University of Huddersfield Repository

McClelland, Gabrielle Tracy, Horne, Maria, Dearnley, Christine, Raynsford, Justine and Irving, Donna

Experiences and Outcomes Among Undergraduate Health Professional Higher Education Students With Protected Characteristics: Disability, Gender, and Ethnicity

Original Citation

McClelland, Gabrielle Tracy, Horne, Maria, Dearnley, Christine, Raynsford, Justine and Irving, Donna (2015) Experiences and Outcomes Among Undergraduate Health Professional Higher Education Students With Protected Characteristics: Disability, Gender, and Ethnicity. Journal of Psychological Issues in Organizational Culture, 6 (1). pp. 38-64. ISSN 2041-8418

This version is available at http://eprints.hud.ac.uk/id/eprint/28521/

A Literature Review:

Experiences & Outcomes
Amongst
Undergraduate
Health Professional
Higher Education Students
With
Protected Characteristics

**Date of
Publication
31.07.2014**

Review Authors & Acknowledgements

Dr Gabrielle McClelland,
Senior Lecturer/Post-doctoral Researcher,
g.t.mcclelland@bradford.ac.uk,
01274 236571, University of Bradford,
School of Health Studies,
Richmond Road, Bradford,
West Yorkshire, BD7 1DP

Dr Maria Horne,
Senior Lecturer in Public Health,
m.horne@bradford.ac.uk,
01274 236462, University of Bradford,
School of Health Studies,
Richmond Road, Bradford,
West Yorkshire, BD7 1DP

Dr Christine Dearnley,
Associate Dean-Learning and Teaching,
c.a.dearnley@bradford.ac.uk,
01274 236449, University of Bradford,
School of Health Studies,
Richmond Road, Bradford,
West Yorkshire, BD7 1DP

Justine Raynsford,
Health Lecturer,
 j.raynsford@bradford.ac.uk,
01274 235198, University of Bradford,
School of Health Studies,
Richmond Road, Bradford,
West Yorkshire, BD7 1DP

Donna Irving,
Health Studies Librarian,
d.irving1@bradford.ac.uk,
01274 236370, University of Bradford,
School of Health Studies Library,
Richmond Road, Bradford,
West Yorkshire, BD7 1DP

Contents   **Page number**

Foreword

I am delighted to introduce this literature review requested by the Dean of the School of Health Studies on the experiences and attainment of students in health programmes within higher education with protected characteristics.

The importance of student diversity in health programmes within the higher education sector in the UK has been greater following Robert Francis QC indightment of staff values and behaviours which were contrary to the requirements of the NHS Constitution. Alongside a push to create a patient-centred and compassionate service for patients, equality and diversity are crucial to delivering quality services.

Now, more than ever, higher education health programmes geared towards meeting this demand for safe and culturally competent health care practitioners must work to ensure that we appropriately value the diversity within and among our student body. We also must be resolute in our focus on how to best leverage that diversity to meet the demands of the dramatically changing social and economic fabric and the ever changing landscape across health and social care.

Attainment of students on our programmes is important. We all want to get the best out of our students. The business need to be both proactive and reactive poses challenges and opportunities to health programmes. Running parallel to this is the University's commitment to creating an environment where diversity is celebrated and everyone is treated fairly, regardless of gender, disability, ethnic origin, religion or belief, sexual orientation, marital status, age, or nationality.

Findings from this review suggest that there appears to be more research published around ethnicity and in the context of pre-registration nursing and illustrating examples of negative student experiences and outcomes. The research relating to gender, disability and age was very sparse. Whilst there were some examples of positive practice, these were limited. This literature review does not claim to have all the answers, but rather it is a precursor to a wider study that will examine these important issues in depth through empirical research involving all areas of health care education. I would like to thank the project team for their hard work in producing this report.

Professor Uduak Archibong
Professor of Diversity, Director, Centre for Inclusion and Diversity and Strategic Advisor for Equality, Diversity and Inclusion
University of Bradford

Executive summary

Background

The Dean of the School of Health Studies at the University of Bradford, requested a review of the experiences and outcomes amongst undergraduate health professional higher education students with protected characteristics (as defined by the Equality and Human Rights Commission, 2010). The rational for this work was the University of Bradford's recognition that all students are entitled to a valuable and rewarding university experience regardless of age, ability, gender or ethnicity. Across the higher education sector nationally, it has been suggested that whilst many students benefit from positive outcomes and experiences, some do not. This literature review was undertaken, as a precursor to a wider project, in order to report on current published research illustrating examples of negative and positive student experiences and outcomes in health higher education.

Objectives

- To review available literature in order to examine the relationship between undergraduate health professional students with protected characteristics and their experiences and outcomes in health higher education.
- To identify and report examples of good practice relating to the review aims

Method

The literature review was undertaken systematically, using a protocol-based approach between 31.01.14 and 31.07.14. Only primary or secondary research data were included in the review. Databases and search terms were pre-specified and literature published between 2010 and 2014 was retrieved. Data bases searched included CINAHL, Medline, ERIC, BHI ASSIA and the Higher Education Academy. Papers were screened at title and abstract against exclusion criteria and eligible papers were included in the review.

Results

Thirty seven papers were included in this review. Data were broadly organized and displayed through the Equality and Human Rights Commission (2010) protected characteristics categories. These included the presentation of three categories: disability, gender and ethnicity. No papers relating to age were included. Data describing both negative and positive student experiences and outcomes was presented in the context of medical, nursing and allied health professions.

Discussion

Findings were presented in a narrative format. Included literature predominantly centred on pre-registration nursing students and ethnicity. There were more examples of negative student experiences and outcomes with fewer positive examples to report. Further empirical and secondary research focusing on age, disability, gender and ethnicity is required. The review also highlights the need to examine each protected characteristic student group independently to enable closer examination of specific issues.

Title: Experiences and outcomes amongst undergraduate health professional higher education students with protected characteristics

Introduction and background

Equality of opportunity for students to achieve personal potential and to encounter positive experiences is a central tenet of any effective higher education institution. The White paper: 'Students at the heart of the System' (Department for Business, Innovation and Skills, 2011) espoused these principles and reinforced the important message that all students are entitled to a valuable and rewarding university experience regardless of age, ability, gender or ethnicity. Whilst many students benefit from positive outcomes and experiences, unsatisfactorily, some do not.

There is evidence to suggest that there is a disparity between students with and without protected characteristics (as defined by the Equality and Human Rights Commission, 2010), amongst higher education students (Berry et al, 2011, National Union of Students, 2011, Stevenson and Whelan, 2013). For example, Stevenson and Whelan (2013) highlighted the degree attainment gap of Black and Minority students in higher education in the UK to be of national concern.

Running parallel to the importance of student attainment and experience is the increasing emphasis within the higher education sector on students as consumers with autonomy to select their education from a competitive sector 'market place'. The student voice has a significant influence on the reputation of a university which may have an impact on recruitment. Therefore equality of opportunity for all students is critical.

The University of Bradford is committed to an educational experience that is inclusive and recognises the diversity of its students and staff. The University recognises the attainments gaps within our student body, particularly that between black and minority ethnic and white students and aims to address the underlying principles. To achieve this, there is aspiration to move beyond a culture of special adjustments to meet diverse needs, toward a more universal educational design that is sufficiently flexible to meet the needs of all learners. To support these

aspirations, the development of an inclusive curriculum is a key theme within the Curriculum Framework of the University of Bradford (2012). This includes ensuring that assessment practices are varied and flexible enough to meet diverse needs and recognition of the need to develop curricula that reflect the diverse cultural and national backgrounds of our students (University of Bradford, 2012).

The Curriculum Framework also aims to provide significant space for learners to become more involved in the decisions relating to the curriculum, and to learning, teaching and assessment practices in general. There is a strong commitment to enabling students to feel genuine partners in their learning process, and ultimately becoming producers more than consumers of their higher education (UoB 2012). This will enable students to identify and select approaches to learning and assessment that suit their specific needs and preferences. However, it is important that all students regardless of special characteristics are enabled to engage in their learning in this way and that all opportunities are available to all. The innovative and inclusive redesign of curricular is fundamental to providing these opportunities.

This literature review was undertaken in order to examine these issues. International research papers published between 2010 and 2014 were systematically reviewed to identify experiences and outcomes amongst undergraduate health students in higher education. The review examined both student experiences and outcomes. This was in recognition of the more recent movement across the higher education sector to pay more attention to how students experience university rather than wholly focusing on student outcomes. This trend is not designed to minimise the importance of positive and optimum student outcomes. Rather, it is in recognition of the symbiotic relationship between experience and outcomes; students who are physically, psychologically and socially supported are more likely to succeed and have a positive experience at university. Students without these assets are more likely to fail to progress and have a negative experience. In particular examples of negative, positive, and good practices were reviewed and are presented.

Policy context

Unequivocally the Equality Act (2010) is the most relevant current piece of legislation in terms of equality in the UK, classifying the following attributes: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation as protected characteristics.

The Equality Act (2010) brought together several laws relating to equality into one framework, aiming to make equality law simpler and more accessible. According to the Equality and Human Rights Commission, (2010) direct discrimination is present when a student without a protected characteristic receives better treatment than a student with one. Indirect discrimination may be illustrated by the application of a practice, provision or criteria and failing to take protected characteristics of individual students into account resulting in disadvantage. Consideration is not given to the intention to disadvantage or not; in terms of the Equality Law (2010).

The Act is supported by public sector equality duties which require further and higher education institutions to take action in terms of equality including elimination of unlawful discrimination and the promotion of equality (Equality and Human Rights Commission, 2010).

Defining Protected Characteristics:

Age: Where this is referred to, it refers to a person belonging to a particular age (e.g. 32 year olds) or range of ages (e.g. 18 - 30 year olds).

Disability: person has a disability if s/he has a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.

Gender reassignment: The process of transitioning from one gender to another.

Marriage and civil partnership: In England and Wales marriage is no longer restricted to a union between a man and a woman but now includes a marriage between a same-sex couple. This will also be true in Scotland when the relevant legislation is brought into force. Same-sex couples can also have their relationships legally recognised as 'civil partnerships'. Civil partners must not be treated less favourably than married couples (except where permitted by the Equality Act).

Pregnancy and maternity: Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth, and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth, and this includes treating a woman unfavourably because she is breastfeeding.

Race: Refers to the protected characteristic of Race. It refers to a group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins.

Religion and belief: Religion has the meaning usually given to it but belief includes religious and philosophical beliefs including lack of belief (e.g. Atheism). Generally, a belief should affect your life choices or the way you live for it to be included in the definition.

Sex: A man or a woman.

Sexual orientation: Whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.

Review aim

To examine the experiences and outcomes amongst undergraduate health professional higher education students with protected characteristics

Review objectives

• To review available literature in order to examine the relationship between undergraduate health professional students with protected characteristics and their experiences and outcomes in health higher education.

• To identify and report examples of good practice relating to undergraduate students with protected characteristics in health higher education.

Review protocol

		Inclusion	**Exclusion**
Population	Student characteristics: age, disability, gender, gender re-assignment, sexual orientation, pregnant, race, ethnicity, religion and belief Student: Midwives, Nurses, Occupational therapists, Physiotherapists, Radiographers	Home and international students Undergraduate Pre-registration Higher education setting	Post graduate Masters Doctoral Non-healthcare education. Primary or secondary education. Further education
Intervention	Recruitment and Admissions, learning and teaching, assessment, practice placement, career and employment.	Undergraduate programmes Pre-registration programmes	Short courses Study days
Comparator	None		
Outcomes	Accepted or rejected at admission stage. Progression, completion, award attainment, failure, referral, intercalation, discontinuation, retention, attrition, student satisfaction, dissatisfaction. Employment.		
Study	International research papers	Published in English, between 2010-2014	Non-research literature. Before 2010.

Literature review-Methodology

The review process was informed by Booth et al (2012) and the Centre for Reviews and Dissemination (2009) and involved a systematic appraisal of the literature to examine the relationship between undergraduate students with protected characteristics in health higher education, and their experiences and outcomes. Examples and models of good practice were also searched for in the literature and reported. A detailed audit trail of processes and materials is offered to promote transparency.

Search strategy

Search terms used: Student, age, disability, gender, gender re-assignment, sexual orientation, pregnant, race, ethnicity, religion and belief, equality, diversity, student midwives, student nurses, student occupational therapists, student physiotherapists, student radiographers, undergraduate, pre-registration, programme, course, higher education setting, health, recruitment and admissions, learning and teaching, assessment, practice placement, career and employment.

Sources of data

Data bases searched included CINAHL, Medline, ERIC, BHI and ASSIA. Resources from the Higher Education Academy were accessed. Searching other resources References of research papers included in the review were screened and Index to Theses was checked for suitable records.

Study selection.

Study selection was undertaken using the inclusion and exclusion criteria linked to the review protocol. Titles and abstracts of research papers were screened by two reviewers to determine eligibility against the inclusion criteria with a third reviewer available to arbitrate if required. An adapted version of the preferred reporting items for systematic reviews and meta- analysis (PRISMA) template (Moher et al, 2009) (Appendix 1) was used to record the literature search and selection to promote transparency through a review audit trail.

Critical appraisal and quality assessment

Quality assessment of research papers was undertaken using a modified version of a critical appraisal tool (Dixon-Woods et al., 2006). Papers were screened against the following questions:

1. Are the aims and objectives of the research clearly stated?
2. Is the research design clearly specified and appropriate for the aims and objectives of the research?
3. Do the researchers provide a clear account of the process by which their findings were produced?
4. Is the method of analysis appropriate and adequately described?

Another review author was available to offer a second opinion regarding quality assessment of individual studies.

Data extraction

Data was extracted from studies under the following domains: author, date of publication and country, health professional orientation, brief description of study, positive student experiences and outcomes, negative student experiences and outcomes and affirmative or transformational practice.

Data synthesis

The objective of this literature review was to provide evidence to justify further research; through the examination of areas with noticeable identified gaps or through further examination of areas already identified, in more detail. Therefore key points and findings from included studies relating to positive and negative student experiences, outcomes and affirmative and transformational practices in the context of health higher education and protected characteristics are reported and set out in a narrative format.

Annotated bibliography of experiences and outcomes amongst undergraduate health professional higher education students with protected characteristics

Overview: disability as a protected characteristic

All literature reviewed relating to students with a disability emerged from the UK and predominantly described issues experienced by students with a learning disability; in particular dyslexia, dyspraxia or dyscalculia. There was only one study located relating to students with a physical health disability. This category had the second most research evidence and reported on both negative and positive student experiences and outcomes, with two examples of good practice. All research in this category centred on pre-registration student nurses apart from one example from undergraduate radiography students.

The main issues reported by students from the studies reviewed were fear of failure and discrimination across both academic and clinical practice settings, resulting in a reluctance to disclose their disability. Positive elements for students with a disability included strategies adopted to combat the negative impact of labelling through the use of positive language and compensatory behaviour to offset perceived deficits. Good practice centred on the promotion of early identification and support initiation in order to improve experiences and outcomes for students with a disability.

Disability-negative student experiences and outcomes

Pre-registration student nurses

Examples of negative experiences for student nurses with a disability were derived from an exploratory study undertaken by Wray et al (2012) in the UK. Findings from this study indicated that student nurses with a specific learning disability, such as dyslexia, dyspraxia or dyscalculia were considered to be at higher risk of academic failure than those without. Wray et al reported that 48% of student nurses in this study identified through a university screening process as likely to have a specific learning disability, had rejected further assessment or support. The rational offered was fear of stigma, discrimination and labelling and

fitness to practice implications combined with concerns about the potential impact on their future careers.

Focusing on dyslexia, Evans (2013) explored how student nurses discursively constructed their dyslexic identities, through a discourse based design. Evans found that 75% of students in this study had not disclosed their dyslexia in practice settings due to feeling that they may not be understood, with underlying concerns that they may be perceived as "being stupid" by peers.

Further evidence of negative experiences amongst student nurses with a disability was highlighted by Sanderson-Mann et al (2012), who explored the impact of dyslexia on student nurses' clinical practice learning in the UK, with a follow up comparison with non-dyslexic students. This study reported difficulties experienced by students with dyslexia whilst on clinical placement and recommended that mentors and other staff develop a better understanding of the support needs of dyslexic students.

Undergraduate radiography students

Regarding dyslexia Murphy (2010) explored the experiences of undergraduate radiography students with dyslexia and the impact of dyslexia during clinical placements. Findings illustrated examples of negative experiences such as inadequate support to enable students with dyslexia to achieve the required standards of proficiency to be able to practice. Inadequate support was illustrated in this study by the provision of a Dictaphone to a student with dyslexia without instruction to enable usage. Another finding was that whilst student learner support plans tended to be prepared for students in the university setting, student radiographers reported that this rarely translated into the practice environment.

One of the most significant problems for students with specific learning disabilities, according to Murphy, is the processing and sequencing of information leading to difficulty in reading, writing and spelling. Dyslexia may also be reflected in poor motor skills and spatial awareness and Murphy reported that there was a general lack of understanding of the impact of dyslexia which may result in dyslexic students being treated as "stupid or slow"; although Murphy found that dyslexic

students do tend to require additional time to perform tasks. Murphy suggested that these deficits may be missed as the radiography student may have developed sophisticated coping or compensation strategies such as being 'hyper vigilant' and repeatedly checking their work to avoid errors.

Disability-positive student experiences and outcomes

Pre-registration student nurses

In relation to positive outcomes amongst pre-registration student nurses with a disability, students in a study undertaken by Evans (2013) in the UK were found to have rejected traditional medical and disability-impaired language associated with dyslexia and had engaged with alternative constructions that elicited more positive aspects of dyslexia in framing their identity. This included being 'extra able', for example being able to complete calculations without the use of a calculator or paper and possessing other creative talents.

Evans (2013) also stated that policy leaders need to continue to consider individualised and wider socio-cultural understandings of dyslexic identities to enhance inclusion prerogatives. Finding from Evan's study suggested that there had been a positive development surrounding disclosure by student nurses with a disability. He asserted that a move towards a positive organisational culture for people with disabilities, specifically, early identification and on-going education for faculty staff to be able to support students with a disability, were contributory factors.

Disability-examples of good practice

Pre-registration student nurses

Good practice in the context of disability was demonstrated by Wray at el (2012) who undertook a UK based evaluation of interactive resources. The aim of this study was to help promote a positive attitude amongst mentors towards students with specific learning disabilities, such as dyslexia, dyspraxia and dyscalculia. Wray at el highlighted the potential benefits that these students bring with them, such as increased capacity for empathy and excellent interpersonal skills and

stressed the importance that competence of students with specific learning disabilities is not pre-judged and of screening being enabling rather than disabling. In response to students with dyslexia being identified at the point of failing or exiting the programme, Wray et al recommended the introduction of early screening of student nurses as a strategy to improving outcomes for students with learning disabilities. Wray found that that the number of students with learning disabilities such as dyslexia, choosing to enter nursing was increasing, and that screening on entry assisted early identification and enabled early support structures to be implemented. Wray also reported that for those students who attended for further assessment following the initial screening, earlier identification was possible resulting in earlier initiation of support processes with an overall improvement in the student experience.

Another example of good practice is offered by Griffiths et al (2010) stemming from a UK based case study to demonstrate the positive application of their six stage tri-partite model designed to provide a supportive framework for disabled student nurses in practice settings. Griffiths et al asserted the need for a planned and prepared approach to practice and the recognition that disabled students should be enabled to achieve their potential. They stressed the requirement for the specific preparation of mentors and link lecturers to facilitate adequate support for disabled students in practice and highlighted the potential opportunities for the sharing of good practice amongst universities and health care providers, on a national and international basis.

Overview: gender as a protected characteristic
The literature relating to student experiences and outcomes associated with gender was limited and only 4 papers were included in this category; all focusing on issues for males in pre-registration nurse training. Negative experiences and outcomes centred on detrimental stereotyping and the limitations imposed on male student nurses through reduced choice and opportunity during clinical practice placements. Unfavourable links were made between being male, role identity and attrition. Examples of positive student experiences focused on the presence of male role models and positive outcomes for male student nurses.

Gender-negative student experiences and outcomes

Pre-registration student nurses

McLaughlin et al 2010, undertook a UK based study using the Bem Sex Role inventory to discover how gender role identity and perceived gender appropriateness of a nursing career impacted on attrition. This study found that male students nurses tended to have a less positive experience during training than their female counterparts. McLaughlin et al reported that limited opportunities on obstetric placements for male student nurses, lack of guidance on the use of touch in practice and a general lack of awareness of the needs of male student nurses were perceived as barriers to the equality of educational opportunities. In particular, some career options such as midwifery, paediatric nursing and health visiting, were considered to be more appropriate for females than males further limiting experiences for male student nurses. However, the areas of mental health, learning disabilities, accident and emergency, surgery, medical wards, management and teaching were considered to be gender neutral by student respondents.

Positive female stereotyping and negative bias towards male students during nurse training was reported to have created a sense of dissonance, resulting in a mismatch between the individual and their chosen career, often leading to attrition. Although McLaughlin et al found that males were more likely to withdraw from their nurse training than females, gender role identity was not considered to be a predictor of course completion.

Gender stereotypes towards men in nurse training were also examined by Kouta and Kaite (2011) through a literature review. Evidence was located in this review to suggest that many unhelpful gender stereotypes towards male student nurses existed. For example, lack of gender neutrality in text books with a general lack of male nurses portrayed throughout the history of nursing. Limited opportunities to work with other male student nurses on placements were also reported as an issue. Based on these findings Kouta and Kaite hypothesised that changes in practice such as consideration of nursing stereotypes and increasing opportunities

to speak freely about intimate care experiences might improve the experiences of male student nurses.

Gender-positive student experiences and outcomes

Pre-registration student nurses

Regarding gender related positive student nurse experiences Wan Chik et al (2012) undertook a questionnaire survey in Malaysia to examine differences in academic performance, the interest in pursuing nursing as a career and the influences of professional identity and spoken language. Interest in nursing as a career was found to be high in this study regardless of gender and there were no difference in the sense of professional identity between males and females. Another finding was that not all career pathways in nursing were felt to be more appropriate for females than males. Wan Chik et al gave examples about practices to empower male student nurses such as male instructors acting as role models in nurse training. Although Wan Chik et al found that male student nurses acquired lower mean grade point averages in assessments than female student nurses; they suggested that non-cognitive skills such as discipline, motivation and time management could be factors.

Despite the previously cited recognised challenges experienced by male student nurses, Kukulu et al (2013) reported that although differences reported were not statistically significant, male student nurses were found to have more self-confidence than female student nurses in a study they performed in Turkey. The study examined whether self-confidence was related to gender and achievement using a validated self confidence questionnaire.

Overview: ethnicity as a protected characteristic

The literature relating to ethnicity in the context of pre-registration nursing was the largest reported group in this review with a couple of examples from the allied health professions. However, this may reflect the fact that nurses tend to represent the largest professional group amongst health care providers. The majority of the literature in this category reported negative student experiences

and outcomes with a limited number of positive examples, all of which were related to pre-registration nursing.

The most prolifically reported issue amongst ethnic minority students was difficulties associated with language barriers. The consequences of these difficulties often manifested in reduced student progression or completion, with less favourable academic achievement and higher levels of intercalation and attrition. Examples offered were linked to learning, teaching and assessment across higher education institutions and clinical practice settings. In particular, students described the impact of challenges experienced through studying in a foreign language as having affected them physically, psychologically and socially. Examples included financial costs associated with an extended period of study, increased stress levels and social isolation.

Several examples of institutional steps taken to alleviate some of the difficulties experienced by students studying in a foreign language were offered. These included the introduction of a range of technological and non technological methods of learning and teaching, intended to facilitate better experiences and outcomes for example, web based learning. However, these methods had yielded limited success and on occasions added to existing challenges encountered by these students.

Other factors impacting negatively on ethnic minority students' experiences and outcomes included discriminatory racial stereotyping and stigmatization directed towards them, the lack of ethnic role models, being, and feeling excluded from peers and groups in terms of peer mentoring and group tutoring .

Several examples of positive experiences and outcomes amongst ethnic minority nursing students were located in the reviewed literature. The main elements of student satisfaction in this respect were centred on supportive and culturally aware faculty staff and a culturally safe learning environment. Other important initiatives included the availability of financial support through a stipend and support from a success facilitator. There were no examples of positive practice located in this review relating to the allied health professions.

Good practice was demonstrated through several targeted interventions. These included a programme designed for culturally and linguistically diverse students which offered participants additional and specific support. Another example was an initiative to recruit and retain ethnic minority students through the 'Develop/Increase the Voice of Ethnic, Racial Students and Interns through Youth-DIVERSITY' programme. A third example was the 'Success in learning: Individualised Pathway Program' which was an initiative to support ethnically diverse students through a pre-entrance preparation programme.

Ethnicity-negative student experiences and outcomes

Pre-registration student nurses

Regarding negative student experiences in the context of ethnicity, Lewis (2011) aimed to evaluate the relationship between nursing training and clinical self-efficacy, and student nurse progression during their first year. This USA based study used a cross-sectional, research design, with 878 first semester student nurses. Findings suggested that over 88% of ethnically diverse students reported very high or extremely high levels of stress compared to approximately 73% of their Caucasian counterparts. Lewis found that although clinical self-efficacy scores were similar for all students regardless of ethnicity, ethnically diverse student nurses were significantly more likely to fail their first semester compared to their Caucasian counterparts. Significantly, Lewis found differences between racial groups of student nurses in terms of support and encouragement received from parents, family members or role models. The majority of Caucasian students (96.2%) reported having received support and encouragement during their nursing training whilst many ethnically diverse students did not.

Koch et al (2011) undertook an Australian based qualitative study in order to assess students' perception of the usefulness and appropriateness of the Web-based intervention entitled CALAIS, designed as an adjunct to traditional teaching methods (for example, lectures) and to explore the barriers and facilitators to language acquisition. This study was part of a larger cross sectional study, involving 52 student nurses. Koch et al found that language was a barrier to

achievement in ethnically diverse student nurses, which had affected their self-confidence and sense of control. Although the web based intervention, for students who spoke English as a second language had allowed students to engage in autonomous and self-paced learning, students were disappointed with some aspects of the assessment. Whilst Koch et al found that focussing on the spoken word, using audio clips had increased the capacity for interaction and had promoted self-confidence among some student nurses. Koch et al also found that two students reported feeling marginalised because they had to use web based intervention to develop their English Language skills and would have preferred more opportunities to communicate with local students.

Similarly, Spinner-Gelfars (2013) reported dissatisfaction amongst mental health student nurses from culturally linguistic and diverse backgrounds and that these students were frustrated when technical difficulties occurred with the high-fidelity patient simulation technology. These findings were generated from a USA based pilot study which aimed to evaluate the introduction of high-fidelity patient simulation to develop and practice therapeutic and oral communication skills with a diverse student population. Spinner-Gelfars found that culturally and linguistically diverse mental health student nurses had performed well on the traditional format of the written paper and felt better prepared in communicating with patients because of the simulation experience they had received.

Likewise, Pitkajarvi et al (2012) undertook a study in Finland, using focus groups with 27 student nurses which aimed to explore student nurses' experiences with English-language-taught degree programmes Pitkajarvi et al found that language barriers among culturally diverse student nurses increased the risk of isolation and that these students required additional time for learning, as studying through a foreign language was more time and energy intensive than studying in their native language. In relation to teaching and learning, Pitkajarvi et al found that culturally diverse student nurses preferred a variety in teaching and learning methods and particularly enjoyed group activities and simulation skills laboratories which had enabled them to practice working as a team and to support each other with linguistically.

According to Pitkajarvi et al due to culturally diverse student's limited domestic language skills, there were often difficulties in locating suitable clinical placements. Notably, staff and patient positive attitudes towards these students and their cultural background played an important role in influencing positive clinical experiences. Conversely, negative attitudes towards culturally diverse students by staff and patients made clinical practice difficult for them. Pitkajarvi et al also highlighted that mentoring programmes had been unsuccessful due to infrequent and inconsistent communication between mentors and mentees and pointed out that language barriers had negatively affected learning outcomes in clinical settings for ethnically diverse students. Interestingly, Pitkajarvi et al stated that when students own experiences were positive, other parties were learning and gaining from their language and culture.

In terms of negative experiences, Duerksen (2013) performed a systematic review which aimed to describe common barriers for culturally diverse student nurses and discover best practices for retention and success. The review highlighted that culturally diverse students, not only struggled with English proficiency, but also experienced difficulties with grammar, communicating their ideas and understanding examination questions. Duerkson noted that culturally diverse student nurses were commonly the main income provider for their family and tended to be less successful academically due to the competing demands of school, work and family responsibilities (Duerksen). Additionally, Duerksen pointed out that these factors may be compounded by family members being fearful of the student disregarding their native culture or learning "bad" values by entering a mainstream Anglo education system. Duerksen found that negative actions, such as dismissive gestures, assumptions and racial insults, had led students to feel inferior, invisible and isolated. Duerksen also found that the lack of eye contact, quiet demeanour or unassertiveness may often be misunderstood by others as the student being "lazy" or "dumb". Duerksen highlighted financial needs, perceived discrimination, English proficiency, and cultural tensions as specific barriers to success for culturally diverse students. Supportive multicultural training and peer relationships, belongingness and connectedness were cited as crucial components for the promotion of retention and academic success of

culturally diverse student nurses. However, Duerkson reported that these elements were frequently undermined by prejudice.

Further examples of negative experiences are cited by Wilson et al (2011) through a cross-sectional survey with 108 undergraduate Indigenous Māori student nurses in New Zealand, in order to identify their experiences of a nursing degree program. Wilson et al found that 75% of Māori student nurses reported conflict or tension when prioritizing their family commitments over academic requirements. In addition, students reported unsuitable teaching and learning approaches within an unsupportive and culturally unsafe learning environment with the absence of Māori mentors and role models.

The lack of role models as a negative experience was also reported by Gilmon (2012) from an Alaskan study which aimed to examine the care expressions, practices, and patterns of 5 Alaska Native student nurses and 5 nurse educators within the context of their nursing school experience. This study also aimed to identify generic and professional care factors that promote the academic success of Alaska Native students and to explore how these factors might affect culturally congruent education within the classroom.

Gilmon found that Alaska Native student nurses reported feeling stressed by living in two 'cultural' worlds. Gilmon identified specific challenges for Alaska Native student nurses because of their connection to the community, which was often small and meant that they may have to take care of relatives or friends; students highlighted issues around patient confidentiality and feeling uncomfortable when having to care for relatives or friends. They also experienced culturally non-congruent and non-caring events and interactions with fellow students and nurse educators in the classroom, which they found hurtful and had discouraged them from contributing as they felt unsupported and unsafe. Gilmon recommended the provision of universal and diverse cultural care to Alaska Native people through cultural knowledge, communication and community connection.

Similarly, Love (2010) who undertook a USA based qualitative study which aimed to explore the phenomenon of socialisation among 8 African American student

nurses in predominantly White universities, found that African American student nurses reported difficulty talking to teachers and students as one of the biggest barriers to 'fitting in' in terms of being understood by others and overcoming stereotypes. Love found that African American student nurses experienced discrimination from teachers, students and nurses. This led to experiences of self-doubt, fear, lack of confidence and diminished self-esteem, feelings of isolation and being singled out as they often faced the stereotype of being admitted on a quota system or as student athletes.

Love identified that the phenomenon of socialisation as a process of growth and learning, was often stressful and emotional for African American undergraduate student nurses. Love also found that African American students reported positive experiences with White peers and teachers, as well as bonding with other African American students.

How students experience clinical placements in a setting of diversity and how they cope with the emotional challenges involved was examined by Arieli (2013) through a phenomenological study in Israel. In-depth interviews with 20 students 10 Arabs (5 men and 5 women), 9 Jews (2 men and 7 women), and 1 Circassia revealed that diversity in the context of encounters with patients exacerbated emotional tensions. Interestingly, Arieli found that diversity did not play a role in conveying empathy, managing resentment, and facing language frustration in encounters with patients. Ethiopian student nurses preferred to be part of a diverse group consisting of students from various groups (for example, Arab, Jewish and new immigrants) and that this was significant for their learning and made a real difference to their experience and supported learning processes, according to Arieli. Students reported feeling unable to perform the care they had been taught to deliver and wanted to give, because they could not communicate with patients and often experienced stress associated with their relations with the instructor linked to diversity. Working in mixed teams sometimes led to harsh feelings - mostly related to language issues, and specifically to cases when some team members spoke among themselves in a language that other members of the group could not understand engendering feelings of alienation and loneliness.

Morton-Miller (2013) reported issues around language from their USA based qualitative study with 11 student nurses, which aimed to understand student perceptions of their education. Students from diverse groups reported having feared being judged negatively by instructors and other students due to having a "foreign" accent. This had resulted in a reluctance to ask questions or to ask for assistance with coursework. Understanding the nuances of behavioural norms within the dominant culture was also identified as an issue by these students.

Arieli and Hirschfeld et al (2013) undertook action research in order to report on an Israeli academic nursing project aimed at supporting the integration of Ethiopian immigrants into nursing studies. The 'Opportunity for Success' programmes' aim was to attract students of Ethiopian descent and support them to successfully pass nursing programme and the national examination. Some of the Ethiopian student nurses felt that this marked them out as a separate group, labelled them as 'different' and created a sense of separation between them and other students. Several Ethiopian students expressed that did not feel socially integrated, seeing the whole group of students as divided into small groups based on ethnicity.

Likewise, Rearden (2012) found that Alaska Native student nurses tended to participate less in peer mentoring or tutoring programmes. Similarly, Rearden undertook a cross sectional survey of Alaska Native or American Indian nursing graduates who had participated in the Recruitment and Retention of Alaska Natives into Nursing (RRANN) programme between 1998-2009 (n=22). The survey aimed to identify programme elements important to achieving academic success and satisfaction. The survey identified that despite the fact that participating in cultural outings being considered to be an important element during training, they were not available to all students on the programme, which had influenced levels of satisfaction.

Academic success amongst ethnically diverse student nurses was explored by Salomonson et al (2011) in an Australian study which aimed to compare academic performance of ethnically diverse students. This study found 12 month follow up

grade point averages among international students to be significantly lower than home students.

Peer mentoring was another area where negative experiences existed, as located in a systematic review undertaken by Torregosa and Morin (2012) which aimed to examine the evidence of programmatic and teaching initiatives implemented by nursing faculty to enhance the academic success rates of ethnically diverse students. The review identified resistance among students to join peer mentoring schemes where English as second language (ESL) students were paired up with non-ESL students as language partners. This was based on perceptions of discrimination, academic stigma and conflicting schedules between mentors and mentees. Lowered ability to communication in the English language was highlighted as a barrier to success for student nurses by Torregosa and Morin. Despite negative feedback from students, Torregosa and Morin reported that peer mentoring had improved test performance and pass rates and increased retention rates among ethnically diverse student nurses.

Loftus and Duty 2010 aimed to identify the facilitators and barriers to graduating from nursing programs for African-American students and other Ethnic Minority students using a cross-sectional survey of 314 current students and those who had graduated within 2 years. Findings suggested that having a job; academic workload; test-taking anxiety; financial worries; family responsibilities and managing time were the top five factors associated with limiting academic success for ethnic minority students.

The associations between language, a reading comprehension programme and attrition rates of student nurses were examined by Donnell (2013). Secondary analysis using a retrospective, longitudinal survey administered to students at 27 nurse licensure campuses (n=3,258) in the USA found that undergraduate student nurses who had intercalated or withdrawn from the programme were more likely to be older, male, have additional learning needs, first generation college students, and were either , Asian or a Native Hawaiian/Other Islander.

In terms of negative student outcomes, Healey (2013) found that the largest barrier for Hispanic student nurses was found to be funding their education.

Healey undertook a USA based three phase, mixed method study. The aims were to complete a needs assessment to understand the disproportionately low numbers of Hispanic students enrolled in the nursing programme, to identify best practices nationally in recruiting and retaining Hispanic students. Healey reported that support from family and friends were the most influential factors in completion of Hispanic students' nursing education.

Hispanic student nurses were the focus of a review undertaken by Loftin et al (2013) in the USA which aimed to examine the interventions used by nursing programmes to increase the success of underrepresented minority student nurses. This review indicated the lack of role models and mentors as a barrier to success among Hispanic and other underrepresented minority students.

Undergraduate allied health professionals

Hispanic students in the allied health professionals were identified through a secondary analysis of online survey data (originally collected by the American Medical Association), which offered examples of negative student experiences and outcomes amongst undergraduate students. The analysis was undertaken by Donini-Lenhoff et al (2010) and indicated that attrition rates among underrepresented minority groups remained high, particularly among and Hispanic students. This was most noticeable at for-profit institutions, but was also seen in non-profit institutions.

Undergraduate physiotherapy students

Mbambo-Kekana et al (2011), undertook a mixed methods study in South Africa using a cross-sectional survey with 128 physiotherapy graduates and in-depth interviews with 6 Heads of Department. This study aimed to investigate factors that predicted success of African students in physiotherapy programmes and whether these factors were influenced by race. Findings suggested that physiotherapy students were less likely to succeed and took a year longer to complete their physiotherapy degree, compared to their white counterparts. Moreover, fewer African students were admitted into physiotherapy, particularly at historically white universities despite the application of interventions to widen access for underrepresented students. In addition, Mbambo-Kekana et al found

that that high school performance was not a predictor of success for physiotherapy students. Predictors of success included obtaining information about the physiotherapy profession and university support systems, feeling part of the group of classmates and sharing a residence room.

Undergraduate medical students

In terms of negative medical student outcomes, Woolf et al (2013) from a study undertaken in the UK found that minority ethnic students had a lower final exam score, were more likely to fail and less likely to achieve a merit or distinction in their finals compared to white medical students. Ethnicity was also found to predict final exam scores tended to perform worse than their white colleagues in final year practical and written examinations.

Ethnicity-positive student experiences and outcomes

Pre-registration student nurses

In terms of positive student experiences, Hsiao et al (2010) undertook a Taiwan based cross-sectional survey with 1276 student nurses to explore the association of spiritual health with clinical practice stress, depressive tendency and health-promoting behaviours among student nurses. Hsiao et al found that whilst spiritual health was negatively correlated with clinical practice stress for Taiwanese student nurses, good spiritual health was a positive factor for other student nurses in coping with clinical practice stress. However, Taiwanese student nurses with better spiritual health had weaker depression tendency and were less affected by clinical practice. Hsiao et al also found that spiritual health was positively correlated with health promoting behaviours.

Positively, Wilson et al (2011) found that 60% of Māori student nurses participants believed they had adequate academic preparation when they commenced their nursing degree with 73% of participants feeling able to approach faculty staff, who understood their learning and cultural needs. In addition, 74% of Māori nursing student participants indicated teaching and learning approaches met their learning styles and needs, with 79% of participants reporting that the teaching and learning environment was supportive and culturally safe.

Smith et al (2012) undertook a descriptive survey in the USA based on an adapted version of Loftus and Duty's work, in order to identify facilitators and barriers to academic success among minority student nurses. Smith et al reported that the top five factors identified that influenced students' academic success were: availability and encouragement from faculty; self-directed learning; teaching methods and problem-solving at the application and analysis level.

Ethnicity-examples of good practice

Pre-registration student nurses
An example of affirmative and transformational practice relating to student experiences and ethnicity was illustrated through a qualitative evaluation of a programme designed for culturally and linguistically diverse (CALD) student nurses. The aim of this study undertaken by Boughton et al (2010) in Australia was to evaluate the effectiveness of the CALD programme with 13 female student nurses through the use of semi-structured interviews. Findings indicated enhanced academic potential had been achieved by instilling confidence relating to computer use, essay writing, referencing and critical reading through the provision of additional support and information. Students reported a sense of affiliation through the sharing of experiences with similar students, working in small groups, which enabled them to speak, rather than feel embarrassed about their accent, had alleviated feelings of isolation and loneliness and facilitated them to make cultural adjustments. Importantly, Boughton et al also reported that students on this programme had indicated that involvement in this programme had prevented their withdrawal from nurse training.

The needs of (CALD) student nurses, student pharmacists and medical students were also examined by Gilligan et al (2012) in Australia. Similar issues were found including difficulties with the spoken language and tutors speaking too fast making it challenging for these students to interact. In response to this, specific health related language and communication courses had been established to support these students.

Similarly, Condon et al (2013) undertook a USA based study to evaluate the use of a 'Success in learning: Individualised Pathway Program' using a summative evaluative survey. Interviews were conduced with 77 disadvantaged and ethnically diverse students accepted onto this pre-entrance preparation programme. Findings showed a 6.5% attrition rate of student nurses, mainly due to academic failure. However, 90.9% of the original students graduated (above the projected 80%) and 75.3% of those students achieved bachelor degrees.

A longitudinal cohort intervention study entitled 'DIVERSITY' (Develop/Increase the Voice of Ethnic, Racial Students and Interns through Youth) was conducted by Lopez-Bushnell et al (2014) in the USA. This study used mentoring and job shadowing as a motivating factor with 50 nurses serving as mentors and 63 student nurses as study participants. The aim of this study was to recruit and retain 60 underserved, ethnically diverse students into a nursing career, to academically prepare these students for college and a nursing career and to establish community partners to support them. The study reported difficulties in recruiting minority students to the undergraduate nursing programme despite a strong educational foundation at the participating high school. Lopez-Bushnell et al found that mentoring had the greatest impact on outcomes and that professional and personal relationships with mentors helped minority undergraduate student nurses visualize a positive future career in nursing.

Conclusion

This literature review aimed to examine experiences and outcomes amongst undergraduate health higher education students with protected characteristics. An aim of the review was to locate and report associated examples of good practice as the intention was to look at positive as well as negative examples of student experiences and outcomes. The Equality Act (2010) definition and language used to describe protected characteristics was adopted in this review and only research papers published between 2010 and 2014 were included. There were 37 papers included in this review.

Only research papers and literature reviews were included in the review rather than opinion and position papers or other forms of lower hierarchical evidence.

Whilst, there was evidence to suggest that more information relating to the review question was available, this was not empirical or secondary research and was therefore not included as it was less likely to be published in high impact journals or disseminated.

The majority of the reviewed papers originated from the USA (12), with (7) papers included from the UK and 5 papers from Australia. There were 1-2 papers from Alaska, Cyprus, Finland, Israel, Malaysia, New Zealand, South Africa, Taiwan or Turkey. The protected characteristic category with the highest level of published evidence was ethnicity (n= 28), with much less from disability (n=5), fewer from gender (n=4) and no papers relating to age. In the UK, hypothetically this may be because the Race Relations Amendment Act (2000) served as a significant marker to draw attention to ethnicity in 2000, whereas disability, gender and age tend to have received a lower profile generally prior to the implementation of the Equality Act (2010). Whilst this is changing, progress is slow and this is highlighted by the overall lack of contemporary and empirical published evidence available to draw from, whilst undertaking this literature review.

There were more examples drawn from negative than positive student experiences and outcomes and this may reflect the reality the current landscape across higher education. However, the impetus for undertaking and publishing equality and diversity related research tends to stem from highlighting and examining important, contemporary issues. This review found limited empirical evidence related to good practices and concluded that less attention has been afforded research that aims to highlight positive elements as there are more urgent and negative issues to examine and address.

In terms of literature relating to professional groups, the majority of research related to pre-registration nursing. There was one paper under ethnicity relating to medical students. Some study authors did not specifically identify the professional group in their research so these were classed as allied health professional papers. No papers were found relating to midwifery students. This review indicates that more research is needed to increase the evidence base to support policy and practice in all protected characteristic domains. However, there is more research

available in ethnicity and consequently, in particular research around gender, disability and age are required.

Recommendations

Review literature

1. Expand the search to include other sources of information, for example grey literature, reference lists and abstracts
2. Include STEM subject students with protected characteristics as the issues are not unique to health professional students in higher education
3. Extend the literature review to include health higher education graduate and post graduate students with protected characteristics.
4. Undertake an in depth literature review that specifically focuses on each professional group to examine details unique to their professional orientation
5. Undertake an in depth literature review that specifically focuses on each protected characteristic to examine details unique to their experiences and outcomes

Empirical research

1. Address the question and aims from this review through empirical research.
2. Address the findings from this review through empirical research.

Appendix 1 Search strategy used in CINAHL and applied to the other databases

#	Query	Results
S47	S27 AND S45 (limit to 2010, research articles, English language)	320
S46	S27 AND S45	1,516
S45	S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44	401,853
S44	(MH "Educational Measurement")	6,277
S43	(MH "Academic Achievement") OR (MH "Achievement") OR (MH "Academic Performance") OR (MH "Academic Failure")	7,213
S42	(MH "Student Dropouts")	954
S41	(MH "Outcomes of Education")	6,805
S40	(MH "Student Retention")	695
S39	(MH "Employment Status")	5,043
S38	(MH "Employment")	14,398
S37	(MH "Education, Clinical")	7,408
+S36	"practice Placement"	116
S35	"clinical Placement"	524
S34	(MH "Student Placement")	2,638
S33	"assessment" OR (MH "Competency Assessment")	302,463
S32	(MH "School Admissions") OR "admissions"	10,989
S31	"Recruitment"	26,548
S30	(MH "Student Recruitment")	1,972
S29	(MH "Teaching Methods, Clinical") OR (MH "Teaching Materials") OR (MH "Learning Theory") OR (MH "Learning")	25,594
S28	(MH "Learning") OR (MH "Learning Methods")	19,511
S27	S8 AND S26	4,978
S26	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25	943,799

S25	(MH "Minority Groups")	7,524
S24	(MH "Discrimination") OR (MH "Sexism") OR (MH "Ageism") OR (MH "Racism")	12,975
S23	(MH "Cultural Diversity")	7,818
S22	"protected characteristic"	0
S21	"protected characteristics"	1
S20	(MH "Sexism")	2,070
S19	(MH "Intellectual Disability") OR (MH "Students, Disabled")	14,406
S18	"belief"	7,775
S17	(MH "Religion and Religions")	8,201
S16	(MH "Ethnic Groups") OR "ethnicity" OR (MH "Cultural Diversity") OR (MH "Cultural Bias")	30,501
S15	(MH "Race Factors") OR "race"	28,425
S14	(MH "Expectant Mothers") OR "Pregnant"	18,460
S13	(MH "Pregnancy") OR (MH "Attitude to Pregnancy")	112,987
S12	"gender reassignment" OR (MH "Sex Determination")	319
S11	(MH "Gender Identity") OR (MH "Gender Bias") OR (MH "Sex Role") OR (MH "Sex Factors")	69,633
S10	(MH "Attitude to Disability") OR (MH "Intellectual Disability") OR (MH "Severity of Disability") OR "disability"	54,587
S9	"age" OR (MH "Age Factors")	745,110
S8	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7	30,726
S7	"radiography student"	2
S6	"student radiographer"	3
S5	"students radiography"	2
S4	(MH "Students, Physical Therapy") OR (MH "Students, Midwifery") OR (MH "Students, Allied Health") OR (MH "Students, Health Occupations")	3,727
S3	(MH "Students, Nursing") OR (MH "Students, Pre-Nursing")	18,627
S2	"student nurse" OR (MH "Students, Nurse Midwifery")	994
S1	(MH "Students")	8,252

Appendix 2

PRISMA Flow Diagram

Records identified through data base and other sources searching:
Medline (n=730)
CINAHL (n=323)
ASSIA and BHI (n=880)
Eric (n=7)
Index to Theses (n=4)

↓

Records excluded at title and duplicates removed:
Medline (n=609)
CINAHL (n=262)
ASSIA and BHI (n=832)
Eric (n=0)
Index to Theses (n=0)

↓

Records excluded at abstract:
Medline (n=594)
CINAHL (n=240)
ASSIA and BHI (n=784)
Eric (n=0)
Index to Theses (n=0)

↓

Records included in review: 37
Medline (n=14)
CINAHL (n=19)
ASSIA and BHI (n=4)
Eric (n=0)
Index to Theses (n=0)

Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

References

Arielli, D. (2013). Emotional Work and Diversity in Clinical Placements of Student nurses. *Journal of Nursing Scholarship*, 45(2): 192–201.

Arielli, D. & Hirschfeld, M.J. (2013). Supporting minority student nurses: 'Opportunity for Success' for Ethiopian immigrants in Israel. *International Nursing Review*, 60(2): 213-20.

Berry, B. & Loke, G. (2011) Improving the degree attainment of Black and Minority Ethnic students. London. The Higher Education Academy/Equality Challenge Unit.

Booth, A., Papaioannou, D., & Sutton, A. (2012*). Systematic Approaches to a Successful Literature Review*. London: Sage Publications.

Boughton, M.A., Halliday, L.E. & Brown, L. (2010). A tailored program of support for culturally and linguistically diverse (CALD) student nurses in a graduate entry Masters of Nursing course: A qualitative evaluation of outcomes. *Nurse Education in Practice*, 10(6): 355–360.

Centre for Reviews and Dissemination (CRD) (2009). Systematic reviews: CRD's guidance for undertaking reviews in health care. Retrieved from http://www.york.ac.uk/inst/crd/systematic_reviews_book.htm.

Condon, V.M., Morgan, C.J., Miller, E.W., Mamier, I., Zimmerman, G.J. & Mazhar, W. (2013). A program to enhance recruitment and retention of disadvantaged and ethnically diverse Baccalaureate student nurses. *Journal of Transcultural Nursing*, 24(4): 397-407.

Department for Business, Innovation and Skills (2011) Higher Education: Students at the Heart of the System. UK. HMSO

Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., & Sutton, A.J. (2006). Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. BMC Medical.Research Methodology, 6 , 35, http://informationr.net/ir/9-3/paper178.html

Donini-Lenhoff, F.G. & Brotherton, S.E. (2010). Racial-ethnic diversity in allied health: the continuing challenge. *Journal of Allied Health*, 39(2): 104-109.

Donnell, W.M. (2013). *A correlational study of a reading comprehension program and attrition rates of ESL student nurses in Texas*. PhD Thesis. The

University of Texas at Arlington, USA. Retrieved from:
https://dspace.uta.edu/bitstream/handle/10106/11857/Donnell_uta_2502D_12
108.pdf?sequence=1

Duerksen, J.L. (2013). Retention and success of culturally diverse student
nurses. *The Oklahoma Nurse*, 58(3): 4-5.

Equality and Human Rights Commission (2010), Higher Education providers
Guidance http://www.equalityhumanrights.com/private-and-public-sector-
guidance/education-providers/higher-education-providers-guidance (accessed
on 18th July 2014)

Evans W. (2013) 'I am not a dyslexic person I'm a person with dyslexia':
identity constructions of dyslexia among students in nurse education. *Journal
of Advanced Nursing. 70* (2) 360-372. doi: 10.1111/jan.12199.

Gilligan C., Outram S. (2012) Culturally and linguistically diverse students in
health professional programs: an exploration of concerns and needs.
Education for Health, 25 (1): 40-47.

Gilmon, M.E. (2012). *Cultural diversity and the experiences of Alaska Native
student nurses*. PhD Thesis, University of Northern Colorado, USA. Retrieved
from http://gateway.proquest.com/openurl%3furl_ver=Z39.88-
2004%26res_dat=xri:pqdiss%26rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation%
26rft_dat=xri:pqdiss:3523426

Griffiths, L., Worth, P., Scullard, Z., Gilbert D. (2010) Supporting disabled
students in practice: a tripartite approach. *Nurse Education in Practice*, *10*
132-137. doi:10.1016/j.nepr.2009.05.001

Healey, C. (2013). Development of a plan for improved recruitment and
retention of Hispanic practical student nurses. *Nurse Education Today,*
33(1):10-12.

Higgins, J.P.T., & Green, S. (Eds). (2011). *Cochrane Handbook for
Systematic Reviews of Interventions Version 5.1.0*. Retrieved
from http://www.cochrane-handbook.org

Hsiao, Y.C. Chien, L.Y. Chiang, C.M. & Huang, S.Y. (2010). Spiritual health,
clinical practice stress, depressive tendency and health-promoting behaviours
among student nurses. *Journal of Advanced Nursing*, 66(7): 1612–1622.

Koch, J., Salamonson, Y., Du H.Y., Andrew, S., Frost, S.A., Dunncliff, K. &
Davidson, P.M. (2011). Value of web-based learning activities for student

nurses who speak English as a second language. *Journal of Nursing Education*, 50(7): 373-380.

Kouta, C., Kaite, C. P. (2011). Gender discrimination and nursing: A literature review. *Journal of Professional Nursing,* 27 (1), 59-63.

Kukulu, K., Korukca, O., Ozdemir, Y., Bezci, A., Calik, C. (2013). Self-confidence, gender and academic achievement of undergraduate nursing students. *Journal of Psychiatric and Mental Health Nursing,* 20, 330-335.

Lewis, J.C. (2011). Self-efficacy and retention among ethnically diverse student nurses. PhD Thesis. University of Northern Coloroado, USA. Retrieved from digitalunc.coalliance.org/fedora/.../Lewis_unco_0161D_10075.pdf

Loftin, C., Newman, S.D., Bond, M.L., Dumas, B.P. & Gilden, G. (2012). Diversity in Texas nursing programs: A study of the relationship between supportive characteristics and graduation of Hispanic and other underrepresented minority student nurses. *Hispanic Health Care International*, 10(4):159-167.

Loftus, J. & Duty, S. (2010). Educating ethnic minority students for the nursing workforce: facilitators and barriers to success. *Journal of National Nurses Association*, 21(1):7-16.

Lopez-Bushnell K., Gardner K., Sanchez J., Miller D. (2014) The Effects of Mentoring on Minority Nurse Recruitment. *Minority Nurse.com*. Retrieved from http://www.minoritynurse.com/article/effects-mentoring-minority-nurse-recruitment#sthash.uKC6gAr0.dpuf

Love, K.L. (2010). The lived experience of socialization among African American student nurses in a predominantly White university. *Journal of Transcultural Nursing*, 21(4):342-50.

Mbambo-Kekana, N., Rothberg, A. & Bruce, J. (2011). *Predictors of success of African physiotherapy students in South Africa*. PhD Thesis. University of the Witwatersrand, Johannesburg. Retrieved from http://digitalunc.coalliance.org/fedora/repository/cogru%3A3326/Gilmon_unco _0161D_10147.pdf/Gilmon_unco_0161D_10147.pdf

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.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D.G., the PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Medicine,* 6(6): e1000097. doi:10.1371/journal.pmed1000097. Available from http://www.prisma-statement.org/

Morton-Miller, A.R. (2013). Cultural competence in nursing education: practicing what we preach. *Teaching and Learning in Nursing*, 8(3): 91-95.

Murphy, F. (2011). On being dyslexic: student radiographers' perspectives. *Radiography 17.* 132-138. j.radi.2010.08.005

National Union of Students (2011) Race for equality: A report on the experiences of Black students in further and higher education

Pitkajarvi, M., Kekk,i P., Eriksson, E. & Pitkala, K. (2012). Culturally diverse student nurses in Finland: Some experiences. International Journal of Nursing Education Scholarship, 9 (1): 1-16.

Pope, C., Mays, N., & Popay, J. (2007). *Synthesising Qualitative and Quantitative Health Research: A Guide to Methods*. Maidenhead (UK): Open University Press.

Rearden, A.K. (2012). Recruitment and retention of Alaska Natives into nursing: elements enabling educational success. *Journal of Cultural Diversity*, 19(3): 72-78.

Race Relations Amendment Act (2000). London. Her Majesty's Stationery Office

Salamonson Y., Ramjan L., Lombardo L., Lanser LH., Fernandez R., Griffiths R. (2011) Diversity and demographic heterogeneity of Australian nursing students: a closer look. International Nursing Review, 59, (1): 59–65.

Sanderson-Mann, J., Wharrad, Heather J., McCandless, F. (2012) An empirical exploration of the impact of dyslexia on placement-based learning, and a comparison with non-dyslexic students. Diversity and Equality in Health and Care, 9, (2), 89-99

Smith, C.B., Williams-Jones, P., Lewis-Trabeaux, S. & Mitchell, D. (2012). Facilitators and barriers to success among ethnic minority students enrolled in a predominantly white Baccalaureate nursing program. *The Journal of the National Nurses Association*, 23(1): 41-51.

Spinner-Gelfars, A.H. (2013). Using simulation to promote effective communication with a diverse student population. *Teaching and Learning in Nursing*, 8(3): 96-101.

Stevenson, J. and Whelan, P. (2013) Synthesis of US literature relating to the retention, progression, completion and attainment of black and minority ethnic (BME) students in HE. Higher Education Academy: York.

Torregosa, M.B. & Morin, K.H. (2012). Programmatic and Teaching initiatives for ethnically diverse student nurses: A literature review. *Asian Nursing Research*, 6(2): 67-74.

University of Bradford (2012) Curriculum Framework Document. http://www.bradford.ac.uk/academic-development/media/academicdevelopment/documents/UoB-Curriculum-Framework---Final-August-2012.pdf (accessed on 18th July 2014)

Wan Chik, W. Z., Salamonson, Y., Everett, B., Ramjan, L. M., Attwood, N., Weaver, R. ,Davidson, P. M. (2012). Gender difference in academic performance of nursing students in a Malaysian university college. *International Nursing Review,* 59, 387-393.

Wilson, D., McKinney, C. & Rapata-Hanning, M. (2011). Retention of indigenous student nurses in New Zealand: A cross-sectional survey. *Contemporary Nurse*, 38(1-2): 59-75.

Woolf, K., McManus, I.C., Potts, H.W.W. & Dacre, J. (2013). The mediators of minority ethnic underperformance in final medical school examinations. *British Journal of Educational Psychology*, 83(1):135-59.

Wray J, Aspland J, Taghzouit J, Pace K, Harrison P. (2012) Screening for specific learning difficulties (SpLD): the impact upon the progression of pre-registration nursing students. *Nurse Education Today.* *32*(1):96-100. doi: 10.1016/j.nedt.2011.01.021.