistent with previously findings that children's nursing tends to attract younger applicants (Pryjmachuk et al., 2009) However, the small sample size, did not allow an examination of children's nursing programme attrition in relation to age.

Recommendations
Results of this study indicate several recommendations to support students prior to commencing, or on, a pre-registration children's nursing programme:

- Promote a more realistic picture of children's nursing
- Develop the role of the personal tutor to enhance two-way communication between student and tutor
- Clearly signpost to students the support available, as well as university policies and procedures

- Improve the student experience, by considering: smaller class sizes; enhancement of first year support strategies; co-ordination of placements and assessment submission times; accommodation facilities that are close to university or placement and affordable; introduction of student 'buddying' system;
- Collect detailed information on students who leave courses to inform future support strategies to reduce attrition

Limitations

When reviewing findings from this study some limitations need to be considered. It is recognised that the information in the HEE NCEL central portal data is not primarily collected for research purposes. This secondary use of data may mean there are uncontrolled factors that may have influenced the findings. It is acknowledged that the study sample size was small and therefore, the participants' views may not have been wholly representative of their colleagues' perspective or of gender. Eliciting the views of others, such as academic and clinical staff may have added a different perspective. However, this study has provided new insights into the student experience in this context.

Future research

Work to understand attrition from a wider range of pre-registration children's nursing students would be valuable. This insight could be obtained by a larger study that includes other HEIs. It would be particularly beneficial to involve other personnel, such as practitioners and academic staff. The development and evaluation of support strategies, such as the role of the personal tutor and link lecturer, would benefit from further exploration.

Conclusion

There is an increasing need for universities to reduce student nurse attrition. Giving a voice to students and understanding the issues faced are important to develop targeted and successful retention strategies. Whilst this study has not provided a complete picture of attrition from children's nursing programmes, some valuable new insights were obtained. These findings can help inform the planning of the future children's nursing courses and facilitate the successful registration of our future nurses.

References

Abele, C., Penprase, B., Ternes, R., 2013. A closer look at academic probation and attrition: what courses are predictive of nursing student success? Nurse Education Today 33, 258-261.

Andrew, S., Salamonson, Y., Weaver, R., Smith, A., O'Reilly, R., Taylor, C., 2008. Hate the course or hate to go: semester differences in first year nursing attrition. Nurse Education Today 28, 865-872.

Creswell, J.W., 2009. Research design: Qualitative, quantitative, and mixed methods approaches, 3 ed. Sage, Los Angeles.

Deary, I.J., Watson, R., Hogston, R., 2003. A longitudinal cohort study of burnout and attrition in nursing students. Journal of Advanced Nursing 43, 71-81.

Eick, S.A., Williamson, G.R., Heath, V., 2012. A systematic review of placement-related attrition in nurse education. International Journal of Nursing Studies 49, 1299-1309.

Glogowska, M., Young, P., Lockyer, L., 2007. Should I go or should I stay?: A study of factors influencing students' decisions on early leaving. Active Learning in Higher Education 8, 63-77.

Glossop, C., 2001. Student nurse attrition from pre-registration courses: investigating methodological issues. Nurse education today 21, 170-180.

Hamshire, C., Willgoss, T.G., Wibberley, C., 2012. 'The placement was probably the tipping point' – The narratives of recently discontinued students. Nurse Education in Practice 12, 182-186.

Harris, R.C., Rosenberg, L., O'Rourke, M.E.G., 2014. Addressing the challenges of nursing student attrition. The Journal of Nursing Education 53, 31-37.

Jinks, A.M., Richardson, K., Jones, C., Kirton, J.A., 2014. Issues concerning recruitment, retention and attrition of student nurses in the 1950/60s: a comparative study. Nurse Education in Practice 14, 641-647.

Last, L., Fulbrook, P., 2003. Why do student nurses leave? Suggestions from a Delphi study. Nurse education today 23, 449-458.

McKeever, S., Whiting, L.S., Anderson, D., Anderson, D.P., Twycross, A.M., 2016. Causes of ATtrition in CHIldrens NursinG (CATCHING) study. Final report. London South Bank University, London http://researchopen.lsbu.ac.uk/465/1/CATCHING_report_120716.pdf.

McLaughlin, K., Moutray, M., Muldoon, O.T., 2008. The role of personality and self-efficacy in the selection and retention of successful nursing students: A longitudinal study. Journal of Advanced Nursing 61, 211-221.

McLaughlin, K., Muldoon, O.T., Moutray, M., 2010. Gender, gender roles and completion of nursing education: A longitudinal study. Nurse Education Today 30, 303-307.

Mulholland, J., Anionwu, E.N., Atkins, R., Tappern, M., Franks, P.J., 2008. Diversity, attrition and transition into nursing. Journal of Advanced Nursing 64, 49-59.

O'Donnell, H., 2011. Expectations and voluntary attrition in nursing students. Nurse education in practice 11, 54-63.

Orton, S., 2011. Re-thinking attrition in student nurses. Journal of Health and Social Care Improvement, 1-7.

Pitt, V., Powis, D., Levett-Jones, T., Hunter, S., 2012. Factors influencing nursing students' academic and clinical performance and attrition: An integrative literature review. Nurse Education Today 32, 903-913.

Pryjmachuk, S., Easton, K., Littlewood, A., 2009. Nurse education: Factors associated with attrition. Journal of Advanced Nursing 65, 149-160.

Urwin, S., Stanley, R., Jones, M., Gallagher, A., Wainwright, P., Perkins, A., 2010. Understanding student nurse attrition: learning from the literature. Nurse education today 30, 202-207.

Williamson, G.R., Health, V., Proctor-Childs, T., 2013. Vocation, friendship and resilience: a study exploring nursing student and staff views on retention and attrition. Open Nursing Journal 7, 149-156.

Wray, J., Barrett, D., Aspland, J., Gardiner, E., 2010. Staying the course: Factors influencing pre-registration nursing student progression into Year 2. University of Hull, Hull.

Wright, J., Wray, J., 2012. Exploring the experiences and expectations of year 1 children's nursing students. Nursing Children and Young People 24, 24-28.