The 'values journey' of nursing and midwifery students selected using multiple mini interviews: evaluations from a longitudinal study

ABSTRACT

Values-based practice is deemed essential for healthcare provision world-wide. In England, values-based recruitment methods, such as multiple mini interviews (MMIs), are employed to ensure that healthcare students' personal values align with the values of the National Health Service (NHS), which focus on compassion and patient-centeredness. However, values cannot be seen as static constructs. They can be positively and negatively influenced by learning and socialisation. We have conceptualised students' perceptions of their values over the duration of their education programme as a 'values journey'. The aim of this hermeneutic longitudinal focus group study was to explore the 'values journey' of student nurses and midwives, recruited through MMIs, across the three years of their education programme. The study commenced in 2016, with 42 nursing and midwifery students, originally recruited onto their programmes through multiple mini interviews. At the third and final point of data collection, 25 participants remained. Findings indicate that students' confidence, courage and sense of accountability increased over the three years. However, their values were also shaped by time constraints, emotional experiences and racial discrimination. We argue that adequate psychological support is necessary as healthcare students embark on and progress through their values journey, and propose a framework for this.

KEY WORDS:

Students, nursing; Students, midwifery; Personal values; Values based recruitment; Multiple mini interviews; Reflection; Racism; Support, psychological

Main paper

1. Introduction

Nurses and midwives should possess the competencies and motivation necessary to provide culturally appropriate quality care, meeting the expectations of patients and families world-wide (World Health Organisation, 2016). Core human values are deemed essential in the delivery of such care (Rider et al., 2014). In England, the national Values Based Recruitment (VBR) programme (Health Education England, HEE, 2016) aims to ensure that all (higher education) healthcare students are recruited on the basis that their personal values align with the compassionate and patient-centred values of the National Health Service (NHS) (Department of Health, 2015, Figure 1). One of the approaches to VBR that HEE (2016) endorses is Multiple Mini Interviews (MMIs) (Eva, Rosenfeld, Reiter, & Norman, 2004), a selection method for healthcare programmes also employed internationally (Rees et al., 2016), in countries such as Australia, Canada, the United States, Israel and Saudi Arabia (Roberts et al., 2014; Jerant et al., 2017; Knorr et al., 2018). The personal domains MMIs are designed to assess are tailored towards specific constructs, and are, in the context of the VBR programme, based on the NHS values (Department of Health, 2015).

Figure 1

Implicit in VBR processes like MMIs is the assumption that students' values expressed at the point of recruitment are reflected in their future clinical practice performance (Groothuizen et al., 2017). However, values are not static (Pattison & Pill, 2004); they develop through social interactions and can be subject to change (Parks & Guay, 2009). Over the course of their programme, healthcare students experience a process of professional socialisation both at university and in clinical practice, which can influence their values positively as well as negatively (Dinmohammadi, Peyrovi, & Mehrdad, 2013). Therefore, it is important to research what happens to students' values *after* VBR (MMI-selection). We have conceptualised students' (recruited through values-based MMIs) changing perceptions of their values upon progression through their programme as a 'values journey'. A longitudinal study exploring the 'journey' of adult, child, mental health nursing and midwifery students commenced in 2016, and took place over the duration of students' three year education programme. Preliminary results were published in 2017 and 2018 (Callwood, Bolger, &

Allan, 2017; Callwood, Groothuizen, & Allan, 2018). This paper presents our final findings, overview and evaluations regarding the study, and provides recommendations.

2. Background

Values are beliefs, linked to affect, and refer to desirable motivational goals that underpin behaviour. Different values are of varying relevance and significance to people (Schwartz, 2012). It could be argued that one can distinguish between personal and professional values that people hold. However, we believe this distinction to be arbitrary, as personal factors inevitably influence professional thinking and behaviour (Cuthbert & Quallington, 2017). For the purpose of this paper, we will therefore not treat professional values as separate constructs.

Values are dynamic (Pattison & Pill, 2004), and subject to social influences (Parks & Guay, 2009), including knowledge acquisition. Our conceptualisation of the 'values journey' draws on Gadamer's (1989) hermeneutic theory of 'horizons of understanding'; we argue that knowledge acquisition is an ongoing and fluid process, underpinned by interactions with others (Gadamer, 1989). One's 'horizon' refers to everything that one can know and understand at a particular moment in time (Gadamer, 1989). When one's current knowledge is applied within a new context, re-contextualisation takes place. This process engages with and changes existing practices and experiences (Evans et al., 2010), implying that student nurses and midwives are constantly 'broadening their horizons' through their educational and clinical encounters (Callwood et al., 2017). Students' accumulating knowledge, in response to the challenges and dilemmas that they inevitably face over the duration of their education programme, can be transformative (Mezirow, 1978) in relation to their values (Callwood et al., 2018).

This transformation can be positive or negative. Students' experiences with patients during their education programme may enhance their values regarding patient-centeredness; it may change their perspectives from 'seeing patients' to 'seeing people' with individual needs and preferences (Seed, 1994). Conversely, some literature suggests that increased experience in busy, high-pressure clinical environments can cause ideals regarding holistic and patient-centred care provision to become 'compromised' or 'crushed' (Maben, Latter, & Clark, 2007). Healthcare professionals can start putting up a 'smoke screen' of justifications

and trivialisations for poor care (de Vries & Timmins, 2017). Furthermore, instances of 'compassion fatigue' (Joinson, 1992), which can lead to callousness and indifference, have been witnessed in students (Jack, 2017).

We have previously shown that student nurses and midwives can change and reprioritise their values after commencement of their programme and gaining clinical practice experience (Callwood et al., 2017, 2018). Knowledge and confidence improved from the first to the second year, but the greater level of responsibility and organisational pressure experienced in the second year challenged compassion and patient-centeredness (Callwood et al., 2018). Evidence from the field of medicine (Hojat et al., 2009) suggests that, particularly in the demanding final stage of students' education programme, idealism and empathy may erode, due to factors such as a challenging curriculum, time pressures, a hostile environment, exhaustion, and a fear of making mistakes.

Approaching registration is a unique and unprecedented moment within the professional socialisation process of student nurses and midwives. Research internationally has shown that the transition from student to registered professional comes with its own specific challenges (e.g. Hezaveh, Rafii, & Seyedfatemi, 2013; Odland, Sneltvedt, & Sörlie, 2014). In this paper, students' reflections on their three year values journey, near the end of their programme, are described. Findings from the final year of the study are discussed in the context of findings from previous years.

3. Methods

3.1. Design

This hermeneutic, longitudinal focus group study commenced in 2016, at one university in England. The aim was to explore the 'values journey' of student nurses and midwives, recruited through MMIs, across the three years of their education programme. At three points in time (years one, two, and three), students were asked to describe this journey.

3.2. Recruitment and participants

At the start of the study in 2016, all undergraduate pre-registration September 2015 entry adult, child, mental health nursing and midwifery students were invited to participate, using non-probability, consecutive sampling. They were recruited through email and lectures. Students who had previously undertaken a health education programme were excluded from participation. Data were collected from 42 participants at the end of their first year (eight adult, eight child, nine mental health and 17 midwifery students). In the second and third year of the study, students who had previously taken part in the study were emailed again, and asked to participate in further data collection. This resulted in the participation of 28 (three adult, six child, three mental health and 16 midwifery) and 25 (two adult, four child, five mental health and 14 midwifery) students in the second and third year respectively. A total of 23 students participated at all three points of data collection. Due to ethical restrictions, it was not possible to follow up students who withdrew over the course of the study.

3.3. Data collection

Semi-structured focus groups, in which students were asked to describe their 'values journey', were held in June-October 2016 (year one), October 2017 (year two), and May 2018 (year three). Focus groups were chosen because they facilitate interaction between participants (Barbour, 2007), stimulating reflection and discussion. As such, new perspectives (Mezirow, 1978) can be explored (Bradbury-Jones, Sambrook, & Irvine, 2009). To avoid distraction (Cresswell, 2013), focus groups took place at the university. For consistency purposes, the semi-structured interview guide was held constant across data collection points.

3.4. Ethical considerations

Approval from the University Research Ethics Committee was received in May 2016 (UEC/2016/022/FHMS). It was pointed out to students that they were free to withdraw at any time, and that no consequences regarding their programme progression would be associated with their (non-)participation.

3.5. Data analysis

All focus groups were audio-recorded, and transcribed verbatim. Thematic analysis was conducted using NVivo (version 11). Cross-referencing took place between data sets of years one, two, and three.

A three stage hybrid approach was used for data analysis (Fereday & Muir-Cochrane, 2006). This meant that, in stage 1, deductive coding was undertaken using an a priori codebook (Crabtree & Millar, 1992; Miles & Huberman, 1994) developed from the focus group questions. In this stage, codes were entered into NVivo as 'mother nodes'. In Stage 2, further, semi-inductive, coding took place: additional codes, generated from the data were placed as 'child nodes' under the 'mother nodes'. Stage 3 was data-driven, which meant that themes and subthemes were identified from the 'child nodes'.

3.6. Rigour

In order to avoid a conflict of interest, focus groups were facilitated by two research assistants who had no connection to participants' education programmes. The facilitators were experienced in conducting focus groups, and as such, were able to employ active listening, and keep personal views to themselves (Krueger & Casey, 2000). Equally, facilitators' full understanding of the topic of study enabled them to place participants' comments in perspective and follow up on critical points (Krueger & Casey, 2000). Verbatim transcription of focus group audio-recordings by a research assistant took place. Secondary checking of 20% of the transcripts revealed that they were complete, and over 95% accurate.

4. Findings

Figure 2 shows an overview of the (stage 3) themes that were extracted across the three years of study.

Figure 2

Themes found in the third and final year of the study are discussed in the context of findings from previous years (Callwood et al., 2017, 2018). Quotes are from year three.

4.1. Effects of imminent registration

Students' procedural knowledge and confidence in clinical practice situations appeared to grow with each year of the study. This positively influenced their ability to provide care and their courage to challenge colleagues regarding poor practice.

> *"You become more confident in yourself, and what your values are. So, if you see something, I think it's the confidence that you've now built. That you realise, like: 'hang on, that's not… what I'm about.'"* –Child nursing student

Aware of their imminent registration, students across disciplines experienced an increase in feelings of autonomy, responsibility and accountability in year three. A growth in such feelings had also taken place between year one and year two (Callwood et al., 2018). However, they now seemed to come with an additional pressure.

> *"When I went into third year* […] *the pressure was instant.* […] *Second year, if I got something wrong… it was alright, I've got another year, I can still learn* […] *This year, as soon as I've forgotten something, or I've got something wrong,* […] *you're like: 'this isn't good enough.* […] *Next year, that's not good enough, you know, you need to be able to do it.'"* –Student midwife

An important difference with previous years was that, in year three, students had started delegating tasks to other members of staff. Both student nurses and midwives discussed delegation, and were able to reflect on this.

> *"Confidence to be able to say, you know: 'this has come up', to other members of staff, 'this has come up, so I'm not going to be able to do X, Y and Z. I need you to help me with this…'"* –Adult nursing student.

In years one and two, students were not yet prepared to delegate tasks to, for instance, healthcare assistants (Callwood et al., 2018). While, in year three, students expressed that they did not always feel comfortable with this, they now believed delegation to be a requirement for good care, in the face of high activity and time pressures. Students argued that they were not always able to provide care for patients themselves. They believed that, in such a case, it was their responsibility to ensure that the necessary care would be provided by another member of staff instead.

> *"*[…] *then that's where I start sort of thinking, okay, maybe I need to bring in somebody who* does *have the time to provide the care. So, even if she doesn't think that* I'm *very caring, she's still getting something."* –Student midwife

In year two, student midwives reported an increased focus on clinical safety (Callwood et al., 2018). In year three, the pressure of their impending registration appeared to exacerbate this. Although clinical safety is of vital importance, and learning to prioritise is part of professional socialisation, students argued that this could go at the cost of compassion and patient-centeredness. Further compromising a patient-centred focus was the third year course curriculum.

> *"*[…] *I look back and* […] *I remember* […] *what a lovely relationship I got in first year with all the women. And maybe, third year, now that my head's somewhere else, in terms of thinking: 'if I was on my own now, what would I do?' And I need to make sure that women are safe…"* –Student midwife

> *"My head isn't as much there, and I'm not as involved as I was, maybe even at the beginning of the year, when I didn't have the pressure of getting my dissertation done."* –Student midwife

In year three, students across disciplines expressed an awareness and fear of potential sanctions in the case of mistakes.

> ***"***[…] *there will be an inquiry* […] *and you have to prove, as a professional, that you have done everything within your power* […]*"* –Mental health nursing student

The fear of litigation, at times, seemed to influence their considerations regarding the type of care to provide.

> *"One thing I think we learnt this year, we did a lot on litigation and, sort of, covering your own back* […] *And I think, sometimes, that's a big impact on how you provide care, because you know that, if a case is pulled up* […] *the documents don't show: 'oh, she was really caring, she spent a lot of time talking to me, her manner was really lovely, I felt really safe'. It doesn't show that. It shows what you did at what time, and just your physical activity, rather than your care."* –Student midwife

It can be concluded that, in year three, students' professional sense of self was greatly influenced by their impending registration.

4.2. Influences on values in practice

Students' perceived influence of time pressures appeared to increase with each year on the programme. In year three, student midwives showed a sense of defeat as they discussed that, due to time pressures, some patients noticeably felt like an inconvenience, and emotional care was missed.

> *"*[…] *by the time you've done all those things, you've actually sat down, and gone: 'right, is there anything you want to talk about?', she's gone: '… no, I'm okay, actually. Like, you're busy. I don't want to… intrude, I don't want to interrupt.'"* – Student midwife

Another point of concern raised by student midwives was that, due to time and staffing constraints, those patients who were less inclined to ask for help, or who were 'low-risk', received less attention. This made them feel bad, and they did not know how to address it.

> *"But then, if you have one woman that* […] *is managing herself really well, and doesn't press the buzzer… then at the end of the shift, I can feel really XXXX about myself, because I think: 'I haven't even seen her'.* […] *Like, just because she doesn't need, or hasn't been demanding, you should still be popping along and seeing them, but obviously, if you've got people continually pressing, pressing, pressing… that person's not going to get seen, are they?"* –Student midwife

Across the three years of the study, students mentioned the importance of doing 'little things' for patients. However, in year three, student midwives were mainly discussing doing such little things in order to compensate for the fact that other care requirements were not being met.

> *"*[…] *the little things, so say if… we had a postnatal woman the other day and nobody wanted to take ownership of her… and she was kept waiting for ages, until a doctor came in… to see her. So, I, like, made them a cup of tea, and got them biscuits* […] *and then they think: 'oh, somebody cares. So, I don't mind waiting as much.'"* – Student midwife

Some student midwives stated that, now that they were in their third year, there was no time for such little things in the first place.

> *"Yeah, instead of getting that lady a really nice cup of tea, and talking to her about how her* […] *two year old is at home, in your head you're thinking: 'right, so… does she need fluids to sort her CTG out?'"* –Student midwife

Adult and child nursing students argued that being busy was no excuse for compromising one's values, or delivering poor care.

> *"I think it* can *do, sometimes, when you're busy… but I don't think it should. I don't think being busy, or being stressed should affect the way that you treat your patients, their parents, any of their relatives…"* –Child nursing student

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Across the three years of the study, interactions with patients influenced students' values in both positive and negative ways. In year three, students across disciplines maintained that interacting with patients had helped them become more empathetic and less judgemental, particularly when patients displayed challenging behaviour.

> *"Because, now, I understand that… you cannot take something away from somebody, replacing it with nothing, if you actually do not know where… that is coming from. And, because of that… if I look at somebody who is self-harming… now… I think I will start… to try and understand, from their point of view, where this is coming from, and whether there's other things that… perhaps, they could do to help themselves."* –Mental health nursing student

In relation to patient interactions, student midwives, in year three, mentioned patients' high expectations of the service. It was argued that it could be difficult to remain compassionate towards patients who did not show appreciation for the care provided.

> *"Some people are very ungrateful, but expect an awful lot. And it's really difficult to be compassionate with those people. And I know you shouldn't treat anyone any different, but if you're literally working as hard as you can, and you're getting… not that you should get something back from them, but, like, a 'thank you' would be okay, wouldn't it?"* –Student midwife

More so than in years one and two (Callwood et al., 2017, 2018), student midwives believed it was acceptable to inform patients about the busy ward environment. Although there was some debate around this, they argued that transparency would help manage patients' expectations, and therefore increase their satisfaction with the care.

> *"*[…] *being able to be open about that. You know: 'we want you to have your shower on postnatal ward, because there are three people outside, wanting to have their baby', rather than, kind of, you know, making somebody feel awkward, or… you know, 'it's time to go now.'"* –Student midwife

In year two, mental health nursing students spoke about being discriminated by patients on the basis of their ethnicity, which challenged their compassion and vision of 'helping' these patients (Callwood et al., 2018). In year three, this topic was reported again. It was argued that the extent of discrimination one experienced was linked to one's place in the organisational hierarchy.

> ***"****It* [being black] *would have been okay if I was a psychiatrist* […] *If you're a nurse, you have to be white.* […] *If you're a psychiatrist, then it means, you know, you've… gone a step up."* –Mental health nursing student

Compared to year two, students were more adamant that patients' discriminatory behaviour should be addressed by their (white) colleagues. However, due to the reality of the busy ward environment, this often did not happen.

> *"Sometimes you will just do what's easier, rather than what is right. Because what would be right is for… someone to sit down with that person, and talk to them, and say: 'look, this just isn't on'. But, really, in reality, we're so busy* […] *and we never really nip it in the bud."* –Mental health nursing student

Race and ethnicity-related issues appeared to also exist amongst colleagues. One mental health nursing student of black heritage reported that fellow black healthcare professionals had advised him to keep quiet because of his ethnicity. He argued that staff members of ethnic minorities often experience feelings of inferiority, making them afraid to voice their values or speak out against poor practice.

> *"I've had a few teams that I've been in, where I've actually been told… not to speak too much, because there are white people around. And… I've always thought… you know, I've always looked at myself as an equal to everybody else,* […] *regardless of… whatever their race or, and age, or anything… But yeah, there are quite a few people who look at…* […] *and… you're basically discouraged from speaking up. Just because of… your colour…"* –Mental health nursing student

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Interaction and communication with colleagues influenced students' values over the whole duration of their education programme. The importance of a supportive team in relation to the morale on the ward, and learning from good and bad role models were discussed in both year two and year three. Across the three years of the study, students mentioned the apparent cynical attitudes of some senior colleagues (Callwood et al., 2017, 2018). In year one, students showed an understanding of, and made excuses for these attitudes, whereas, in year two, this was not the case anymore (Callwood et al., 2018). In year three, however, there seemed to be a distinction between disciplines. Adult and child nursing students were still determined that they did not want to become like these colleagues, whereas student midwives had started identifying more with them, due to the increased workload and pressure they now experienced.

> *"And that just… reinforces my values… as you said, while… sort of showing me how I don't want to be."* –Adult nursing student

> *"I think, the third year, you, because you realise the pressure is on, and you need to, kind of, get all this stuff in your head, before you finish… I think you have a bit more compassion towards the mentors, whereas, before, I was perhaps a bit judgemental, you know, thinking: 'well, why aren't they like that with these women, why are they… why are they like that?'"* –Student midwife

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As students gained more clinical experience, it was inevitable that they were exposed to adverse situations to a greater extent. This was emotionally challenging and, in student midwives, increased their strong focus on clinical safety, as previously mentioned.

> *"I was involved in an incident at work, and, like, I think that may be why I'm… you know… that is kind of…* (voice breaking) *sorry…* […] *But now* […] *I'm so worried about getting something wrong, or… missing something* […] *that I feel like I can't give… good care, and be safe at the same time. I feel like it's one or the other. And that is really… it's really hard.* […] *I feel like the safety thing is so vital to a good outcome that, surely, then a good outcome for that woman is her baby not being dead. You know, and then, actually, whether or not you found out what her other kid's called, or, you know, made her a cup of tea, just becomes completely…"* –Student midwife

Mental health nursing students had increased experience with suicide amongst patients, which forced them to consider their limitations as professionals. A debate amongst students emerged regarding this.

> *"So you can, kind of, signpost them, or give them information…* […] *but actually… for me… I feel… if somebody… really… would like their… to take their life away… they'll still do it."* –Mental health nursing student

> *"*[…] *and you turn around and you say: 'they wanted to do it, there's nothing I could have done about it', it's like, for me, it's like a heart surgeon saying: 'there's a problem with your heart, but there's nothing I can do about it.'"* –Mental health nursing student

In all three years of the study, students discussed the importance of protecting oneself emotionally. In year three, this was mentioned in the context of the learning experience.

> *"*[…] *one of the most important things I've learnt is to, like, not let yourself get overwhelmed with guilt…* […] *Because you can only do the best that you can do…*" – Mental health nursing student

In student midwives, a contrast in attitude towards the future was seen between year two and year three. Whilst, in year two, students showed empowerment and positivity, they now expressed a weariness.

> *"I think we just feel a bit more downtrodden."* –Student midwife

> *"And I… wanted to qualify in a… in a better place, but… I don't feel like I am."* –

Student midwife

4.3. Personal reflection on values and practice

In year two, students across disciplines mentioned the importance of reflection, and the limited time dedicated to this in practice (Callwood et al., 2018). In year three, this was addressed again. Student midwives felt that the ward culture would improve if there were more shared reflection, characterised by openness and honesty. Both student midwives and mental health nursing students felt that it would be beneficial to reflect on and learn from positive as well as negative things.

> *"So, we've done a good job. But have we… done the best we can, or should we be able to… improve from there? You know, going forward."* –Mental health nursing student

Looking back at the three years of their education programme, students believed that their values had been reprioritised, and that new values had been added. Students across all professional groups argued that, with the experience they gained throughout their programme, the meaning of their values (e.g. what it means for one to *be* caring and compassionate, rather than just *saying* that one has these values) had deepened and become more personal.

> *"I think I'd say, in first year, you kind of… I don't know, I don't think my values were… just my values. I think it was that I'd seen somebody else, and thought: 'oh, I want to be like them', or heard somebody else like: 'oh, this is something* I *value'. I'd be like: 'oh yeah, I think I should take that on board too'. But now, in third year, I'm like, you know: 'these are* mine*. This is what I believe in. This is the way* I *see it.'"* –Child nursing student

Students argued that their 'values journey' had not ended. They believed that, as registered practitioners, their values would continue to evolve, as a result of new knowledge and interactions.

> *"I think in first year as well, you almost feel like your values journey will stop when you qualify. But, at this point, you fully realise… it's never going to stop. It's going to evolve continuously forever."* –Child nursing student

Table 1 presents an overview of main findings throughout the three years of study.

Table 1

5. Discussion

Recruitment through values-based MMIs aims to ensure congruence between healthcare students' personal values and the values of the NHS (Department of Health, 2015, Figure 1) when they progress into practice. However, the 'values journey' depicted above shows that students' values can change in the years between recruitment and qualification as professionals, as they broaden their horizons of understanding (Gadamer, 1989).

The finding that, across disciplines, students' courage to speak out against poor practice strengthened over the course of the three years, as they gained knowledge and experience, is reassuring in the context of the NHS values (Department of Health, 2015, Figure 1). Students' increased levels of delegation to other staff members in year three appeared to be associated with a perspective change. Although it was unclear which specific delegation styles students adopted, their reflections indicated a shift from a self-focused 'do it all' (Magnusson et al., 2017) perspective ('*I* need to provide care') to a more patient-focused perspective ('The patient needs to receive care, so *someone* needs to provide this'). This implied a sense of maturity, as delegation is an important skill for healthcare professionals (Magnusson et al., 2017), and signified a positive evolution of values regarding patient-centred care provision, congruent with the NHS values (Department of Health, 2015, Figure 1). Nevertheless, some students appeared to perceive the need for delegation as a compromise to their original ideals in relation to holistic care. Delegation by students in healthcare teams would benefit from more exploration of the aforementioned perspective change.

Participants in this study argued that their values underpinned their caring practice. However, they expressed an awareness of factors compromising values-based care. These

are discussed within the next paragraphs.

With registration becoming an impending reality, students across disciplines expressed an awareness or fear of litigation. It was suggested that this fear could influence caring practice. Incidences of tutors scaring students with 'horror stories' in relation to litigation or losing their registration have previously been reported by Pearson, Steven and Dawson (2009). Defensive practice is common amongst healthcare professionals, and concerns have been raised that a fear of litigation can trump acting in the best interest of patients (Rimmer, 2017).

The issues in relation to racism reported by mental health nursing students may be indicative of problems on an institutional level (Kline, 2014). Black students' descriptions of the attitudes held by other black minority staff members they worked with (avoiding confrontation and accepting/normalising a racist status quo) appear to be common in environments characterised by overt or indirect racist bullying (Allan, Cowie, & Smith, 2009). Puzan (2003) has argued that whiteness is often perceived to be the standard in nursing, and that those who are unable to meet this standard find themselves subordinate. 'Acting white' – conforming to the behaviours and values of the dominant white culture – is required for assimilation (Puzan, 2003). The suggestion that students from ethnic minority backgrounds may be discouraged from voicing their values is concerning. Research into similar issues had been conducted, in some detail, in relation to qualified overseas nurses (Allan et al., 2009). Related research has been conducted in classroom settings (e.g. Diver-Stamnes & Lomascolo, 2001), but not with healthcare students in clinical practice environments.

Hojat et al.'s (2009) findings regarding an erosion of empathy and idealism near the end of students' programme did not appear to be present in student nurses, but were, to some extent, reflected in student midwives. Student midwives argued that time pressures, a fear of making mistakes, exhaustion and curriculum-related factors compromised their ability to maintain their compassion and provide care accordingly. They appeared to be overwhelmed by the high workload and responsibility they were faced with. This led some student midwives to experience a sense of unpreparedness for their roles as practitioners (Odland et al., 2014). The aforementioned high workload led to a 'stacking' of cognitive tasks, whilst in the clinical practice environment. Research has shown that this can impact the ability to

attend to patients, and lead to missed care (Potter et al., 2005). It is important to strengthen processes and systems to support practitioners' reasoning when faced with a multitude of cognitive tasks, and reduce factors that get in the way of providing patient care. Technology that provides quick access to all patient information, organised in a way that enhances practitioners' pattern recognition in relation to situations and patients may help with this (Ebright, 2010).

Participants in this study did not appear to put up a 'smoke screen' of trivialisations and justifications for poor or missed care, as suggested by de Vries and Timmins (2017). When care requirements were not being met, or compassionate practice was compromised, they experienced negative feelings. It is important to note that, when these negative feelings – resulting from a cognitive dissonance between one's initial values and one's actions – become too strong, they can eventually threaten one's self-concept, causing the 'smoke screen' to emerge (de Vries & Timmins, 2017). Self-affirmation strategies (Steele, 1988), which focus on positively asserting one's self-concept, may help reduce this threat, and therefore the need to make justifications and trivialisations (Cohen & Sherman, 2007). Such strategies can, for instance, take the form of reflecting on one's positive skills, or on overarching personal values (Cohen & Sherman, 2007).

We have previously argued that it is important to direct time towards reflection in clinical practice environments (Callwood et al., 2018). As articulating feelings in such environments comes with difficulty (Allan, 2011), it is important to put an appropriate structure in place. This could, for instance, be provided through Schwartz rounds, in which healthcare professionals discuss challenging cases and emotional aspects of their work (Robert et al., 2017). An evaluation of Schwartz rounds (Maben et al., 2018) showed that they led to a greater understanding, empathy and tolerance towards both colleagues and patients. Barker et al. (2016) make a case for the use of Schwartz rounds within healthcare education programmes.

However, reflection alone may not be sufficient when students experience a great emotional burden (Magnusson et al., 2014). Therefore, we argue that, additionally, it may be beneficial to provide further support resources for students, so that they can address challenging experiences and learn to (re-)contextualise these. The SCARF model (Rock,

2008), based on social neuroscience, is a relatively recent theory that explains how individuals can learn to label and reappraise experiences. It proposes five domains of human perception, reflecting core brain networks that are important when interacting with others. Understanding these domains can help people find personalised strategies to reduce perceived threats and focus on positive intrinsic rewards in relation to each of them (Rock, 2008). The domains are: Status, which refers to one's perceived importance of oneself in relation to others; Certainty, relating to one's ability to predict what might happen in the future; Autonomy, referring to one's perception of control over events; Relatedness, which refers to one's sense of safety amongst others; and Fairness, relating to a perception of fair exchanges between different parties (Rock, 2008). Students in our research appeared to experience threats regarding all domains in the model: issues regarding organisational hierarchy and discrimination threatened their status; uncertainty was experienced regarding their impending registration; adverse events threatened their sense of control; negative experiences with colleagues and patients affected their perceived relatedness; and they were struggling with their perceptions of fairness in relation to the distribution of care between patients. Adequate psychological support, focusing on each of the SCARF domains, may benefit students' emotional resilience and increase their performance (Rock, 2008). Their perceptions of status may be improved through the provision of positive feedback, and further teaching of self-affirmation strategies (Steele, 1988). Certainty can be increased by helping students identify their central goals, and break these down into smaller, achievable steps (Rock, 2008). Students' sense of autonomy may be improved when they are taught ways of setting their own objectives, even if these are relatively 'small' (Rock, 2008). Interacting with the person providing the support may help restore students' sense of relatedness (Rock, 2008), where this is lacking in clinical practice. Students' perceptions of fairness in relation to their own care provision may be increased by teaching them methods of communicating with patients in a transparent manner.

Psychological support may help healthcare staff to remain resilient and effective in the context of emotional labour (Wren, 2017). Hospitals offer varying levels of such support to staff (Wren, 2017), but there is little information regarding the extent to which this is tailored to the needs of students and new graduates. More research is needed regarding the possibilities for individual and group-focused initiatives, targeted at these particularly

vulnerable members of the workforce. Known strategies, such as mindfulness and cognitive behavioural techniques, have been suggested as methods to alleviate distress in nursing students (Mitchell, 2018). These strategies, combined with insights from the SCARF model (Rock, 2008) as we have proposed above, could underpin the development of tailored support programmes for students. Although we appreciate the challenge of implementing such support programmes in the face of time pressures and heavy workloads, we expect the long-term gains to outweigh this.

6. Limitations

Due to attrition of participants in year two and year three, not all students participated at all three points of data collection. As mentioned earlier, follow-up of prematurely withdrawn participants was not possible due to ethical restrictions. Another limitation that may have influenced the findings is the disproportion regarding both the absolute numbers and attrition rates of participants between different disciplines. In this respect, we point towards the overrepresentation of student midwives, particularly in years two and three, which, to some extent, influenced the themes extracted.

7. Conclusion

Findings from this study confirm that values cannot be seen as static constructs (Pattison & Pill, 2004), supporting our conceptualisation of a values journey theoretically grounded in Gadamer's (1989) 'horizons of understanding'. Students across disciplines showed several perspective changes (Mezirow, 1978) in relation to their values and caring practice. Values were added (e.g. clinical safety, self-protection), deepened (e.g. understanding compassion), reprioritised and re-contextualised.

We have previously questioned whether approaches to VBR, such as MMIs, lead to correspondingly elevated standards of care (Callwood et al., 2018). Based on the findings of our longitudinal evaluation, we emphasise that VBR methods alone are not sufficient to ensure that students will maintain the 'right' values in their clinical practice. Therefore, additional strategies need to be identified and implemented. Apart from some wider system issues – including those relating to race and ethnicity – that require further investigation

and addressing by nurse educators and clinical leaders and managers, it is important that space for reflection is provided through, for instance, Schwartz rounds (Robert et al., 2017), and that routes to appropriate psychological support are visible and available.

Students acknowledged that their values journey will be ongoing as they become registered practitioners. Therefore, we expect to conduct a separate follow-up study later in 2019, to examine these students' adaptation to their respective professions.

References:

Allan, H.T. (2011). Using psychodynamic small group work in nurse education: Closing the theory–practice gap? *Nurse Education Today, 31*(5), 521-524. doi: 10.1016/j.nedt.2010.09.006

Allan, H.T., Cowie, H., & Smith, P. (2009). Overseas nurses' experiences of discrimination: A case of racist bullying? *Journal of Nursing Management, 17*(7), 898-906. doi: 10.1111/j.1365-2834.2009.00983.x

Barbour, R. (2007). *Doing Focus Groups*. London, England: SAGE.

Barker, R., Cornwell, J., & Gishen, F. (2016). Introducing compassion into the education of health care professionals; Can Schwartz Rounds help? *Journal of Compassionate Healthcare, 3*(3). doi: 10.1186/s40639-016-0020-0

Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2009). The phenomenological focus group: An oxymoron. *Journal of Advanced Nursing, 65*(3), 663-671. doi: 10.1111/j.1365-2648.2008.04922.x

Callwood, A., Bolger, S., & Allan, H. T. (2017). The 'values journey' of nursing and midwifery students selected using multiple mini interviews; year one findings. *Journal of Advanced Nursing, 74*(5), 1139-1149. doi: 10.1111/jan.13514

Callwood, A., Groothuizen, J., & Allan, H.T. (2018). The 'values journey' of nursing and midwifery students selected using multiple mini interviews; year two findings. *Journal of Advanced Nursing, 75*(5), 1074-1084. doi: 10.1111/jan.13941

Cohen, G.L., & Sherman, D.K. (2007). Self-affirmation theory. In: R.F Baumeister & K.D. Vohs (Eds.). *Encyclopedia of Social Psychology* (pp. 787-789). Thousand Oaks, CA: SAGE.

Crabtree, B., & Millar, W. (Eds.) (1992). *Doing qualitative research: Research methods for primary care.* London, England: SAGE.

Creswell, J. (2013). *Qualitative inquiry and research design: Choosing amongst five approaches* (3rd ed.) London, England: SAGE.

Department of Health (2015). *The NHS Constitution for England.* Retrieved from https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england on 9 September 2018.

Dinmohammadi, M., Peyrovi, H., & Mehrdad, N. (2013). Concept analysis of professional socialization in nursing. *Nursing Forum, 48*(1), 26-34. doi: 10.1111/nuf.12006

Diver-Stamnes, A.C., & Lomascolo, A.F. (2001). The marginalization of ethnic minority students: A case study of a rural university. *Equity & Excellence in Education, 34*(1), 50-57. doi: 10.1080/1066568010340107

Ebright, P. (2010). The Complex Work of RNs: Implications for healthy work environments. *Online Journal of Issues in Nursing, 15.* doi: 10.3912/OJIN.Vol15No01Man04

Eva, K., Rosenfeld, J., Reiter, H., & Norman, G. (2004). An admissions OSCE: The multiple mini interview, *Medical Education, 38*(3), 314-326. doi: 10.1046/j.1365-2923.2004.01776.x

Evans, K., Guile, D., Harris, J., & Allan, H. T. (2010) Putting knowledge to work: A new approach. *Nurse Education Today*, 30(2010), 245–251. doi: 10.1016/j.nedt.2009.10.014

Fereday, J., Muir-Cochrane, E. (2006). Demonstrating rigour using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1) 80-90. doi: 10.1177/160940690600500107

Gadamer, H. (1989). *Truth and method* (2nd ed.) London, England: Sheen and Ward.

Groothuizen, J. E., Callwood, A., & Gallagher, A. (2017). What is the value of values based recruitment for nurse education programmes? *Journal of Advanced Nursing, 74*(5), 1068-1077. doi: 10.1111/jan.13512

Health Education England (2016). *Values based recruitment framework.* Retrieved from https://www.hee.nhs.uk/sites/default/files/documents/VBR_Framework%20March%202016.pdf on 9 September 2018.

Hezaveh, M. S., Rafii, F., & Seyedfatemi, N. (2013). Novice nurses' experiences of unpreparedness at the beginning of the work. *Global Journal of Health Science, 6*(1), 215-22. doi:10.5539/gjhs.v6n1p215

Jack, K. (2017). The meaning of compassion fatigue to student nurses: An interpretive phenomenological study. *Journal of Compassionate Care, 4*(2). doi: 10.1186/s40639-017-0031-5. doi: 10.1186/s40639-017-0031-5

Jerant, A., Henderson, M. C., Griffin, E., Rainwater, J. A., Hall, T. R., Kelly, C. J., Peterson, E. M., Wofsy, D., … Franks, P. (2017). Reliability of multiple mini-interviews and traditional interviews within and between institutions: A study of five California medical schools. *BMC Medical Education, 17*(1), 190. doi:10.1186/s12909-017-1030-0

Joinson, C. (1992). Coping with compassion fatigue. *Nursing, 22*(4), 116-120.

Hojat, M., Vergare, M., Maxwell, K., Brainard, G., Herrine, S., Isenberg, G., Veloski, J., & Gonnella, J. (2009). The devil is in the third year: A longitudinal study of erosion and empathy in medical school. *Academic Medicine, 84*(9), 1182-1191. doi: 10.1097/ACM.0b013e3181b17e55.

Kline, R. (2014*). The "snowy white peaks" of the NHS: A survey of discrimination in governance and leadership and the potential impact on patient care in London and England.* Retrieved from https://www.england.nhs.uk/wp-content/uploads/2014/08/edc7-0514.pdf on 11 December 2018.

Knorr, M., Schwibbe, A., Ehrhardt, M., Lackamp, J., Zimmermann, S., & Hampe, W. (2018). Validity evidence for the Hamburg multiple mini-interview. *BMC Medical Education, 18*(1), 106. doi:10.1186/s12909-018-1208-0

Krueger, R.A., & Casey, M.A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Thousand Oaks, CA: SAGE.

Maben, J., Latter, S., & Clark, J.M. (2007). The sustainability of ideals, values and the nursing mandate: Evidence from a longitudinal qualitative study. *Nursing Inquiry, 14*(2), 99-113. doi:10.1111/j.1440-1800.2007.00357.x

Maben, J., Taylor, C., Dawson, J., Leamy, M., McCarthy, I., Reynolds, E., … Foot, C. (2018). A realist informed mixed methods evaluation of Schwartz Center Rounds® in England. *Health Services and Delivery Research*, 6(37). doi:10.3310/hsdr06370

Magnusson, C., Allan, H., Horton, K., Johnson, M., Evans, K., & Ball, E. (2017). An analysis of delegation styles among newly qualified nurses. *Nursing Standard, 31*(25), 46-53. doi: 10.7748/ns.2017.e9780

Magnusson, C., Westwood, S., Ball, E., Curtis, K., Evans, K., Horton, K., Johnson, M., & Allan, H.T. (2014). *An investigation into newly qualified nurses' ability to re-contextualise knowledge to allow them to delegate and supervise care.* Retrieved from https://docplayer.net/366776-An-investigation-into-newly-qualified-nurses-ability-to-recontextualise-knowledge-to-allow-them-to-delegate-and-supervise-care-aark.html on 6 November 2018.

Mezirow, J. (1978). Perspective transformations. *Adult Education Quarterly, 28*(2), 100-110. doi: 10.1177/074171367802800202

Miles, M., Huberman, M. (1994). *Qualitative data analysis* (2nd ed.). London, England: SAGE.

Mitchell, A.E.P. (2018). Psychological distress in student nurses undertaking an educational programme with professional registration as a nurse: Their perceived barriers and facilitators in seeking psychological support. *Journal of Psychiatric and Mental Health Nursing, 25*(4), 358-269. doi: 10.1111/jpm.12459

Odland, L., Sneltvedt, T., Sörlie, V. (2014). Responsible but unprepared: Experiences of newly educated nurses in hospital care. *Nurse Education in Practice, 14*(5), 538-543. doi: 10.1016/j.nepr.2014.05.005

Parks, L., & Guay, R.P. (2009). Personality, values, and motivation. *Personality and Individual Differences, 47*(7), 675-684. doi: 10.1016/j.paid.2009.06.002

Pattison, S., & Pill, R. (Eds.) (2004). *Values in professional practice.* Oxon: Radcliffe Publishing Ltd.

Pearson, P.H., & Steven, A., & Dawson, P. (2009). *Patient safety in health care professional educational curricula: Examining the learning experience.* Retrieved from http://nrl.northumbria.ac.uk/594/ on 6 November 2018.

Potter, P., Wolf, L., Boxerman, S., Grayson, D., Sledge, J., Dunagan, C. & Evanoff, B. (2005). Understanding the cognitive work of nursing in the acute care environment. *Journal of Nursing Administration, 35(7/8),* 327-335.

Puzan (2003). The unbearable whiteness of being (in nursing). *Nursing Inquiry, 10*(3), 193-200. doi: 10.1046/j.1440-1800.2003.00180.x

Rees, E.L., Hawarden, A.W., Dent, G., Hays, R., Bates, J., & Hassell, A.B. (2016). Evidence regarding the utility of multiple mini-interview (MMI) for selection to undergraduate health programs: A BEME systematic review: BEME Guide No. 37. *Medical Teacher, 38*(5), 443–455. doi: 10.3109/0142159X.2016.1158799.

Rider, E. A., Kurtz, S., Slade, D., Longmaid, H. E., Ho, M. J., Pun, J. K., . . . Branch, W. T. (2014). The international charter for human values in healthcare: An interprofessional global collaboration to enhance values and communication in healthcare. *Patient Education and Counseling, 96*(3), 273–280. doi: 10.1016/j.pec.2014.06.017

Rimmer, A. (2017). Can I avoid complaints by practising defensively? *British Medical Journal, 359.* doi: 10.1136/bmj.j4483

Robert, G., Philippou, J., Leamy, M., Reynolds, E., Ross, S., Bennett, L., Taylor, C., Shuldham, C., Maben, J. (2017). Exploring the adoption of Schwartz Center Rounds as an organisational innovation to improve staff well-being in England, 2009–2015. *BMJ Open*, *7(*1). doi: 10.1136/bmjopen-2016-014326

Roberts, C., Clark, T., Burgess, A., Frommer, M., Grant, M., & Mossman, K. (2014). The validity of a behavioural multiple mini-interview within an assessment centre for selection into specialty training. *BMC Medical Education, 14,* 169. doi:10.1186/1472-6920-14-169

Rock, D. (2008). Scarf: A brain-based model for collaborating with and influencing others. *NeuroLeadership Journal, 1*, 78-87.

Schwartz, S.H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture, 2*(1). doi: 10.9707/2307-0919.1116

Seed, A. (1994). Patients to people. *Journal of Advanced Nursing, 19*(4), 738-748. doi: 10.1111/j.1365-2648.1994.tb01146.x

Steele, C.M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in Experimental Social Psychology, 21,* 261-302. doi: 10.1016/S0065-2601(08)60229-4

de Vries, J. M. A., & Timmins, F. (2017). Teaching psychology to nursing students: A discussion of the potential contribution of psychology towards building resilience to lapses in compassionate caring. *Nurse Education in Practice, 26*, 27-32. doi: 10.1016/j.nepr.2017.06.004

World Health Organisation (2016). *Global strategic directions for strengthening nursing and midwifery 2016-2020.* Retrieved from http://www.who.int/hrh/nursing_midwifery/global-strategic-midwifery2016-2020.pdf on 12 September 2018.

Wren, B. (2017). *As a psychologist for NHS staff I saw how hospital work takes its toll.* The Guardian. Retrieved from https://www.theguardian.com/healthcare-network/views-from-the-nhs-frontline/2017/jun/19/pyschologist-nhs-hospital-staff-work-toll on 20 September 2018.

Table legends:

Table 1: Main findings across the three years of study

Figure legends:

Figure 1: The NHS values and their descriptions (Department of Health, 2015)
Figure 2: Themes and subthemes throughout the three years of the study