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**‘Are student midwives influenced by the
‘traditional’ (non evidence-based) practices of
their clinical mentors’?**

Nicola Armstrong

**Dissertation submitted to the University of
Chester for the Degree of Master in
Professional Education in part fulfilment of the
Modular Programme in Professional Education**

November 2007

Abstract:

Aim

The aim of this study was to find out whether cohorts of final year pre-registered midwifery students are influenced by the 'traditional' (non evidence-based) practices of their clinical mentors. This was thought to be worthy for a number of reasons. Foremost, it is said that; where pre-registered students are allocated to a clinical placement, the workplace should ensure that the provision of care is based on relevant research-based and evidence-based findings. It is also said that clinical mentors should have a good knowledge base in order to identify, apply and disseminate research findings within their area of practice. Against this, there is a growing concern that many practices are based on tradition, rather than on sound evidence. The consequence of this is that; if students adopt the traditional practices of their mentors it may have implications on how students may practice when they qualify, and in turn, they may pass on these traditions to future students. More importantly, it is essential that midwifery practice is informed by the best available evidence and where this philosophy is lacking, it may not only impact on students learning, but more importantly it can impact on the quality of patient care.

Method and Design

The data collection method included a survey of a finite population, which consisted of all final year pre-registered midwifery students, who were based at five midwifery cohorts. A total of 145 students were available for inclusion. The sample was asked to complete a questionnaire, which predominantly utilised a 5-point Likert scale and was designed to yield some 'open' responses.

Analysis

The quantitative data was amenable to statistical analysis which was coded into the computer software. A grounded theory approach was utilised to analyse the 'open response' data.

Findings

There was a sufficient amount of evidence to assert that; the students were influenced by their mentors' traditional practices. The findings also strongly supported the idea that; what was taught in the Higher Education Institution (HEI), did not always equate to the workplace realities and while the HEI advocated students to employ evidence-based practices (EBP), the students were more likely to adopt the traditional practices of their mentors.

While statistically the majority of students perceived that they would challenge their mentors if they did not employ EBP's, their comments overall conflicted with these findings. Indeed, many perceived that; to challenge their mentors could potentially jeopardise their clinical assessments and or career prospects.

The most significant finding was that there appeared to be a multitude of barriers that prevented the students from employing EBP's, however, they believed they would utilise these practices once they had qualified.

Declaration:

This work is original and has not been submitted previously in support of any qualification or course:

Signed

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List of Abbreviations:

DoH: Department of Health

EBP: Evidence-based practice

EB: Evidence-based

ENB: English National Board for Nursing, Midwifery and Health Visiting

HEA: Higher Education Academy

HEI: Higher Educational Institution

NHS: National Health Service

NMC: Nursing and Midwifery Council

NICE: National Institution of Clinical Excellence

QAA: Quality Assurance Agencies

RCM: Royal College of Midwives

SPSS: Statistical Package for Social Sciences

Chapter 1:

Introduction

Background

Introduction:

Finding out whether the final year pre-registered midwifery students in this study are influenced by the traditional practices of their clinical mentors was worthwhile for a number of reasons. Foremost, the Joint English National Board for Nursing, Midwifery and Health Visiting (ENB) and the Department of Health [DoH] (2001) '*Placements in Focus*' document emphasised that, where students are allocated to a clinical placement, the workplace should ensure that the provision of care is based on relevant research-based and evidence-based findings. The *Preparation of Mentors and Teachers* document (ENB & DoH 2001a) also advises that mentors need to have a good knowledge base in order to identify, apply and disseminate research findings within their area of practice. These recommendations were again re-emphasised by the Nursing and Midwifery Council [NMC] (2002, 2002a & 2004, 2004b).

These recommendations are by no means innovative concepts. Indeed, they reiterate the proposals that were set out by the DoH documents: '*The New NHS: Modern, Dependable*' (1997), and '*A First Class Service*' (1998) and the National Health Service (NHS) Executive document: *Working together: Securing a quality workforce for the NHS* (1998). The central themes of these documents were to deliver 'high quality care', with practitioners using the best possible evidence to inform practice.

However, it is not possible to monitor and know with any real certainty that individual practitioners, who may be involved with mentoring students, employ practices that are based on best evidence. Indeed, some studies have suggested that practitioners may be unaware of which practices are evidence-based and or, may lack knowledge of what is meant by evidence-based and or, they are uncertain of how to utilise the evidence in practice. In contrast, it has been said that where some practitioners are knowledgeable of the EBP and know how to apply that evidence, they may chose to disregard it if it does not correspond with their own beliefs, or the beliefs and practices of their colleagues, or their managers. These

latter concepts imply the workplace culture may have some influence on the utilisation of EBP. Additionally, while many midwives might claim they do not employ traditional practices, there is an abundance of studies that have identified many employ routine practices that are of no benefit to their service users.

This study was purposed to identify whether students adopt the traditional practices of their mentors, and if they do, why.

The reasons why this research is important is because, there is a growing concern that many practices are based on tradition, customs and 'ward culture', rather than on sound evidence and if students adopt the traditional practices of their mentors it could have implications on how they may practice when they qualify, and how they may also influence the practices of future midwifery students. More importantly, the ethos of healthcare should be striving to ensure practitioners utilise evidence-based care, and where this philosophy is lacking the consequences of employing traditional behaviours can have a far greater impact on the quality of patient care.

Background

As a practising midwife, teaching pre-registered midwifery students within the clinical environment is an integral part of the author's role. In addition to this role, the author has also taught midwifery students in the Higher Educational Institution (HEI). This has afforded the author insight into the roles and responsibilities of a clinical mentor and that of a lecturer.

Preparing for a teaching session within the HEI requires a great deal more than utilising one's practice experience in that it necessitates gathering, analysing and evaluating various forms of data, research findings and evidence-based recommendations. Thereafter, imparting that information to students can be relatively unproblematic. However, influencing students to adopt those ideas and practices is a far more difficult task. Indeed, in the context of discussing practice recommendations to students, the author has frequently heard students' say:

"We know it makes sense to do this ...but the midwives don't do it, they say we do things differently here, so we (the students) do what the midwives do".

This statement perhaps highlights some of the difficulties as to why some students chose not to put into practice, what they have learnt in the HEI, but moreover, it brings to light a number of important issues. It implies there may be some inconsistency between what is taught in HEI and what happens in the clinical setting. Moreover, it may underline the overriding influence of socialisation as a determinant of behaviour. It also challenges the theory that, learning is the acquisition of knowledge or skill, and by its very nature, it induces alternative ways of living (Rogers 1996, Brookfield 1994).

Chapter 2

Literature Search

Literature Review

Literature Search

The literature review included obtaining evidence derived from the naturalistic to the positivist research traditions.

Utilising relevant data that was based on either: 'scientific' evidence, 'scientific' approaches or 'scientific' rigour was used as a means to the development of theory (Whitehead & Mason 2003). According to Sleep and Clark (1999), it is important to achieve a balance between clinical expertise and scientific evidence, because without clinical expertise, the eternal evidence may not be fitting, and at worst may be detriment to that of practice.

It was through searching and analysing various scientific data that provided some guidance as to what aspects might need to be explored, and what questions would need to be asked. For example, to ensure relevant concepts were explored, necessitated knowing, to some extent, what factors might be influential to the author's research. Additionally, it was thought that by undertaking a literature search, it would enable the author to test for similarities or differences to that of other studies and or theories that are developed through expert opinion.

The Internet search engines was used to gain assess to the relevant databases and professional websites. Other resources such as educational benchmarks and textbooks were used to find out what was already known about the research subject.

While there was an abundance of useful literature, only a few studies had made reference to students adopting the traditional practices of their clinical mentors. Of these studies, most were qualitative and therefore it was not possible to make generalisations of the wider population. Additionally, most of the studies had investigated the experiences of pre-registered nursing students and or nurse practitioners. Against this, the literature overall suggested that the socio-cultural environment plays a key influence in determining the behaviour of students. There were also a number of additional concepts that were thought to be relevant and these were used as a conceptual framework to direct this research.

According to Bell (2005), the purpose of developing a framework is to find out what are the key factors, constructs or variables that may influence your research question. In other words, in order to find out whether student midwives are influenced by the traditional practices of their clinical mentors, the author needed to acquire an awareness of what factors might influence student midwives to adopt the traditional practices of their clinical mentors

By initially drawing from the author's clinical experiences and thereafter, undertaking a literature review, it not only provided a theoretical framework, it enabled the formulation of hypotheses, but, it had some influence on the chosen research methods and design.

Literature Review:

'Employment of traditional practice': Studies identifying that traditional practices are employed:

Studies undertaken by Perez-Botella and Downe (2006), Cloherty, Alexander and Holloway (2004), Baxter, McCrae and Dorey-Irani (2003), Begley (2001) and Bick (2000) have suggested that some practitioners place great emphasis on traditional physical aspects of care, which is claimed to have no benefit to their service users. Indeed, the National Institute for Clinical Excellence (NICE) guidelines for Women's and Children's Health (2006 & 2003) contains an abundant of studies, which have identified that traditional practices are employed.

‘Use of evidence-based practice amongst practitioners’: Studies that have explored the utilisation of evidence-based practice amongst qualified practitioners:

There have been a substantial number of studies that have explored this concept, and the majority of these studies have provided a number of explanations as to why some practitioners elect not to employ EBP.

Studies undertaken by Banning 2005, Rycroft-Malone, Harvey, Seers, Kitson, McCormack & Titchen (2004), Parahoo (1999) and McSherry (1997) suggest that some practitioners lack knowledge of what is meant by evidence-based, or as MacGuire (2006) and Rodgers (2000) suggest, they may be unaware of which practices are evidence-based. Alternatively, studies undertaken by Thompson, McCaughan, Cullum, Sheldon & Raynor (2005), Glacken and Chaney (2004), and Parahoo (2000), alleged that some practitioners were uncertain of how to utilise the evidence into practice.

According to Leeman, Jackson and Sandelowski (2006), this latter concept may be due to the fact that many research publications fail to provide practitioners information on ‘how to apply’ the research in practice. In contrast, it has been said that where some practitioners are knowledgeable of the EBP and know how to apply that evidence, they may chose to discount it if it does not correspond with their own beliefs (Furber & Thomson 2006, French 2005, Ring, Malcolm, Coull, Murphy-Black & Watterson 2005, Crawford, Brown, Anthony & Hicks 2002, Thompson, McCaughan, Cullum, Sheldon, Mulhall & Thompson 2001, 2001a), or, more interestingly, the beliefs and practices of their colleagues (Maben, Latter and Macleod Clark’s 2006, Wilson McCormack & Ives 2005, Veeramah 2004, Nutley, Percy-Smith & Solesbury 2003, Rodgers 2000, Retsas 2000, Le May, Mulhall & Alexandar 1998), and or their managers (Parahoo & McCaughan 2001, Parsons 2004).

The two latter concepts might imply that the workplace culture may have some influence on the utilisation of EBP. Indeed, Veeramah (2004) cross-sectional survey revealed that some practitioners felt they were pressurised to conform to ritualistic practice and that other team

members were not supportive and or, were resistant to change and or, were unwilling to try out new ideas.

Some of these theories correspond with the findings of surveys undertaken by Hutchinson and Johnston (2004), Oranta, Routasalo and Huple (2002), Parahoo and McCaughan (2001), Parahoo (2000), Retsas (2000), Closs, Baum, Bryar, Griffiths and Knight (2000), Kajermo, Nordstrom, Krusebrant and Bjovell (1998) and Dunn, Crichton, Roe, Seers and Williams (1997). These studies utilised a 29 item 'BARRIERS Scale', which was originally designed and utilised by Funk, Champagne, Wiese and Tornquist in 1991 to identify the barriers to research utilisation amongst registered nurses. While these studies occurred between 1991-2004, and had geographical differences, and investigated varied nurse professions, the research findings revealed notable similarities. Indeed, the most frequently cited barriers were:

- 1). Nurses did not feel they had the authority to implement research findings.
- 2). There was insufficient time on the job to implement new ideas and or to read research articles.
- 3). Management and or doctors would not allow and or cooperate with implementation.
- 4). Statistical analyses were not understandable.
- 5). Facilities were inadequate for implementation and
- 6). Other staff were not supportive of implementation.

These findings become significant when they are compared to the standard objectives of professional organisations such as the NMC, which claims that, the HEI and the clinical workplace should incorporate and promote students to employ EBP.

'Educational and Organisational Standards':

The NMC (2004a) document: *Standards of proficiency for pre-registration midwifery education*, contains a number of standards that should be included in the students' educational programme. This document also details proficiency statements, which students are expected to achieve. The vast majority of these outcomes contain elements that require students to demonstrate their knowledge and application of evidence-based findings into practice. The

ENB and DoH '*Placements in Focus*' document (2001), also had recommended that where students are allocated to clinical placements, the workplace should ensure the provision of care is based on relevant research-based and evidence-based findings. The document '*Making a Difference to Nursing and Midwifery Pre-registered Education*' (DoH 1999) also advocated that pre-registered education programmes should have an understanding of EBP and that this outcome should be achieved by the end of a student's first year. The NMC (2004) and the Royal College of Midwives [RCM] (2003) also emphasised that, pre-registered midwifery students should be brought into a culture that develops them to examine knowledge, to be critical of the environment in which they operate and that they should be encouraged to challenge those practices that are of no benefit to their service users. While these recommendations are faultless, they are by no means straightforward, in that, if students are taught EBP, for instance, in the HEI, 'do students utilise their evidence-based knowledge in their practice environment'?

'Applying theory to practice':

The amount of literature relating to whether students utilise their evidence-base knowledge in their practice environment, was exceptionally broad, in that it involved reviewing those theories that relate to the workplace culture and that of behaviourism and socialisation, and how this can influence the adoption of practices. For example, while the RCM (2003) and the NMC (2004) advocates that students should be critical of their environment and challenge practices that are not beneficial, Morrall (2005) suggests that this concept is highly improbable due to the fact that:

'the process of socialisation insidiously teaches students to conform to a set of pre-set norms, values, attitudes and behaviours which are difficult (if not possible) for the student to influence'and in those incidences where students dare to challenge such practices, they may run the risk of being 'labelled as 'deviant' ...and their... 'creativity, innovation and 'free-expression' would be stifled' (p 622).

Morrall's theory appears to support this statement, and May and Veitch (1998) case study provides a representation of the conflicts students face. For example, one student stated that:

..., whereas the college wants us to go out and question and to think, the wards don't want people who think, they don't want people who question, they just want people who do (p 635).

Correspondingly, Swain, Pufahl and Williamson (2003) study explored students' knowledge of manual handling techniques and identified that most students were knowledgeable of the recommended practices. However, in clinical practice where the students worked with mentors and or other staff members who demonstrated bad manual handling techniques, the students would adopt those behaviours.

Kyrkjebo and Hage (2005), Randle (2003), Seymour, Kinn & Sutherland (2003), Swain, et al (2003), Begley (2001 & 2001a), Yearley (1999) and Cahill (1996), make comparable declarations as to why students may adopt the 'good or bad' behaviours of their mentors. They allege that, within the clinical hierarchy, students are often seen as being '*at the bottom of the barrel*', and as a result a student's lack of power and their desire to be accepted can outweigh challenging, nonconforming and declining the adoption of bad behaviours.

What is perhaps pertinent to the author's research is that according to Begley (2002), the negative issues associated with clinical hierarchy are far more evident in midwifery, than that of nursing.

Spouse (2003), Welsh and Swann (2002), Chan (2002), Boud, Keogh and Walker (1994) concur that students are not only powerless, but they are particularly vulnerable. Papp, Markkanen and Bonsdorff (2003), Koh (2002), Yearley (1999), Phillips, Davies and Neary (1996) allege that, it is for this reason, that they are more likely to imitate the behaviours of their mentors. However, as to whether they carry on imitating their mentors behaviours when they qualify is debateable.

'Aspiring to change' their practice once they have graduated

Interestingly, the students in Kyrkjebo and Hage's (2005) and Pearcey and Elliott's (2004), study believed that, when they graduated, they would do things differently from what they had observed. However, it could be argued that the desire to 'fit in' and behave like others might possibly be more compelling when those students qualify and essentially become part of the workforce. Indeed, Wilson et al's (2005), and Mantzoukas and Jasper's (2004) studies suggested that some qualified staff felt the need to comply with the '*way things were always done*', regardless of whether that practice was believed to be good or bad. Similarly, Randle's (2003) and Begley's (2002) study, highlighted that, where students were subjected to bullying by qualified staff, the students themselves, when they were near completing their training, also engaged in bullying activities. In some cases Randle (2003) believed this was detrimental to their patients. Against this, there appeared to be a limited number of studies that have explored whether students believe their practices will change to that of more evidence-based once they become qualified practitioners

While admittedly these are a limited number of studies, what might be worthy of note is that, these studies appear to contest Bandura's (1977) theories of social and behavioural learning, whereby he maintained that if someone witnesses a behaviour that violates their moral principles, or if it is socially unacceptable that person will not adopt that behaviour.

These studies implied that the ward culture influenced the adoption of behaviours and that there existed an oppressive culture. According to Freire (2000), this discourages liberal thinking, creativity and self-determination and eventually the oppressed begin to deny their own identity and accept the attributes and qualities modelled by those that are dominant.

Thomas's (2006) qualitative study which explored the experiences of qualified midwives appears to support this latter concept. In this study, some midwives described situations where their moral principles were violated by the actions and commands of doctors and or senior midwives. However, instead of challenging these decisions they complied, but at the same

time they described themselves as feeling ‘frustrated, powerless and angry’ at not being able to achieve what they believed would be the best outcome for their women.

‘The oppressive environment’

The suggestion that there exists an ‘oppressive environment’ may be evident in those studies which utilised Funk et al’s (1991a) ‘BARRIERS Scale’ in that, these studies had suggested that the clinical environment rarely offered practitioners the opportunity to use research in practice. While the rationale concerning this concept is broad, Seymour et al (2003) and Le May et al (1998) suggest that if newly qualified professions attempt to challenge or adopt new ways of working to that of their colleagues it is likely to induce conflict.

Likewise, as a means to demonstrate to nurses the potential risks of being overly righteous and challenging, Fielding and Llewelyn (1987), used the myth of the ‘hero-innovator, who stormed the ‘Castle of Doom’ to free its inhabitants from the evil governance’. However, they warned nurses that, organisations such as hospitals, ‘are like dragons, and will eat hero-innovators for breakfast’.

Begley’s (2001a) study appears to support Fielding and Llewelyn theory, whereby some students described their negative encounters with senior midwives as ‘*being eaten from a great height*’. Likewise, the students in Pearcey and Elliott’s (2004) study learnt the need to either, restrain their thoughts and or apply a judicious approach to questioning the negative practices of clinical staff. For example, one student commented that

...“*the culture is to keep your mouth shut or you are seen as that bloody upstart of a degree nurse, so you have got to be careful, you have got to handle it very carefully, you’ve got to handle it very tactfully*” (p 385).

Arguably, there may be a number of readers that may relate to Fielding and Llewelyn’s, Seymour et al and Le May et al’s opinions of the working environment. However, perhaps Macleod Clark (2006) suggestion may hold greater conviction amongst practitioners, when

she suggests that the reality of an over-stretched workforce is an inherent barrier as to why there is little opportunity for practitioners to change practices. Macleod Clark also asserts that if this continues to escalate it will create a forever-widening gap between theoretically-sound best practice and actual care delivery. Indeed, Maben et al's (2006) longitudinal study concurs with this theory, by suggesting that it suggested that, despite newly qualified nurses emerging from their programmes with a strong set of nursing values, professional and organisational factors disabled them from utilising their knowledge of evidence-based research into practice. Professional barriers included obeying covert rules, lack of support and poor role models. Organisational barriers included constraints such as time pressures, staff shortages, work overload and role constraints, such as their desire to 'fit in'.

While this concept may be very relevant, perhaps equally as pertinent are the suggestions made by Russell (2007), Perez-Botella and Downe (2006), Symon (2003 & 1998), Upton (1999), Ashcroft (1998), and Chamberlain (1997) who claim there exists contradiction in terms of research-based evidence, trust policies, and professional skills and beliefs. For example, midwives can be torn between the need to adhere to their local trust policies, which may or may not be evidence-based, and the use of their own professional judgment. Abiding by the former can deny their ability to act autonomously, to exercise power, and to authorise and support patient choice. Ashcroft (1998) adds that, midwives are forever faced with a back-drop of unit policies and or, may be 'expected' to abide by a consultant's preferences, which suggests that many women's choices are manipulated by a pre-ordained and biased selection of information. Kirkham (2000) also asserts that, evidence-based client choice is a complex issue to introduce into an organisation that contains a strong hierarchical framework. The institutional structures are as such that it does not allow midwives to use a sound theoretical basis on which flexibly to use their clinical judgement is freely permitted, instead:

'guidelines come to be interpreted as 'rules', and any non-compliance has to be defended'
(p 231).

Symon (2003 & 1998) also declares that, the difficulties midwives face is balancing their autonomy, and that of their clients, and the perceived need to follow a policy becomes a delicate matter. Moreover, Symon adds that, many midwives hold the assumption that by adhering to a policy it will provide a defence mechanism against litigation. However, he points out that, it is wrong to characterise policies as being purely defensive and that there is clearly a difference between a policy that, for instance, insists on two-hourly vaginal examinations and one which prescribes a care pathway for a defined situation. There is also the danger that protocols can inhibit a practitioner from seeing the whole picture. This concept also appears to have been shared by Benner (1984), when she claimed that novices, in particular, cope with their insecurity by adhering strictly to rules, thus allowing policies to govern their practice.

When applying some of these theories to the context of student midwives clinical learning, all or anyone of these theories may have a predominant influence on how students might practice. Indeed, according to Reid, Hopkins and Holly (1989), the ‘hidden curriculum’, has the most powerful and lasting impact on students learning.

If Reid et al’s theory holds true, then it might be said that, if mentors support traditional practices, there is a high probability that students will also support these practices. While this latter theory might appear to be a swiping statement, it may, according to some theorists, hold greater conviction than we would wish to believe.

‘The power of the ‘hidden curriculum’:

Gordon (2003), Hinchliff (2001), Neary (2000a), Charters (2000) and Taylor (1997) claim that most of a student’s learning is acquired informally through role modelling. This teaching strategy engages in the principles of behavioural and social strategies of learning (Bandura’s 1977) and has a very powerful influence on how students practice. Bruner (1966) also asserts that role modelling is not just about imitating a model’s actions it is where a model becomes

part of a student's internal dialogue and the model's standards of style and clarity become part of their own standard.

This suggests that if a model's standard is 'good or bad', it will become part of a student's standard. Pitts (1985) also claims that, the hidden curriculum is imposed upon students and the nature of socialisation is such that a student's...*'actual experience is one of control and coercion that is internalised and eventually reproduced'* (p.39).

This statement appears to echo the philosophies of Paulo Freire (1921-1997) who, as an educationalist, made a number of compelling theoretical innovations. In his publications *'Pedagogy of the Oppressed'* (1972 & 2000), Freire advocated the need to promote liberation and empowerment as a means to transform the conditions that lead to an oppressive, coerced educational environment.

In line with much of these theories, it comes of no surprise that theorists and those that represent the professional bodies recommend the need for students to be exposed to high-quality models who can, not only demonstrate best practice, but can empower students to be critical and challenging of the work environment (NMC 2004, RCM 2003, Macleod Clark 2006). However, the application of empowerment, as a single concept, is by no means straightforward. Indeed, as Chavasse (1992) and Jamieson (1994) pointed out: those that seek to empower, must first become empowered. Jamieson also adds that, those that are disempowered are more likely to disempower others. However, it could be argued that, when applying this theory and that of Freire's 'liberated' education, to the context of the educational curriculum they appear to be at odds with one another. For example, the midwifery curriculum content, hidden or otherwise, comprises a set of standards aims and outcomes to which educators, mentors and students are expected to follow (Price 2005, Purdy 1997). While the implementation of such standards are developed with the consultation of influential external organisations such as, Quality Assurance Agencies (QAA), the Higher Education Academy [HEA] (2006) declares that there are real tensions between the wishes of teachers

who deliver the curriculum to preserve and even increase the subject content of their course and the many 'external' stakeholders who advocate the need for more general skills that have a strong vocational relevance.

The need to take into account the ideologies of individual stakeholders will, according to Houston (1999), always generate debate, and while the QAA (2004) document: *'Partnership Quality Assurance for Healthcare Education'*, advocated the need to take on board students' views of their curriculum, there appears to be little available literature that identifies whether this is so, and or whether students are actual members of midwifery programme committees. This could perhaps, alongside the HEA's (2006) statement highlight the fact that Freire's ideas of 'liberated co-learners' might be somewhat idealistic. Moreover, within the clinical environment students are not only expected to abide by their HEI's objectives, but they are also expected to abide by the cultural codes of their clinical mentors and ward managers.

According to Lewis (1998), these cultural codes may not only conflict with the HEI's intentions, but more importantly, they collectively disempower the student. While arguably the HEI may support standard learning outcomes as a worthwhile and valid means of delivering education and effectively assessing a students learning, it might appear that application of these standards to the hidden curriculum is something else entirely (Caldwell 1997). Indeed, whilst the HEI issue students with valid and explicit aims, learning outcomes and clinical competency examinations, many of which contain elements that require students to demonstrate their knowledge and application of evidence-based findings into practice (NMC 2004a), it has been suggested that when students are in the clinical environment they readily abandon these HEI's instructions in favour of what their mentors believe to be more appropriate objectives.

‘Preference and Credibility’:

There may be a number of alternative explanations as to why students employ the practices of their mentors in favour of those practices recommended by the HEI. Indeed, in terms of the students’ clinical assessments, studies undertaken by Richmond (2006) and Pulsford, Boit and Owen’s (2002) suggested that mentors perceived the student’s assessment documents were excessive and not ‘user-friendly’. Likewise, Neary’s (2001 & 2000) studies suggested that some practitioners believed that the students’ HEI objective competency tests were incomprehensible and unrealistic, and as a result they elected to adopt their own ways of assessing their students. Calman, Watson, Norman, Redfern and Murrells (2002) study appears to support this, in that the pre-registered nursing and midwifery students felt that their assessors, despite attending an assessors training course, still had great difficulty understanding the assessment documentation and did not seem to take the assessment process seriously. The nursing students, in particular, felt that if their tutors participated in the clinical assessment, it might be more objective. Interestingly, this was because the students perceived their tutors had more up-to-date knowledge of clinical treatments and procedures than many of their practice assessors. In addition, all of the students in this study believed that their clinical competence assessment tools were open to bias, and how it was completed depended on the assessor's personality and knowledge of the student. The over-riding comment was that their assessment outcomes depended on how well they ‘fitted in’.

Correspondingly, Begley’s (2001a) triangulation study and May and Veitch’s (1998) case study suggested that students learnt to employ a variety of behavioural strategies that would increase their chances of acceptance by the nursing team. They also used these strategies as a means to achieve favourable assessments. For example, in the short-term, students admitted to ‘*pulling their weight*’, conforming, ‘*keeping their heads down*’, not asking questions, and forfeiting their learning opportunities to please their mentors for the medium, and or long-term gains of achieving acceptance and appraisal. While the students were aware of the

consequences of omitting valuable learning experiences, they perceived that their mentors were not just 'gatekeepers' to learning, but more importantly, they were 'gatekeepers' to the profession. As one student stated:

"...It's difficult. I mean, they're the ones who give you a grade at the end of the placement, you've got to realise that. So you can't kick up too much of a fuss, I feel. You rely on them for your grades" (May & Veitch's 1998, p 635).

Studies undertaken by Calman et al's (2002), Neary's (2001 & 2000) and Hill's (1998) possibly provides further insight as to why the students in May and Veitch study perceived that being accepted by the nursing team was a prerequisite to achieving a good assessment outcome. Indeed, Calman et al's and Hill's study suggested that assessors appeared to have valued a student's socialisation dexterity in preference to their ability to perform tasks competently. However, in Neary's (2001 & 2000) study it also appeared that some practitioners believed the HEI curriculum aims did not always correspond with the clinical workplace, and from a students' perspective, Fraser's (2000) and May and Veitch (1998) case studies also suggested that, the students themselves considered that there was a mismatch between their HEI curriculum intentions and their practitioners expectations.

It might therefore be argued that if the assessors believed the HEI assessment strategies were inappropriate for the clinical setting, than it could be said that the assessors had no choice other than to formulate their own assessment strategies even if this meant valuing a student's social dexterity, over and above, their ability to perform tasks in a manner that the HEI deem to be essential.

Indeed, Fraser believed that, there is a need for a holistic model, where the components of competence encompass the complexity and unpredictability of practice rather than being broken down into a mere list of skills or simplistic competences.

Correspondingly, Phillips, Schostak, Tyler and Allen's (2000) multi-method approach study

identified that practitioners perceived the students assessment criteria's failed to recognise the 'real' world of practice. This concept was also shared by Watson, Stimpson, Topping and Porock (2002).

On a similar note, Morgan (2006), Bendall (2006) and Corlett (2000) also claimed that, one of the common complaints made by students is that, what they are taught in the school was not practised in the wards and vice versa. Kyrkjebo and Hage's (2005) study appears to support this belief in that, when the students in this study asked their mentors why they did not practice in a way that they had been led to expect they were told:

'You may have learned one way in school, but it's not the way we do it here' (p172).

Correspondingly, Corlett's (2000) study also appears to highlight the disparity of the HEI intentions with that of the workplace. Indeed, some of the students in this study believed their teachers were out of date and of questionable credibility. As a result the students gave credence to what they saw and learnt in the clinical setting.

While much of these studies and opinions reveal comparable findings and assertions, they appear to echo the opinions of the NHS Executive (1998a) report *'Integrating theory and practice in nursing'*, which announced that there existed some inconsistency between what was taught in the HEI and what was taught in practice. Against this, there have been a number of recommendations made to rectify this problem. The underlying principles included the need to improve linkage and collaboration between the HEI's and service providers, by means of employing link-lecturers or practice educators to work alongside students and practitioners in the practice setting (NMC 2002a, ENB & DoH 2001).

There has been a number of studies that have investigated nursing students and practitioners perceptions of link-lecturers (Brown, Herd, Humphries & Paton 2005, Koh 2002), and or practice educators/clinical facilitators (Ellis & Hogard 2003, Clarke, Gibb & Ramprogus

2003, Williamson & Webb 2001). The outcomes of these studies suggested that the utilisation of link lecturers/clinical educators / facilitators within the clinical setting had not only a positive influence on students learning, but they also provided support and guidance to mentors. Moreover, these studies also reported that the introduction of this role facilitated practitioners and students to use best practice within the clinical setting. In contrast, Clarke et al's (2003) study also suggested that there existed a degree of conflict between the educationalists and practitioners in that, the placement facilitators, felt that both their authority and credibility were marginalised to the point that they were unable to influence or change practices. Correspondingly, Ramage's (2004) study, which explored the perceptions of link-lecturers working alongside students and practitioners within the clinical setting, revealed comparable findings.

While these studies suggest that there is disparity of HEI intentions with that of the workplace, there have also been a number of alternative suggestions that might induce conflict between the two sectors.

'Two Sectors: Two Different Ideas':

In contrast to Corlett's study, Morgan's (2006) and Landers (2001) study identified that, when students attended their clinical placements, the skills the students had learnt in the HEI were threatened when they observed the different and sometimes imperfect practices of qualified practitioners. While Morgan (2006) acknowledged that the students were novices, she points out that, they will be the professional graduates of the future and will be responsible for teaching others, it is therefore imperative that they are taught correct clinical procedures as this will ensure that they provide high quality patient care that is based on evidence.

Murphy (2000) accordingly claims that, to enhance the quality of clinical placements nurse educators should liaise with students and practitioners, to ensure they are providing EBP. While collaboration may be the answer, Caldwell (1997) suggests that it is a far more complex task, as it is dependent on the varied cultural values, beliefs and political dynamics

of the individual stakeholders. Indeed, Seymour et al (2003) suggests that the culture of the practice environment is by far the greatest barrier for students, and nurses, to use research findings in practice, as it requires not only the development of higher cognitive skills

'but a recognition that the priorities embedded in practice may well conflict with those of research and that personal attributes such as confidence, as well as professional judgment are influential in how nurses use research to inform their practice' (p 292).

Alternatively, Le May et al's (1998) exploratory study suggested that, individual and organisational factors, as barriers, are closely entwined. This study revealed that nurse managers, considered that if they applied research to practice it would induce the negative consequences that are associated with constant change, such as resistance and ..*'destabilising' ...even the most committed staff'* (p. 435).

This study also revealed that some nurses believed that, those nurses who occupied senior clinical positions created principal barriers to utilising EBP.

Correspondingly, Dunn et al (1997) and Camiah (1997), study revealed similar findings. They suggested the reason for this could be due to the fact that many senior nurses may have not have been prepared in research and therefore have limited experience of finding and evaluating research. Seymour et al (2003) supports this explanation and adds that it can be difficult for senior nurses to support and guide less experienced nurses who, although are more likely to be educated in research, they are less likely to be able to change practice due to their clinical inexperience and hierarchical position. Moreover, Seymour et al (2003) and Le May et al (1998) stresses that it is essential to recognise that not all nursing knowledge has a research base.

'Being at odds with evidence-based practices':

Kitson (2002), Benner (2001), Coyler and Kamah (1999), Upton (1999) and Berragan (1998) point out that, nursing and midwifery practice is not solely informed by evidence-based research, but practitioners draw upon several different ways of knowing. For instance, they suggest that, practitioners often exercise their clinical judgment, intuition, and person-centred and humanist approaches to their delivery of care, and while these do not readily lend themselves to scientific measurement, these models of care can often be at odds with that of EBP. Concurringly, Enkin and Jadad (1998) admit that, despite being researchers and advocates of evidence-based care, they believe anecdotal information stills have an important role to play in healthcare decisions. Likewise, Seymour et al (2003) adds that, to view evidence-based research as the end product of nursing suggests that nurses who are not research-aware are not good nurses. However, as discussed previously, the NMC (2002, 2002a 7 2004), and the ENB and the DoH (2001 & 2001a) appears to imply that practitioners who do not utilise EBP may not be good role models. On the other hand, Veeramah (2004) suggests that, while students learn about research in the classroom they are ill prepared to make use of it. Seymour et al and Le May et al concurs that, pre-registration students have no hands-on experience of using research, and that while research as a 'subject', is generally taught by educators, whom may be experts in the theory, they are more often than not, inexperienced and or distance from that of practice.

Upton (1999) also claims that the educational curriculum exposes students to two different models: the ideal versus reality, or '*nursing as it ought to be*', versus '*nursing as it is*' p (552). With educationalist advocating the former and practitioners the latter, they are often at odds with one another, Upton conveys the same opinion of Maben et al (2006) in that, they claim this contributes to the theory-practice gap, which in turn creates difficulties with applying evidence-based research into practice.

This latter concept, alongside those studies that have highlighted the underpinning barriers, might just collectively account for the widening research–practice gap. However, collectively drawing from a number of studies that have investigated parallel concepts as a means to gain the all-encompassing conclusive facts, as well as ‘reasoning’, can be difficult to achieve. Indeed, Parahoo and McCaughan (2001) point out that, while quantitative studies are needed to explore relationships between key variables, a qualitative approach may help to gain an in-depth understanding of why a person might agree or disagree to a particular concept and, that these factors must not be studied in isolation as they are interrelated.

Chapter 3:

Design and Method

Research Questions

Hypothesis

Method and Design:

Order of data gathering instruments

Piloting the questionnaire

Factors shaping and influencing the chosen method

Strengths and design of the questionnaires

Strategies employed to counteract the weakness of questionnaires

Method of Analysis

‘Closed response’: quantitative data from the questionnaire

‘Open response’ data from the questionnaires

Population and Sample

Ethical Procedures

Research Questions:

While the literature overall appeared to suggest that the socio-cultural environment plays a key influence in determining the behaviour of students there were a number of other important variables that appeared to influence the adoption of practices. These variables were thought to be significant to this research and were therefore used to as a means to find out the answers to the research question. Table 1 provides a framework of the type of questions that needed to be asked and these are as follows.

Table 1: Framework of research questions and categories.

<u>Knowledge-based questions i.e.:</u>
1. Do the students know what is meant by EBP?
2. Are the students able to make a distinction between those midwifery practices that are based on research evidence and those practices that are based on tradition?
3. Do students know how to apply evidence-based research and research findings to practice?

<u>What are students overall thoughts about what they are taught in the University setting in relation to midwifery practices i.e.:</u>
4. Do students perceive that the HEI teaches and advocate students to employ EBP?
5. If the HEI advocates students to employ EBP, do students employ these practices within the clinical environment?
6. Do students believe what they are taught in the HEI, in terms of clinical practice, equate to the workplace realities?
7. Are the students more likely to employ the practices and beliefs of their clinical mentors than the practice recommendations of their lecturers in the University?

What are students overall thoughts on the use of EBP's within the clinical setting i.e.:

8. Does the clinical setting encourage and facilitate midwifery staff to employ EBP?

9. Do students believe their mentors are knowledgeable of EBP?

10. Do students believe their mentors agree/support EBP?

11. Do their mentors encourage the students to employ the recommended practices they are been taught in the HEI?

12. Do students believe that some traditional practices are effective?

What are students overall thoughts about traditional practices i.e.:

13. Do students adopt the traditional practices of their clinical mentors?

14. Do students challenge their mentor's traditional practices

15. Once qualified, do students foresee themselves employing some of the traditional practices?

Additionally, it was thought that by including the students, 'university base', their 'age scale' and their 'allocated midwifery site', it would be possible to identify if there are any relationships between these variables and the students responses.

Hypothesis:

With respect to the literature review, there appeared to be an adequate amount of data that was pertinent to this research. It is therefore reasonable to make some predictions as to the expected outcome of this research. Indeed, through the process of synthesising the available literature it allowed the author to draw conclusions and to formulate the following hypothesis to assess and evaluate the worthiness of a theory (Polit & Beck 2004, Cooper 1998).

1. **Hypothesis:** What is taught in the HEI, does not always equate to the workplace realities.
2. **Hypothesis:** While the HEI advocates students to employ EBP, students are more likely to adopt the practices, whether 'good or bad', of their clinical mentors.
3. **Hypothesis:** When a student works alongside a mentor that employs traditional practices the student's desire to 'fit in' can outweigh the student adopting EBP and or challenging their mentor's practices.

Method and Design

This study utilised a quantitative approach as a means to gain insight of whether the students adopt the traditional practices of their mentors. The data collection method involved surveying a finite population by the use of a self-completed semi-structured questionnaire. The reasons for choosing the following research methods and the design are discussed throughout this section.

Order of data gathering instruments

- Pilot study of questionnaire (Appendix X)
- Self completed semi-structured questionnaires (Appendix XI)

Piloting the questionnaire

It was thought that failure to identify problems prior to distribution could consequent a major misuse of resources. Therefore, piloting the questionnaire was employed to eliminate the risk of errors and to enable modifications to be made.

According to Lydeard (1991), the respondents in a pilot study should be as similar as possible to those in the main enquiry. As such, 2nd year midwifery students, who had just completed their evidence-based module were asked to pilot the questionnaire. The pilot volunteers were asked to complete the questionnaire and to comment on the design (Appendix X). Thereafter, feedback of the questionnaire provided an indication as to whether some questions were ambiguous, too lengthy, and or whether the layout was sequenced, and appealing.

In light of the feedback and by undertaking a preliminary analysis the questionnaire required some modification. Thereafter, the questionnaire re-piloted and re-evaluated until it was acceptable.

Factors shaping and influencing the chosen method

Shaw (2005) asserts that, previous data may influence the methodological approaches for future research. For example, Burns (2000) and Ploeg (1999) claim that, if there is little known about the behaviour of mankind in a certain socio-cultural setting, undertaking 'field work', such as participant observation and in-depth interviews may be appropriate. In contrast, where there is sufficient known about a concept, Shaw and Bowling (2005) suggests that, it may be more appropriate to utilise a survey, as this approach can enable a researcher to investigate those concepts that have been identified from previous phenomenological and or ethnographic studies.

In accordance with this philosophy, as previously discussed, the rationale for this research stemmed from the author's personal experiences. Thereafter, by undertaking a literature review it provided a broader overview of possible influences that might govern students to adopt their mentors' traditional practices. Therefore, it was thought to be beneficial to utilise a questionnaire as a means to build on existing theory.

Against this, while the author suggests that there was 'sufficient' known about the research subject, much of the available literature involved student nurses or related to practitioners utilisation of evidence-based research. It may thus be argued that an ethnographic approach may more effectively provide the answers to the author's research. While this may be the case, this study had resource limitations and unfortunately this approach would have involved greater cost and expenditure of time. Additionally, interviews involve participants exposing their identity to the researcher and as such, the participants might have felt inhibited to disclose their true opinions (Kumar 2005). The author also argues that, if an observational approach were to be applied, this might have instigated a 'Hawthorne effect' (Polit, Beck & Hungler 2001).

Strengths and design of the questionnaires:

The questionnaires had a combination of 'closed' responses and 'open' responses. It was thought that by including 'open' questions it would not constrain the participants, but instead, it would give them the freedom to respond by enabling them to qualify their answers. This data was purpose to elicit in-depth information and an understanding of a student's thought process. In contrast, the closed-ended questions were amenable to descriptive and inferential statistical analysis in that, it was envisaged that the statistical measures would enable the author to identify relationships, to test for differences, to draw conclusions and to make recommendations in light of the evidence.

While the questionnaire contained some closed questions, which offered two choices, it predominantly included a number of statements that used a 5-point Likert scale. This allowed the respondents more choice to rate the degree to which they may have agreed or disagreed to a given statement (Bowling 2005, Polit & Beck 2004). The scale also included a middle 'neutral' response to reduce positivity bias (Tourangeau, Rips & Rasinski 2000).

According to Cormack (1996) and Polgar and Thomas (1995), Likert scales are an appropriate and reliable method of measuring how a participant may feel about a particular issue. However, measuring a person's attitude towards a concept necessitates measuring their, cognitive, affective and action potential. This latter aspect was particularly important as it was envisaged that the statistical measures would not only reveal relationships and or test for differences, but they would be used to support or refute the hypotheses.

To effectively present the questions to the sample, the questions needed to be presented in a sequenced and logical format to avoid disruption and or perplexity of the participants thought processes. They also needed to move from the general to the specific (Bowling 2005, Parahoo

1997, McColl 1993). Against this, Bowling (2005) and Bryman 2004, assert that, overly sequencing and forming or the intentional ordering of questions may cause acquiescence response set and response style bias. However, to counteract this effect, the negative and positive questions were purposefully altered so that they did not follow in the same direction.

More importantly, it was thought to be beneficial to use an existing attitude measurement tool that had been proven to accomplish what it set out to do. This would also allow comparison of data with studies that had used the same instrument.

Against this, much of the available literature in relation to the author's research were qualitative studies, and or were based on expert opinion. For this reason, it was difficult to find a standardised measurement tool that could be exclusively applied to this research. Notwithstanding, Hicks (1995), Glacken and Chaney (2004), Upton and Upton (2006), Chow and Suen (2001) had utilised attitude scales to either, test practitioners' utilisation of evidence-based research and or, test mentor-student relationships.

By harvesting some of questions from each of these measuring instruments (Appendix IX), the author was able to standardise the tools so that they would answer the research question.

Strategies employed to avoid a low response:

While piloting the questionnaire was thought to reduce the risk of a poor response (Drennan 2003, Jack & Clarke 1998), to avoid a low return rate, the questionnaires were personally distributed and collected from the participants whilst they were in attendance at the HEI.

According to Bryman (2004), this data collection strategy is acceptable. Bell (2005) also claims that there are advantages in being able to personally distribute the questionnaires in that, you are not only in the position of being able explain the purpose of the study, but where time is allocated for the students to complete the questionnaire, it is more likely to facilitate a good response rate. Moreover, Ferguson, Myrick and Yonge (2006) support that there is a reduced possibility of coercion on students to participate, if the person distributing, collecting and analysis the data is an external researcher to whom the participants are not dependent and or have a captive relationship. It was also thought the students were more likely to be honest with their answers as the author was detached from each of the faculties.

Method of Analysis:

As the questionnaire design included 'closed and open-ended' questions, the approach to analysing the data had to be compatible to the chosen method.

'Closed response': quantitative data from the questionnaire:

The quantitative data was amenable to statistical analysis. Each of the answers to the closed questions was coded and the numerical data was entered into the computer software Statistical Package for Social Sciences (SPSS). Bryman and Cramer (2005), Corston and Colman (2003) provided clear instructions on how to enter data into the SPSS and thereafter, how to go about the data analysis. By utilising this software it was possible to reveal the frequency of responses, as well as perform correlations and cross tabulations. The latter of which allowed the author to see the relationships between the different variables in the form of contingency tables. By utilising the chi-square test, it was also possible to compare the expected frequencies, with that of the observed.

Pearson's correlation and Spearman's rho non parametric correlation coefficient index analysis was also used to statistically test the strength, validity and or absence of relationships between two or more variables. These tests also provided the statistical confidence level as to whether there was a strong relationship between two variables and or whether the statistical finding might have occurred by chance (Bryman 2004).

'Gene Lutz' correlation table (Losh 2002) Table 2, was utilised as a means to ascertain the strength of a relationship.

Table 2: 'Gene Lutz' Correlation values depicting the strength of a relationship:

CORRELATION ABSOLUTE VALUE SIZE	VERBAL DESIGNATION
0	No relationship
.01-.10	Very weak
.11-.25	Weak
.26-.50	Moderate
.51-.75	Strong
.76-.99	Very strong
1.00	Perfect association

By using the SPSS it was possible to organise and present the data into tables and in doing so, this presented the data as clearly and succinctly as possible. More importantly, the process of organising numerical data allowed the author to draw conclusions and to make objective decisions about the validity of the hypotheses.

'Open response' data from the questionnaires:

While the open-ended questions did not qualify as a qualitative approach (Parahoo 1997), when analysing the open responses, it required a systematic approach to coding the data that closely matched the constitutes of grounded theory (Strauss & Corbin 1998). For example, the approach to organising words involved refining the data by use of open coding. This entailed familiarising oneself with the data by repeatedly re-reading the open-ended data. This was purposed to deconstruct the hidden meanings within the various phases and in doing so, this brought about a reduction in the data making it possible to develop a coding system. To assist the coding of data, words or phrase frequencies were placed into columns and rows which contained the responses of a participant and the participant's identity code (Appendix II). Thereafter, by re-reading the data an index of themes was created. Attention was also given to minority opinions and those statements that did not correspond with the questions.

The next stage involved calculating the occurrences, the configuration and the relationships of the different themes. This process facilitated the labelling and charting of data which, not only enabled interpretation and reduction of data, but it also enabled easy retrieval of information.

It was also accessible to others, with all stages of the analysis open to scrutiny.

Population and Sample:

This survey involved utilising a finite probability sample in order to make statistical descriptions and inferences about the characteristics of that population.

The survey sample included all final year pre-registered midwifery students, who were based at five Midwifery University cohorts in the North of England. During the proposal stage, the number of final year students based at the selected universities consisted of 30, 26, 43, 46 and 29.

While the cohorts were relatively small, this was the maximum number of students that made up the cohorts. While the inclusive number totalled to 174, this number was current at the proposal stage, between October to November 2006, as such it was anticipated that this number would be less by the time the research commenced. Indeed, by the time the research started there were 145 students available for inclusion. This number was predominately reduced because one University withdrew participation on the grounds that they were proposing to undertake similar research using the same student population. In light of this, an alternative University was contacted and invited to participate. While permission was granted, their number of final year students was less than the University that had withdrawn and as such the University did not meet the criteria for selection as set out below. However, to obtain a substitute at a late stage was viewed as an acceptable compromise.

The process of selecting a University was based on two criteria:

1. The Universities needed to be spread out geographically. This was purposed to identity whether the data revealed differences according to geographical location.
2. The total population of students in their final year, in a given University, needed to be greater than 25. The rationale for this was based on the study's resources, but it was

thought it may affect the validity of comparative data if there were to be distinct differences in the numbers of students per University.

The reason for choosing only final year students', as opposed to all pre-registered midwifery students within the cohorts, was that novice students may lack the clinical experience and theoretical knowledge to contextualise situations and to make judgements as to which practices are based on evidence and which practices are based on tradition. It was also thought that final year students were more likely to have worked with different mentors and witnessed different ways of practicing.

All of the students were of similar population in that, to gain their clinical experience, all were permanently allocated to a regional NHS Trust site. While there were some variations in the number of NHS Trust sites to which the students were allocated, and the numbers of students allocated to a given Trust, it was not thought to affect the validity of data.

Some of the students were undertaking the three year programme and some were undertaking the eighteen months programme. Irrespectively, their programme specifications encompassed 50% theory and 50% practice and detailed the incorporation of evidence-based practice and the application of research in their academic curriculum.

Ethical Procedures:

The Data Protection Act (1998) and the Royal College of Nursing (2004): '*Research ethics: RCN guidance for nurses*' manuscript was used as guidance to ensure the research fulfilled the ethics criteria.

To gain permission to undertake the research, the Central Office of Research Ethics Committees and the individual Universities Ethics Committees were approached. All were supplied with information regarding the proposed research and the ethical procedures that would be undertaken (Appendix XIII).

Permission from the Ethics Committees to undertake the research was granted in all instances. (Appendix XIV).

Chapter 4:

Results

Research Findings (Closed-ended data)

Correlations and Validity of Data

Cross tabulations

Research Findings (Open-ended data)

Research Findings (Closed-ended data)

A total of 145 questionnaires were distributed. The number of students that consented to participate was 125 (86%).

Of the number of students that had participated (N=125) 27 (21.6%) were based at University A, 16 (12.8%) were based at University B, 37 (29.6) were based at University C, 31 (24.8%) were based at University D and 14 (11.2%) students were based at University E.

82 (65.6%) of the students were aged 20-29, 27 (21.6%) were aged 30-39 and 16 (12.8%) were aged 40-49. 114 (91.2%) students were undertaking the three year programme. 11 (8.8%) were undertaking the 18 month programme (Table 3).

Table 3: Age Scale and Programme Duration

	Scale	Frequency	Percent	Valid %	Cumulative %
Valid	20-29	82	65.6	65.6	65.6
	30-39	27	21.6	21.6	87.2
	40-49	16	12.8	12.8	100.0
	Total	125	100.0	100.0	
	Programme	Frequency	Percent	Valid %	Cumulative %
Valid	3-4 years	114	91.2	91.2	91.2
	18 months	11	8.8	8.8	100.0
	Total	125	100.0	100.0	

While the students were based in five Universities in the North of England, there were a total of twenty five NHS Midwifery Trust sites to which the students were allocated. However, in accordance to the students' geographical University base, the number of students distributed to the different Trust sites was highly unbalanced. As illustrated in Table 4 (p), only one student (0.8%) from University B was allocated to Site: 9. In contrast, twenty-seven students (21.6%) based at University D were allocated to Site: 16. Likewise, four students (3.2 %) were allocated to Site: 2, of which, two were based at University A and two were based in University B.

Table 4: Number of Students Allocated to a Midwifery Trust Site and the Number of Students Based at a given University

Allocated Site	The Students University Base					Total Count	Percent
	A	B	C	D	E		
1	9					9	7.2
2	2	2				4	3.2
3	9					9	7.2
4	2					2	1.6
5	5					5	4.0
6		3				3	2.4
7		2				2	1.6
8		8				8	6.4
9		1				1	.8
10			10			10	8.0
11			3			3	2.4
12			1			1	.8
13			6			6	4.8
14			5			5	4.0
15			12			12	9.6
16				27		27	21.6
17				1		1	.8
19				2		2	1.6
20				1		1	.8
21					6	6	4.8
22					2	2	1.6
23					2	2	1.6
24					2	2	1.6
25					2	2	1.6
Total	27	16	37	31	14	125	100.0

As illustrated in Tables: 5.0-5.5 (p 43), a high percentage of students had agreed that they were knowledgeable of research, EBP and tradition, and that they knew how to apply that knowledge to practice. These questions offered only ‘Yes’ or ‘No’ responses with 98.4 % agreeing that they understood the basic principles of research.

100% of the students agreed that they understood what was meant by EBP. 96% also agreed that they were able to make a distinction between those midwifery practices that are based on research-evidence & those practices are based on tradition. 98% also agreed that they knew how to apply evidence-based research and research findings to practice.

In contrast, (see Table 5) 20.8% agreed that they felt anxious about using research in practice and 24% neither agreed nor disagreed. Likewise, 2.4% strongly agreed and 19.5% agreed that

they found it hard to apply evidence-based recommendations to their patients and 12% neither agreed nor disagreed.

Table 5.0-5.5: ‘Students Recognition of what is Research, EBP and Tradition’

5.0

I understand the principles of research		Frequency	Percent
Valid	No	2	1.6
	Yes	123	98.4
	Total	125	100.0

5.1

I understand what is meant by EBP		Frequency	Percent
Valid	Yes	125	100.0

5.2

I know how to apply evidence-based research to practice		Frequency	Percent	Valid Percent
Valid	No	1	.8	.8
	Yes	123	98.4	99.2
	Total	124	99.2	100.0
Missing	.00	1	.8	
Total		125	100.0	

5.3

I am able to distinction between EBP & tradition		Frequency	Percent	Valid Percent
Valid	No	4	3.2	3.2
	Yes	120	96.0	96.8
	Total	124	99.2	100.0
Missing	.00	1	.8	
Total		125	100.0	

5.4

I feel anxious about using research findings in practice		Frequency	Percent	Valid Percent
Valid	Agree	26	20.8	20.8
	Neither	30	24.0	24.0
	Disagree	64	51.2	51.2
	Strongly Disagree	5	4.0	4.0
	Total	125	100.0	100.0

5.5

I find it hard to apply EBP to my patients		Frequency	Percent	Valid Percent
Valid	Strongly Agree	3	2.4	2.4
	Agree	24	19.2	19.5
	Neither	15	12.0	12.2
	Disagree	77	61.6	62.6
	Strongly Disagree	4	3.2	3.3
	Total	123	98.4	100.0
Missing	.00	2	1.6	
Total		125	100.0	

Factor 1: The students’ perceptions about what they are taught in the University:

As seen in Table 6 77.6% (n=125) strongly agreed and 22.4% agreed that the University taught and encouraged them to carry out EBPs within the clinical setting.

However, 26.4% strongly agreed and 65.6% agreed that what was taught in University did not correspond to what happened in the workplace. Whereas only 3.2% neither agreed nor disagreed and 3.2% disagreed, and 1.6% strongly disagreed.

Correspondingly, 16% strongly agreed and 60% agreed that their mentors suggested alternative ways of practicing that were different to what they had been taught in the University. In contrast 18.4% neither agreed nor disagreed, and 5.6% disagreed.

When asked if they were more likely to employ the practice recommendations that they had been taught in the University, than the practice ideas of their clinical mentors 9.6% strongly agreed and 31.2% agreed. 38.4% neither agreed nor disagreed. 19.2% disagreed and 1.6% strongly disagreed.

Table 6: Students’ perceptions about what they are taught in the University in relation to practice:

What is taught in University in relation to practice	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
	%	%	%	%	%
In Uni we are taught & encouraged to carry out EBP within the clinical setting				22.4%	77.6%
What is taught in Uni does not match up to what happens in the workplace	1.6%	3.2%	3.2%	65.6%	26.4%
My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni		5.6%	18.4%	60.0%	16.0%
I am more likely to employ what I have been taught in Uni than the practice ideas of my mentors	1.6%	19.2%	38.4%	31.2%	9.6%

Factor 2: The students' thoughts on the use of EBP within the clinical setting:

Table 7 illustrates the students' perceptions on the use of EBP's within the clinical setting, with 17% agreeing and 48% agreeing that medical staff did not always permit midwives to use EBP's. 20% neither agreed nor disagreed and 12.2% disagreed and 1.6% strongly disagreed.

13.0% strongly agreed and 36.6% agreed that midwifery managers imposed their 'own ideas' on how the midwives should practice. 30.1% neither agreed nor disagreed and 19.5% disagreed and 0.8% strongly disagreed.

12.9% strongly agreed and 25.8% agreed that midwifery practice was too busy to use EBPs. 25.8 % neither agreed nor disagreed and 30.6% disagreed and 4.8% strongly disagreed.

13.7% strongly agreed and 37.9% agreed that some of their clinical policies and guidelines were not evidence-based. 17.7% neither agreed nor disagreed and 24.2% disagreed and 6.5% strongly disagreed.

28% strongly agreed and 50.4% agreed that they did not have enough authority to change patient care practices to that of evidence-based care. 8.9% neither agreed nor disagreed and 11.4% disagreed and 0.8% strongly disagreed.

7.3% strongly agreed and 39% agreed that the clinical setting had up to date research reports / articles available and 15.4% neither agreed nor disagreed. In contrast, 33.3% disagreed and 4.9% strongly disagreed.

2.4% strongly agreed and 41% agreed that the midwifery staff discussed up to date research findings and new ideas about care. 22.6% neither agreed nor disagreed and 25.8% disagreed and 8.1% strongly disagreed.

30.1% strongly agreed and 56.9% agreed that within the clinical setting there are some practices that are based on tradition. 7.3% percent neither agreed nor disagreed and 4.9% disagreed and 0.8% strongly disagreed.

13.8% strongly agreed and 53.7% agreed that there are some 'traditional' practices' that are good because they seemed to work. 22.0% neither agreed nor disagreed and in contrast only 10% disagreed.

Only 0.8% strongly agreed and 5.8% agreed to stick to their mentors 'tried & trusted' methods. While 27.3% neither agreed nor disagreed, 54.5% disagreed and 11.6% strongly disagreed.

2.5% strongly agreed and 20.5% agreed that they performed the practice in the same way as their mentor had taught them, even if it was not evidence-based. 27.9% neither agreed nor disagreed. 40.2% disagreed and 9.0% strongly disagreed.

Table 7: Students thoughts on the use of EBP's within the clinical setting:

Use of EBP's within the clinical setting	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
	%	%	%	%	%
I do not feel I have enough authority to change patients care practices to that of EB care	.8%	11.4%	8.9%	50.4%	28.5%
In the clinical setting research reports are available	4.9%	33.3%	15.4%	39.0%	7.3%
Midwifery staff discuss up to date research & new ideas about care	8.1%	25.8%	22.6%	41.1%	2.4%
Our policies are not evidence-based	6.5%	24.2%	17.7%	37.9%	13.7%
Midwifery management impose their own ideas on how midwives should practice	.8%	19.5%	30.1%	36.6%	13.0%
Medical staff do not always permit the use of EBP	1.6%	12.2%	20.3%	48.8%	17.1%
Midwifery practice is so busy there is no time to use EBP	4.8%	30.6%	25.8%	25.8%	12.9%
In the clinical area there are practices based on tradition	.8%	4.9%	7.3%	56.9%	30.1%
Some traditional practices are good because they work		10.6%	22.0%	53.7%	13.8%
Rather than change my practice, I prefer to stick to my mentors tried & trusted methods	11.6%	54.5%	27.3%	5.8%	.8%
I perform the practice in the same way as my mentor has taught me, even if it is not EB	9.0%	40.2%	27.9%	20.5%	2.5%

Factor 3: Students thoughts on challenging traditional practices:

As illustrated in Table 8 6.5% strongly agreed and 47.6% agreed that they would challenge their mentors if she/he did not employ EBP’s. 21.8% neither agreed nor disagreed and 23.4% disagreed and 0.8% strongly disagreed.

24.2% strongly agreed and 46.8% agreed that they thought their mentor might resent having their clinical practice questioned. 14.5% neither agreed nor disagreed and 13.7% disagreed and 0.8% strongly disagreed.

6.5% strongly agreed and 42.7% agreed that it is easier to go with ‘the way things have always been done’ because it works. 17.7% neither agreed nor disagreed and 32.3% disagreed and 0.8% strongly disagreed.

8.9% strongly agreed and 28.2% agreed that it is much easier to go along with ‘the way things have always been done’ because it is important to ‘fit in’ with the clinical staff. 26.6% neither agreed nor disagreed and 33.1% disagreed and 3.2% strongly disagreed.

Table 8: Students responses to challenging traditional practices

Challenging traditional practices	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
	%	%	%	%	%
I would challenge my mentor if she does not employ EBP’s	.8%	23.4%	21.8%	47.6%	6.5%
I think my mentor might resent having her practice questioned	.8%	13.7%	14.5%	46.8%	24.2%
It is easier to go along with the way things are done because it works	.8%	32.3%	17.7%	42.7%	6.5%
It is easier to go along with the way things are done because it is so important to 'fit in' with the staff	3.2%	33.1%	26.6%	28.2%	8.9%

Factor 4: Students perceptions of their mentors' attitudes towards EBP's

Table 9 (p) illustrates the perceptions students had about their mentors attitudes towards the use of EBP's.

7.3% strongly agreed and 58.9% agreed that their mentors favoured and maintained some traditional practices rather than EBP's. In contrast, 19.4% neither agreed nor disagreed and only 14.5% disagreed.

4.0% strongly agreed and 23.4% agreed that their mentors seemed unwilling to change/try new ideas. In contrast, 21.0% neither agreed nor disagreed and 46.8% disagreed and 4.8% strongly disagreed.

1.6% strongly agreed and 17.7% agreed that their mentors did not seem interested in implementing evidence-based findings. 26.6% neither agreed nor disagreed. 46.8% disagreed and 7.3% strongly disagreed.

4.9% strongly agreed and 21.3% agreed that their mentors just paid lip-service to the value of research. 23.8% neither agreed nor disagreed. In contrast, 43.4% disagreed and 6.6% strongly disagreed.

1.6% strongly agreed and 10.6% agreed that their mentors were unaware of EBP's. 16.3% neither agreed nor disagreed. In contrast, 55.3% disagreed and 16.3% strongly disagreed.

4.1% strongly agreed 21.1% agreed that their mentors were isolated from up to date knowledgeable colleagues with whom to discuss EBPs. 17.1% neither agreed nor disagreed. In contrast 48% disagreed and 8.9% strongly disagreed.

8.9% strongly agreed and 54.5% agreed that their mentors respected their knowledge of research data and that of EBPs. 22.0% neither agreed nor disagreed. 12.2% disagreed and 2.4% strongly disagreed.

17.7% strongly agreed and 50.8% agreed that their mentors encouraged them to think critically. 17.7% neither agreed nor disagreed. In contrast, 12.9% disagreed and 0.8% strongly disagreed.

3.2% strongly agreed and 24.2% agreed that their mentors provided them with sources of up to date research references. 20.2% neither agreed nor disagreed. In contrast, 43.5% disagreed and 8.9% strongly disagreed.

1.6% strongly agreed and 19.4% agreed that their mentors were committed to help them get to grips with using research findings in their work. 26.6% neither agreed nor disagreed. In contrast, 46.0% disagreed and 6.5% strongly disagreed.

12.9% strongly agreed and 73.4% agreed that they had used some of the traditional practices that their mentors had used. 8.9% neither agreed nor disagreed. 4.8% disagreed.

4.8% strongly agreed and 37.1% agreed that once they were qualified, they foresaw themselves employing some of the traditional practices that their mentors use. 26.6% neither agreed nor disagreed. 26.6% disagreed and 4.8% strongly disagreed.

Table 9: Students perceptions of their mentors' attitudes towards EBP's

Their mentors attitudes towards EBP's	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
	%	%	%	%	%
My mentors favour traditional practices rather than EBP		14.5%	19.4%	58.9%	7.3%
My mentors seem unwilling to change/try new ideas	4.8%	46.8%	21.0%	23.4%	4.0%
My mentors do not seem interested in EBP	7.3%	46.8%	26.6%	17.7%	1.6%
My mentors just pay lip-service to the value of research	6.6%	43.4%	23.8%	21.3%	4.9%
My mentors are unaware of EBP	16.3%	55.3%	16.3%	10.6%	1.6%
My mentors are isolated from knowledgeable colleagues with whom to discuss EBP	8.9%	48.8%	17.1%	21.1%	4.1%
My mentors respect my knowledge of research & EBP	2.4%	12.2%	22.0%	54.5%	8.9%
My mentors encourage me to think critically	.8%	12.9%	17.7%	50.8%	17.7%
My mentors provide me with sources of references	8.9%	43.5%	20.2%	24.2%	3.2%
My mentors are committed to help me get to grips with research	6.5%	46.0%	26.6%	19.4%	1.6%
I have used some of the traditional practices		4.8%	8.9%	73.4%	12.9%
Once I qualify, I foresee myself employing some of the traditional practices that my mentors use	4.8%	26.6%	26.6%	37.1%	4.8%

Correlations and Validity of Data

In terms of statistically measuring the strength and validity of relationships between two or more variables, this research identified greater amounts of significant data and valid relationships than was expected. While this was viewed as being beneficial, the reporting of such data was greatly restrained due to the word restriction of this paper.

In light of the limitations of this paper, it was necessary to establish a criterion as to which values would be reported on. For example, the criterion was to include only research finding that showed a statistical correlation measure that was greater than .300 and was statistically significant at the 0.01 level. Thus, the correlations that are included have a probability level that is highly significant ($p < 0.01$ level: 2-tailed) and have a moderate or strong association. Variables that have a negative association ($p < 0.01 > -.300$) are also included.

Bivariate Correlations

The following tables (10.0-10.1) illustrate the variables that have a moderate relationship with:

‘What is taught in University in relation to practice, does not always match up to what happens in the workplace’.

These include

10.0 ‘My mentors suggest alternative ways of practicing that are different to what I have been taught in University

10.1 ‘In the clinical area there are practices based on tradition’.

** Correlations are significant at the 0.01 level (2-tailed)

10.0

My mentors suggest alternative ways of practicing that are different to what I have been taught in University		
Spearman’s rho = 1.000	Correlation Coefficient	.366 (**)
What is taught in Uni in relation to practice, does not always match up to what happens in the workplace	Sig. (2-tailed)	.000
Pearson Correlation =1		.247 (**)
	Sig. (2-tailed)	.005
	N 125	n125

10.1

In the clinical area there are practices based on tradition		
Spearman’s rho = 1.000	Correlation Coefficient	.384 (**)
What is taught in Uni in relation to practice, does not always match up to what happens in the workplace	Sig. (2-tailed)	.000
Pearson Correlation =1		.306 (**)
	Sig. (2-tailed)	.001
	N 125	n123

Tables 11.0-11.2 show the variables that have a moderate relationship with:

‘My mentors suggest alternative ways of practicing that are different to what I have been taught in University’.

These include

11.0 ‘In the clinical area there are practices based on tradition’

11.1 ‘My mentors favour traditional practices rather than EBP’

11.2 ‘I have used some of the traditional practices’

** Correlations are significant at the 0.01 level (2-tailed)

11.0

In the clinical area there are practices based on tradition		
Spearman’s rho = 1.000	Correlation Coefficient	.381 (**)
My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni	Sig. (2-tailed)	.000
Pearson Correlation =1		.354 (**)
	Sig. (2-tailed)	.001
	N 125	n123

11.1

My mentors favour traditional practices rather than EBP		
Spearman’s rho = 1.000	Correlation Coefficient	.317 (**)
My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni	Sig. (2-tailed)	.000
Pearson Correlation =1		.316 (**)
	Sig. (2-tailed)	.000
	N 125	n124

11.2

I have used some of the traditional practices		
Spearman’s rho = 1.000	Correlation Coefficient	.442 (**)
My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni	Sig. (2-tailed)	.000
Pearson Correlation =1		.435 (**)
	Sig. (2-tailed)	.000
	N 125	n124

Tables 12.0-12.2 show variables that have a **Negative Relationship** with:

I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors

These include

12.0 ‘Rather than change my practice, I prefer to stick to my mentors tried & trusted methods ’

12.1 ‘I perform the practice in the same way as my mentor has taught me, even if it is not EB’

12.2 ‘Once I qualify, I foresee myself employing some of the traditional practices that my mentors use’

12.0

Rather than change my practice, I prefer to stick to my mentors tried & trusted methods		
Spearman's rho = 1.000	Correlation Coefficient	-.376 (**)
I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.379 (**)
	N 125	.000 n121

12.1

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	-.357 (**)
I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.371 (**)
	N 125	.000 n122

12.2

Once I qualify, I foresee myself employing some of the traditional practices that my mentors use		
Spearman's rho = 1.000	Correlation Coefficient	-.281 (**)
I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors	Sig. (2-tailed)	.002
Pearson Correlation =1	Sig. (2-tailed)	-.334 (**)
	N 125	.000 n124

Tables: 13.0-13.4 illustrate the variables that have a moderate to strong or negative relationship with:

‘I feel anxious about using research evidence in my clinical setting’

13.0 ‘I find it hard to apply EBP to my patients’ (Strong Association)

13.1 ‘I do not feel I have enough authority to change patients care practices to that of EB care’ (Strong Association)

13.2 ‘Midwifery practice is so busy there is no time to use EBP’

13.3 I think my mentor might resent having her practice questioned’

Negative relationships include

13.4 My mentors respect my knowledge of research & EBP

** Correlations are significant at the 0.01 level (2-tailed)

13.0

I find it hard to apply EBP to my patients		
Spearman’s rho = 1.000	Correlation Coefficient	.607 (**)
I feel anxious about using research evidence in my clinical setting	Sig. (2-tailed)	.000
Pearson Correlation =1		.611 (**)
	Sig. (2-tailed)	.000
	N 125	n123

13.1

I do not feel I have enough authority to change patients care practices to that of EB care		
Spearman’s rho = 1.000	Correlation Coefficient	.513 (**)
I feel anxious about using research evidence in my clinical setting	Sig. (2-tailed)	.000
Pearson Correlation =1		.472 (**)
	Sig. (2-tailed)	.000
	N 125	n123

13.2

Midwifery practice is so busy there is no time to use EBP		
Spearman's rho = 1.000	Correlation Coefficient	.375 (**)
I feel anxious about using research evidence in my clinical setting	Sig. (2-tailed)	.000
Pearson Correlation =1		.380 (**)
	Sig. (2-tailed)	.000
	N 125	n124

13.3

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.306 (**)
I feel anxious about using research evidence in my clinical setting	Sig. (2-tailed)	.001
Pearson Correlation =1		.318 (**)
	Sig. (2-tailed)	.001
	N 125	n124

Negative Association

13.4

My mentors respect my knowledge of research & EBP		
Spearman's rho = 1.000	Correlation Coefficient	-.314 (**)
I feel anxious about using research evidence in my clinical setting	Sig. (2-tailed)	.000
Pearson Correlation =1		-.273 (**)
	Sig. (2-tailed)	.002
	N 125	n123

Tables 14.0-14.4 shows the variables that have a moderate relationship with:

‘I find it hard to apply EBP to my patients’

These include

14.0 ‘I do not feel I have enough authority to change patients care practices to that of EB care’

14.1 ‘Midwifery practice is so busy there is no time to use EBP’

14.2 ‘I perform the practice in the same way as my mentor has taught me, even if it is not EB’

14.3 ‘It is easier to go along with the way things are done because it works

14.4 It is easier to go along with the way things are done because it is so important to 'fit in' with the staff

** Correlations are significant at the 0.01 level (2-tailed)

14.0

I do not feel I have enough authority to change patients care practices to that of EB care		
Spearman's rho = 1.000	Correlation Coefficient	.465 (**)
I find it hard to apply EBP to my patients	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.416 (**)
		.000
	N 125	n122

14.1

Midwifery practice is so busy there is no time to use EBP		
Spearman's rho = 1.000	Correlation Coefficient	.297 (**)
I find it hard to apply EBP to my patients	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.327 (**)
		.000
	N 125	n123

14.2

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	.358 (**)
I find it hard to apply EBP to my patients	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.360 (**)
	N 125	.000 n121

14.3

It is easier to go along with the way things are done because it works		
Spearman's rho = 1.000	Correlation Coefficient	.288 (**)
I find it hard to apply EBP to my patients	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.315 (**)
	N 125	.000 n123

14.4

It is easier to go along with the way things are done because it is so important to 'fit in' with the staff		
Spearman's rho = 1.000	Correlation Coefficient	.323 (**)
I find it hard to apply EBP to my patients	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.347 (**)
	N 125	.000 n123

Tables 15.0-15.6 show the variables that have a strong to moderate relationship with:

‘I do not feel I have enough authority to change patients care practices to that of EB care’

These include

15.0 ‘In the clinical area there are practices based on tradition’

15.1 ‘I perform the practice in the same way as my mentor has taught me, even if it is not EB’

15.2 ‘I think my mentor might resent having her practice questioned’

15.3 ‘It is easier to go along with the way things are done because it is so important to ‘fit in’ with the staff’

15.4 ‘I have used some of the traditional practices’

15.5 ‘I feel anxious about using research evidence in my clinical setting’ (Strong Association)

15.4 I find it hard to apply EBP to my patients

** Correlations are significant at the 0.01 level (2-tailed)

15.0

In the clinical area there are practices based on tradition		
Spearman’s rho = 1.000	Correlation Coefficient	.301 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.001
Pearson Correlation =1		.289 (**)
	Sig. (2-tailed)	.001
	N 125	n122

15.1

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	.341 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.331 (**)
	N 125	.000 n121

15.2

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.302 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.244 (**)
	N 125	.007 n123

15.3

It is easier to go along with the way things are done because it is so important to 'fit in' with the staff		
Spearman's rho = 1.000	Correlation Coefficient	.503 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.495 (**)
	N 125	.000 n123

15.4

I have used some of the traditional practices		
Spearman's rho = 1.000	Correlation Coefficient	.313 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.329 (**)
	N 125	.000 n123

15.5

I feel anxious about using research evidence in my clinical setting		
Spearman's rho = 1.000	Correlation Coefficient	.513 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.000
Pearson Correlation =1		.472 (**)
	Sig. (2-tailed)	.000
	N 125	n123

15.6

I find it hard to apply EBP to my patients		
Spearman's rho = 1.000	Correlation Coefficient	.465 (**)
I do not feel I have enough authority to change patients care practices to that of EB care	Sig. (2-tailed)	.000
Pearson Correlation =1		.416 (**)
	Sig. (2-tailed)	.000
	N 125	n122

Tables 16.0-16.3 illustrate the variables that have a moderate or negative relationship with:

‘In the clinical setting research reports are available’

Moderate relationships include

16.0 ‘The Midwifery staff discuss up to date research and new ideas about care’

16.1 ‘My mentors are committed to help me get to grips with research’

Negative relationships include

16.2 My mentors are unaware of EBP

16.3 My mentors are isolated from knowledgeable colleagues with whom to discuss EBP

** Correlations are significant at the 0.01 level (2-tailed)

16.0

Midwifery staff discuss up to date research & new ideas about care		
Spearman’s rho = 1.000	Correlation Coefficient	.501 (**)
In the clinical setting research reports are available	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.501 (**)
	N 125	n123

16.1

My mentors are committed to help me get to grips with research		
Spearman’s rho = 1.000	Correlation Coefficient	.331 (**)
In the clinical setting research reports are available	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.336 (**)
	N 125	n123

Negative Associations

16.2

My mentors are unaware of EBP		
Spearman's rho = 1.000	Correlation Coefficient	-.293 (**)
In the clinical setting research reports are available	Sig. (2-tailed)	.001
Pearson Correlation =1		-.297 (**)
	Sig. (2-tailed)	.001
	N 125	n123

16.3

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	-.357 (**)
In the clinical setting research reports are available	Sig. (2-tailed)	.000
Pearson Correlation =1		.380 (**)
	Sig. (2-tailed)	.00
	N 125	n123

Tables 17.0-17.4 show variables that have a moderate or negative association with:

‘The Midwifery staff discuss up to date research and new ideas about care’

Moderate associations include

17.0 ‘My mentors provide me with sources of references’

17.1 ‘My mentors are committed to help me get to grips with research’

Negative associations include

17.2 My mentors do not seem interested in EBP

17.3 My mentors are unaware of EBP

17.4 My mentors are isolated from knowledgeable colleagues with whom to discuss EBP

** Correlations are significant at the 0.01 level (2-tailed)

17.0

My mentors provide me with sources of references		
Spearman's rho = 1.000	Correlation Coefficient	.397 (**)
Midwifery staff discuss up to date research & new ideas about care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.393 (**)
	N 125	.000 n124

17.1

My mentors are committed to help me get to grips with research		
Spearman's rho = 1.000	Correlation Coefficient	.309 (**)
Midwifery staff discuss up to date research & new ideas about care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.335 (**)
	N 125	.000 n124

Negative associations v ‘The Midwifery staff discuss up to date research and new ideas about care’

17.2

My mentors do not seem interested in EBP		
Spearman’s rho = 1.000	Correlation Coefficient	-.393 (**)
Midwifery staff discuss up to date research & new ideas about care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.397 (**)
	N 125	.000 n124

17.3

My mentors are unaware of EBP		
Spearman’s rho = 1.000	Correlation Coefficient	-.340 (**)
Midwifery staff discuss up to date research & new ideas about care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.356 (**)
	N 125	.000 n123

17.4

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman’s rho = 1.000	Correlation Coefficient	-.428 (**)
Midwifery staff discuss up to date research & new ideas about care	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.463 (**)
	N 125	.000 n123

The following tables (18.0-18.2) show variables that have a moderate relationship with:

‘Our Trust policies and guidelines are not evidence-based’

These include

18.0 ‘Midwifery management impose their own ideas on how midwives should practice’

18.1 ‘Medical staff do not always permit the use of EBP’

18.2 ‘In the clinical area there are practices based on tradition’

** Correlations are significant at the 0.01 level (2-tailed)

18.0

Midwifery management impose their own ideas on how midwives should practice		
Spearman’s rho = 1.000	Correlation Coefficient	.407 (**)
Our Trust policies & guidelines are not evidence-based	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.398 (**)
	N 125	.000 n123

18.1

Medical staff do not always permit the use of EBP		
Spearman’s rho = 1.000	Correlation Coefficient	.320 (**)
Our Trust policies & guidelines are not evidence-based	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.315 (**)
	N 125	.000 n123

18.2

In the clinical area there are practices based on tradition		
Spearman’s rho = 1.000	Correlation Coefficient	.363 (**)
Our Trust policies & guidelines are not evidence-based	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.389 (**)
	N 125	.000 n123

Tables 19.0-19.4 show variables that have a moderate relationship with:

‘Medical staff do not always permit the use of EBP’

These include

19.0 ‘In the clinical area there are practices based on tradition’

19.1 ‘I think my mentor might resent having her practice questioned’

19.2 ‘My mentors do not seem interested in EBP’

19.3 ‘My mentors are isolated from knowledgeable colleagues with whom to discuss EBP’

19.4 ‘Our Trust policies & guidelines are not evidence-based’

** Correlations are significant at the 0.01 level (2-tailed)

19.0

In the clinical area there are practices based on tradition		
Spearman’s rho = 1.000	Correlation Coefficient	.412 (**)
Medical staff do not always permit the use of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.453 (**)
	N 125	.000 n123

19.1

I think my mentor might resent having her practice questioned		
Spearman’s rho = 1.000	Correlation Coefficient	.292 (**)
Medical staff do not always permit the use of EBP	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.311 (**)
	N 125	.000 n123

19.2

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.361 (**)
Medical staff do not always permit the use of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.355 (**)
	Sig. (2-tailed)	.000
	N 125	n123

19.3

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	.343 (**)
Medical staff do not always permit the use of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.363 (**)
	Sig. (2-tailed)	.000
	N 125	n123

19.4

Our Trust policies & guidelines are not evidence-based		
Spearman's rho = 1.000	Correlation Coefficient	.320 (**)
Medical staff do not always permit the use of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.315 (**)
	Sig. (2-tailed)	.000
	N 125	n123

The following tables (20.0-20.3) show variables that have a moderate relationship with:

‘Midwifery practice is so busy there is no time to use EBP

These include

20.0 ‘My mentors seem unwilling to change/try new ideas’

20.1 ‘My mentors just pay lip-service to the value of research, they aren’t really convinced of its worth’

20.2 ‘I find it hard to apply EBP to my patients’

20.3 ‘I feel anxious about using research evidence in my clinical setting’

** Correlations are significant at the 0.01 level (2-tailed)

20.0

My mentors seem unwilling to change/try new ideas		
Spearman’s rho = 1.000	Correlation Coefficient	.387 (**)
Midwifery practice is so busy there is no time to use EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.357 (**)
	N 125	n124

20.1

My mentors just pay lip-service to the value of research, they aren’t really convinced of its worth		
Spearman’s rho = 1.000	Correlation Coefficient	.333 (**)
Midwifery practice is so busy there is no time to use EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.309 (**)
	N 125	n122

20.2

I find it hard to apply EBP to my patients		
Spearman's rho = 1.000	Correlation Coefficient	.297 (**)
Midwifery practice is so busy there is no time to use EBP	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.327 (**)
	N 125	.000 n123

20.3

I feel anxious about using research evidence in my clinical setting		
Spearman's rho = 1.000	Correlation Coefficient	.375 (**)
Midwifery practice is so busy there is no time to use EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.380 (**)
	N 125	.000 n124

Tables 21.0-21.6 show variables that have a moderate and or negative relationship with:

'In the clinical area there are practices based on tradition'

Moderate associations include

- 21.0 Some traditional practices are good because they work'
- 21.1 I think my mentor might resent having her practice questioned'
- 21.2 My mentors favour traditional practices rather than EBP'
- 21.3 My mentors do not seem interested in EBP'
- 21.4 My mentors are isolated from knowledgeable colleagues with whom to discuss EBP'
- 21.5 I have used some of the traditional practices'

Negative associations include

- 21.6 My mentors provide me with sources of references

** Correlations are significant at the 0.01 level (2-tailed)

21.0

Some traditional practices are good because they work		
Spearman's rho = 1.000	Correlation Coefficient	.366 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.350 (**)
	N 125	.000 n123

21.1

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.341 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.307 (**)
	N 125	.001 n123

21.2

My mentors favour traditional practices rather than EBP		
Spearman's rho = 1.000	Correlation Coefficient	.409 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.425 (**)
	N 125	.000 n123

21.3

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.333 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.326 (**)
	N 125	.000 n123

21.4

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	.342 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.333 (**)
	N 125	.000 n122

21.5

I have used some of the traditional practices		
Spearman's rho = 1.000	Correlation Coefficient	.447 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.459 (**)
	N 125	.000 n123

Negative Association

21.6

My mentors provide me with sources of references		
Spearman's rho = 1.000	Correlation Coefficient	-. 331 (**)
In the clinical area there are practices based on tradition	Sig. (2-tailed)	.000
Pearson Correlation =1		.307 (**)
	Sig. (2-tailed)	.000
	N 125	n123

The following tables (22.0-22.3) show variables that have a moderate relationship with:

'Some traditional practices are good because they work'

These include

- 22.0** 'Rather than change my practice, I prefer to stick to my mentors tried & trusted methods'
- 22.1** 'I perform the practice in the same way as my mentor has taught me, even if it is not EB'
- 22.2** I have used some of the traditional practices'
- 22.3** 'Once I qualify, I foresee myself employing some of the traditional practices that my mentors use'

** Correlations are significant at the 0.01 level (2-tailed)

22.0

Rather than change my practice, I prefer to stick to my mentors tried & trusted methods		
Spearman's rho = 1.000	Correlation Coefficient	.320 (**)
Some traditional practices are good because they work	Sig. (2-tailed)	.000
Pearson Correlation =1		.313 (**)
	Sig. (2-tailed)	.000
	N 125	n121

22.1

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	.304 (**)
Some traditional practices are good because they work	Sig. (2-tailed)	.001
Pearson Correlation =1		.292 (**)
	Sig. (2-tailed)	.001
	N 125	n122

22.2

I have used some of the traditional practices		
Spearman's rho = 1.000	Correlation Coefficient	.306 (**)
Some traditional practices are good because they work	Sig. (2-tailed)	.001
Pearson Correlation =1		.288 (**)
	Sig. (2-tailed)	.001
	N 125	n123

22.3

Once I qualify, I foresee myself employing some of the traditional practices that my mentors use		
Spearman's rho = 1.000	Correlation Coefficient	.437 (**)
Some traditional practices are good because they work	Sig. (2-tailed)	.000
Pearson Correlation =1		.432 (**)
	Sig. (2-tailed)	.000
	N 125	n123

Table 23.0 shows a variable that has a moderate relationship with:

‘Rather than change my practice, I prefer to stick to my mentors tried & trusted methods’

‘I perform the practice in the same way as my mentor has taught me, even if it is not EB’

** Correlations are significant at the 0.01 level (2-tailed)

23.0

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	.441 (**)
Rather than change my practice, I prefer to stick to my mentors tried & trusted methods	Sig. (2-tailed)	.000
Pearson Correlation =1		.407 (**)
	Sig. (2-tailed)	.000
	N 125	n121

The following tables (24.0-24.6) show variables that have a moderate and or negative relationship with:

I perform the practice in the same way as my mentor has taught me, even if it is not EB

These include

- 24.0 'It is easier to go along with the way things are done because it is so important to 'fit in' with the staff'
- 24.1 'My mentors favour traditional practices rather than EBP'
- 24.2 'I do not feel I have enough authority to change patients care practices to that of EB care'
- 24.3 'I find it hard to apply EBP to my patients'
- 24.4 'Some traditional practices are good because they work'
- 24.5 Rather than change my practice, I prefer to stick to my mentors tried & trusted methods

Negative association includes

- 24.6 'I am more likely to employ what I have been taught in University, than the practice ideas of my clinical mentors'

** Correlations are significant at the 0.01 level (2-tailed)

24.0

It is easier to go along with the way things are done because it is so important to 'fit in' with the staff		
Spearman's rho = 1.000	Correlation Coefficient	.425 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.435 (**)
	N 125	n122

24.1

My mentors favour traditional practices rather than EBP		
Spearman's rho = 1.000	Correlation Coefficient	.336 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.324 (**)
		.000
	N 125	n122

24.2

I do not feel I have enough authority to change patients care practices to that of EB care		
Spearman's rho = 1.000	Correlation Coefficient	.341 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.331 (**)
		.000
	N 125	n121

24.3

I find it hard to apply EBP to my patients		
Spearman's rho = 1.000	Correlation Coefficient	.358 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.360 (**)
		.000
	N 125	n121

24.4

Some traditional practices are good because they work		
Spearman's rho = 1.000	Correlation Coefficient	.304 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.292 (**)
		.001
	N 125	n122

24.5

Rather than change my practice, I prefer to stick to my mentors tried & trusted methods		
Spearman's rho = 1.000	Correlation Coefficient	.441 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1		.407 (**)
	Sig. (2-tailed)	.000
	N 125	n121

Negative association

24.6

I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors		
Spearman's rho = 1.000	Correlation Coefficient	-.357 (**)
I perform the practice in the same way as my mentor has taught me, even if it is not EB	Sig. (2-tailed)	.000
Pearson Correlation =1		-.371 (**)
	Sig. (2-tailed)	.000
	N 125	n122

Tables 25.0-25.9 show variables that have a moderate or negative relationship with:

'I think my mentor might resent having her practice questioned'

Moderate Associations include

- 25.0 'It is easier to go along with the way things are done because it works'
- 25.1 'It is easier to go along with the way things are done because it is so important to 'fit in' with the staff'
- 25.2 'My mentors favour traditional practices rather than EBP'
- 25.3 'My mentors seem unwilling to change/try new ideas'
- 25.4 'My mentors do not seem interested in EBP'
- 25.5 'My mentors just pay lip-service to the value of research, they aren't really convinced of its worth'
- 25.6 My mentors are isolated from knowledgeable colleagues with whom to discuss EBP

Negative Associations include

- 25.7 My mentors encourage me to think critically
- 25.8 My mentors provide me with sources of references
- 25.9 My mentors are committed to help me get to grips with research

** Correlations are significant at the 0.01 level (2-tailed)

25.0

It is easier to go along with the way things are done because it works		
Spearman's rho = 1.000	Correlation Coefficient	.315 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.005
Pearson Correlation =1	Sig. (2-tailed)	.316 (**)
	N 125	.000 n124

25.1

It is easier to go along with the way things are done because it is so important to 'fit in' with the staff		
Spearman's rho = 1.000	Correlation Coefficient	.368 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.350 (**)
	N 125	.000 n124

25.2

My mentors favour traditional practices rather than EBP		
Spearman's rho = 1.000	Correlation Coefficient	.411 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.416 (**)
	N 125	.000 n124

25.3

My mentors seem unwilling to change/try new ideas		
Spearman's rho = 1.000	Correlation Coefficient	.330 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.286 (**)
	N 125	.001 n124

25.4

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.412 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.394 (**)
	N 125	.000 n124

25.5

My mentors just pay lip-service to the value of research		
Spearman's rho = 1.000	Correlation Coefficient	.456 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.438 (**)
	N 125	.000 n122

25.6

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	.309 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.322 (**)
	N 125	.000 n123

Negative Associations

25.7

My mentors encourage me to think critically		
Spearman's rho = 1.000	Correlation Coefficient	-. 297 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	-.283 (**)
	N 125	.001 n124

25.8

My mentors provide me with sources of references		
Spearman's rho = 1.000	Correlation Coefficient	-. 316 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.307 (**)
	N 125	.001 n124

25.9

My mentors are committed to help me get to grips with research		
Spearman's rho = 1.000	Correlation Coefficient	-. 312 (**)
I think my mentor might resent having her practice questioned	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.268 (**)
	N 125	.003 n124

Tables (26.0-26.2) show variables that have a moderate relationship with:

‘It is easier to go along with the way things are done because it works’

These include

26.0 ‘It is easier to go along with the way things are done because it is so important to 'fit in' with the staff’

26-1 ‘Once I qualify, I foresee myself employing some of the traditional practices that my mentors use’

26.2 ‘I think my mentor might resent having her practice questioned’

** Correlations are significant at the 0.01 level (2-tailed)

26.0

It is easier to go along with the way things are done because it is so important to 'fit in' with the staff		
Spearman's rho = 1.000	Correlation Coefficient	.480 (**)
It is easier to go along with the way things are done because it works	Sig. (2-tailed)	.000
Pearson Correlation =1		.482 (**)
	Sig. (2-tailed)	.000
	N 125	n124

26.1

Once I qualify, I foresee myself employing some of the traditional practices that my mentors use		
Spearman's rho = 1.000	Correlation Coefficient	.311 (**)
It is easier to go along with the way things are done because it works	Sig. (2-tailed)	.000
Pearson Correlation =1		.299 (**)
	Sig. (2-tailed)	.001
	N 125	n124

26.2

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.315 (**)
It is easier to go along with the way things are done because it works	Sig. (2-tailed)	.005
Pearson Correlation =1		.316 (**)
	Sig. (2-tailed)	.000
	N 125	n124

Tables 27.0-27.9 show variables that have a moderate or negative relationship with:

‘My mentors favour traditional practices rather than EBP’

Moderate Associations include

- 27.0 ‘My mentors seem unwilling to change/try new ideas’ ‘
- 27.1 ‘My mentors do not seem interested in EBP’
- 27.2 ‘My mentors just pay lip-service to the value of research, they aren’t really convinced of its worth’
- 27.3 ‘I have used some of the traditional practices’
- 27.4 ‘My mentors suggest alternative ways of practicing that are different to what I have been taught in University’
- 27.5 ‘In the clinical area there are practices based on tradition’
- 27.6 ‘I perform the practice in the same way as my mentor has taught me, even if it is not EB’
- 27.7 ‘I think my mentor might resent having her practice questioned’

Negative Associations include

- 27.8 My mentors encourage me to think critically
- 27.9 My mentors provide me with sources of references

** Correlations are significant at the 0.01 level (2-tailed)

27.0

My mentors seem unwilling to change/try new ideas		
Spearman's rho = 1.000	Correlation Coefficient	. 339 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		. 346 (**)
	Sig. (2-tailed)	.001
	N 125	n124

27.1

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.370 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.379 (**)
	Sig. (2-tailed)	.000
	N 125	n124

27.2

My mentors just pay lip-service to the value of research		
Spearman's rho = 1.000	Correlation Coefficient	.456 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.441 (**)
	Sig. (2-tailed)	.000
	N 125	n122

27.3

I have used some of the traditional practices		
Spearman's rho = 1.000	Correlation Coefficient	.366 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.355 (**)
	Sig. (2-tailed)	.000
	N 125	n124

27.4

My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni		
Spearman's rho = 1.000	Correlation Coefficient	.317 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1		.316 (**)
	Sig. (2-tailed)	.000
	N 125	n124

27.5

In the clinical area there are practices based on tradition		
Spearman's rho = 1.000	Correlation Coefficient	.409 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.425 (**)
		.000
	N 125	n123

27.6

I perform the practice in the same way as my mentor has taught me, even if it is not EB		
Spearman's rho = 1.000	Correlation Coefficient	.336 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.324 (**)
		.000
	N 125	n122

27.7

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.411 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.416 (**)
		.000
	N 125	n124

Negative Associations with ‘My mentors favour traditional practices rather than EBP’

27.8

My mentors encourage me to think critically		
Spearman’s rho = 1.000	Correlation Coefficient	-. 343 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 341 (**)
	N 125	.000 n124

27.9

My mentors provide me with sources of references		
Spearman’s rho = 1.000	Correlation Coefficient	-. 374 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.005
Pearson Correlation =1	Sig. (2-tailed)	-. 385 (**)
	N 125	.000 n124

Tables 28.0-28.6 show variables that have a moderate to strong or negative relationship with:

‘My mentors seem unwilling to change/try new ideas’

- 28.0 ‘My mentors do not seem interested in EBP’ (Strong Association)
- 28.1 ‘My mentors just pay lip-service to the value of research, they aren’t really convinced of its worth’ (Strong Association)
- 28.2 My mentors are isolated from knowledgeable colleagues with whom to discuss EBP
- 28.3 Midwifery practice is so busy there is no time to use EBP
- 28.4 I think my mentor might resent having her practice questioned
- 28.5 My mentors favour traditional practices rather than EBP

Negative Associations include

- 28.6 My mentors encourage me to think critically

** Correlations are significant at the 0.01 level (2-tailed)

28.0

My mentors do not seem interested in EBP		
Spearman’s rho = 1.000	Correlation Coefficient	. 561 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 552 (**)
	N 125	.000 n124

28.1

My mentors just pay lip-service to the value of research, they aren't really convinced of its worth		
Spearman's rho = 1.000	Correlation Coefficient	.568 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		.556 (**)
	Sig. (2-tailed)	.000
	N 125	n124

28.2

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	.325 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		.312 (**)
	Sig. (2-tailed)	.000
	N 125	n123

28.3

Midwifery practice is so busy there is no time to use EBP		
Spearman's rho = 1.000	Correlation Coefficient	.387 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		.357 (**)
	Sig. (2-tailed)	.000
	N 125	n124

28.4

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.330 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		.286 (**)
	Sig. (2-tailed)	.001
	N 125	n124

28.5

My mentors favour traditional practices rather than EBP		
Spearman's rho = 1.000	Correlation Coefficient	. 339 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		. 346 (**)
	Sig. (2-tailed)	.001
	N 125	n124

Negative Association with 'My mentors seem unwilling to change/try new ideas'

28.6

My mentors encourage me to think critically		
Spearman's rho = 1.000	Correlation Coefficient	-. 346 (**)
My mentors seem unwilling to change/try new ideas	Sig. (2-tailed)	.000
Pearson Correlation =1		-. 329 (**)
	Sig. (2-tailed)	.000
	N 125	n124

Tables 29.0-29.11 show variables that have a moderate to strong or negative relationship with:

'My mentors do not seem interested in EBP'

- 29.0 'My mentors just pay lip-service to the value of research, they aren't really convinced of its worth' (Strong Association)
- 29.1 'My mentors are unaware of EBP'
- 29.2 'My mentors are isolated from knowledgeable colleagues with whom to discuss EBP'
- 29.3 'In the clinical area there are practices based on tradition'
- 29.4 'My mentors do not seem interested in EBP'
- 29.5 'My mentors seem unwilling to change/try new ideas' (Strong Association)
- 29.6 'I think my mentor might resent having her practice questioned'
- 29.7 'Medical staff do not always permit the use of EBP'

Negative Associations include

- 29.8 'My mentors respect my knowledge of research & EBP'
- 29.9 'My mentors encourage me to think critically'
- 29.10 'My mentors provide me with sources of references'
- 29.11 'My mentors are committed to help me get to grips with research'
- 29.12 'Midwifery staff discuss up to date research & new ideas about care'

** Correlations are significant at the 0.01 level (2-tailed)

29.0

My mentors just pay lip-service to the value of research, they aren't really convinced of its worth		
Spearman's rho = 1.000	Correlation Coefficient	. 657 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 677 (**)
	N 125	.000 n122

29.1

My mentors are unaware of EBP		
Spearman's rho = 1.000	Correlation Coefficient	. 444 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 388 (**)
	N 125	.000 n123

29.2

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	. 468 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 449 (**)
	N 125	.000 n123

29.3

In the clinical area there are practices based on tradition		
Spearman's rho = 1.000	Correlation Coefficient	. 333 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.326 (**)
	N 125	.000 n123

29.4

My mentors seem unwilling to change/try new ideas		
Spearman's rho = 1.000	Correlation Coefficient	.561 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.552 (**)
	N 125	.000 n124

29.5

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.370 (**)
My mentors favour traditional practices rather than EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.379 (**)
	N 125	.000 n124

29.6

I think my mentor might resent having her practice questioned		
Spearman's rho = 1.000	Correlation Coefficient	.412 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.394 (**)
	N 125	.000 n124

29.7

Medical staff do not always permit the use of EBP		
Spearman's rho = 1.000	Correlation Coefficient	.361 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.355 (**)
	N 125	.000 n123

Negative Associations with 'My mentors do not seem interested in EBP'

29.8

My mentors respect my knowledge of research & EBP		
Spearman's rho = 1.000	Correlation Coefficient	-. 382 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 342 (**)
	N 125	.000 n123

29.9

My mentors encourage me to think critically		
Spearman's rho = 1.000	Correlation Coefficient	-. 384 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.005
Pearson Correlation =1	Sig. (2-tailed)	-. 399 (**)
	N 125	.000 n124

29.10

My mentors provide me with sources of references		
Spearman's rho = 1.000	Correlation Coefficient	-. 349 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 310 (**)
	N 125	.000 n124

29.11

My mentors are committed to help me get to grips with research		
Spearman's rho = 1.000	Correlation Coefficient	-. 332 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 328 (**)
	N 125	.000 n124

29.12

Midwifery staff discuss up to date research & new ideas about care		
Spearman's rho = 1.000	Correlation Coefficient	-.393 (**)
My mentors do not seem interested in EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.397 (**)
	N 125	.000 n124

Tables 30.0-30.4 show variables that have a moderate to strong or negative relationship with:

‘My mentors just pay lip-service to the value of research, they aren’t really convinced of its worth’

Moderate to Strong Associations include

30.0 ‘My mentors are unaware of EBP’

30.1 ‘My mentors are isolated from knowledgeable colleagues with whom to discuss EBP’

(Strong Association)

Negative Associations include

30.2 My mentors respect my knowledge of research & EBP

30.3 My mentors encourage me to think critically

30.4 My mentors provide me with sources of references

30.4 My mentors are committed to help me get to grips with research

** Correlations are significant at the 0.01 level (2-tailed)

30.0

My mentors are unaware of EBP		
Spearman’s rho = 1.000	Correlation Coefficient	. 382 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 361 (**)
		.000
	N 125	n122

30.1

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman’s rho = 1.000	Correlation Coefficient	. 555 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 555 (**)
		.000
	N 125	n122

Negative Associations

30.2

My mentors respect my knowledge of research & EBP		
Spearman's rho = 1.000	Correlation Coefficient	-. 375 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 354 (**)
	N 125	.000 n122

30.3

My mentors encourage me to think critically		
Spearman's rho = 1.000	Correlation Coefficient	-. 351 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 351 (**)
	N 125	.000 n122

30.3

My mentors provide me with sources of references		
Spearman's rho = 1.000	Correlation Coefficient	-. 343 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 342 (**)
	N 125	.000 n122

30.4

My mentors are committed to help me get to grips with research		
Spearman's rho = 1.000	Correlation Coefficient	-. 440 (**)
My mentors just pay lip-service to the value of research	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 435 (**)
	N 125	.000 n122

Tables 31.0-31.5 shows variables that have a strong, moderate or negative relationship with:

‘My mentors are unaware of EBP’

Strong relation:

31.0 ‘My mentors are isolated from knowledgeable colleagues with whom to discuss EBP’

31.1 ‘My mentors just pay lip-service to the value of research’

31.2 ‘My mentors do not seem interested in EBP’

Negative relation

31.3 ‘My mentors are committed to help me get to grips with research ‘

31.4 ‘In the clinical setting research reports are available’

31.5 Midwifery staff discuss up to date research & new ideas about care

** Correlations are significant at the 0.01 level (2-tailed)

31.0

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman’s rho = 1.000	Correlation Coefficient	. 537 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 525 (**)
	N 125	.000 n123

31.1

My mentors just pay lip-service to the value of research		
Spearman’s rho = 1.000	Correlation Coefficient	. 382 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 361 (**)
	N 125	.000 n122

31.2

My mentors do not seem interested in EBP		
Spearman's rho = 1.000	Correlation Coefficient	.444 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.388 (**)
	N 125	.000 n123

Negative Associations 'My mentors are unaware of EBP'

31.3

My mentors are isolated from knowledgeable colleagues with whom to discuss EBP		
Spearman's rho = 1.000	Correlation Coefficient	-.327 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.316 (**)
	N 125	.000 n123

31.4

In the clinical setting research reports are available		
Spearman's rho = 1.000	Correlation Coefficient	-.293 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	-.297 (**)
	N 125	.001 n123

31.5

Midwifery staff discuss up to date research & new ideas about care		
Spearman's rho = 1.000	Correlation Coefficient	-.340 (**)
My mentors are unaware of EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-.356 (**)
	N 125	.000 n123

Tables 32.0-32.1 shows variables that have a **negative** relationship with:

‘My mentors are isolated from knowledgeable colleagues with whom to discuss EBP

32.0 ‘My mentors provide me with sources of references

32.1 My mentors are committed to help me get to grips with research

** Correlations are significant at the 0.01 level (2-tailed)

32.0

My mentors provide me with sources of references		
Spearman’s rho = 1.000	Correlation Coefficient	-. 468 (**)
My mentors are isolated from knowledgeable colleagues with whom to discuss EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	-. 467 (**)
	N 125	.000 n123

32.1

My mentors are committed to help me get to grips with research		
Spearman’s rho = 1.000	Correlation Coefficient	-. 455 (**)
My mentors are isolated from knowledgeable colleagues with whom to discuss EBP	Sig. (2-tailed)	.005
Pearson Correlation =1	Sig. (2-tailed)	-. 488 (**)
	N 125	.000 n123

Tables 33.0-33.2 show variables that have a moderate relationship with:

‘My mentors respect my knowledge of research & EBP’

These include

33.0 ‘My mentors encourage me to think critically’

33.1 ‘My mentors provide me with sources of references’

33.2 ‘My mentors are committed to help me get to grips with research’

** Correlations are significant at the 0.01 level (2-tailed)

33.0

My mentors encourage me to think critically		
Spearman’s rho = 1.000	Correlation Coefficient	. 421 (**)
My mentors respect my knowledge of research & EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 389 (**)
	N 125	.000 n123

33.1

My mentors provide me with sources of references		
Spearman’s rho = 1.000	Correlation Coefficient	. 407 (**)
My mentors respect my knowledge of research & EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 430 (**)
	N 125	.000 n123

33.2

My mentors are committed to help me get to grips with research		
Spearman’s rho = 1.000	Correlation Coefficient	. 320 (**)
My mentors respect my knowledge of research & EBP	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 326 (**)
	N 125	.000 n123

Table 34.0 shows a variable that has a **strong** relationship with:

‘My mentors provide me with sources of references’

‘My mentors are committed to help me get to grips with research’

** Correlations are significant at the 0.01 level (2-tailed)

34.0

My mentors are committed to help me get to grips with research		
Spearman's rho = 1.000	Correlation Coefficient	. 595 (**)
My mentors provide me with sources of references	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 563 (**)
	N 125	.000 n124

Tables 35.0-35.1 show variables that have a moderate relationship with:

‘My mentors encourage me to think critically’

These include

35.0 ‘My mentors provide me with sources of references’

35.1 ‘My mentors are committed to help me get to grips with research’

** Correlations are significant at the 0.01 level (2-tailed)

35.0

My mentors provide me with sources of references		
Spearman’s rho = 1.000	Correlation Coefficient	. 389 (**)
My mentors encourage me to think critically	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 397 (**)
	N 125	.000 n124

35.1

My mentors are committed to help me get to grips with research		
Spearman’s rho = 1.000	Correlation Coefficient	. 406 (**)
My mentors encourage me to think critically	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 409 (**)
	N 125	.000 n124

Tables 36.0-36.6 shows the variables that have a moderate and or negative relationship with:

‘I have used some of the traditional practices’

Moderate Associations include

- 36.0 ‘Once I qualify, I foresee myself employing some of the traditional practices that my mentors use’
- 36.1 ‘My mentors favour traditional practices rather than EBP’
- 36.2 ‘In the clinical area there are practices based on tradition’
- 36.3 ‘Some traditional practices are good because they work’
- 36.4 ‘I do not feel I have enough authority to change patients care practices to that of EB care’
- 36.5 ‘My mentors suggest alternative ways of practicing that are different to what I have been taught in University’

Negative Association include

- 36.6 ‘I would challenge my mentor if she does not employ EBP’

** Correlations are significant at the 0.01 level (2-tailed)

36.0

Once I qualify, I foresee myself employing some of the traditional practices that my mentors use		
Spearman’s rho = 1.000	Correlation Coefficient	. 337 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	. 360 (**)
	N 125	.000 n124

36.1

My mentors favour traditional practices rather than EBP		
Spearman's rho = 1.000	Correlation Coefficient	.366 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.355 (**)
	N 125	.000 n124

36.2

In the clinical area there are practices based on tradition		
Spearman's rho = 1.000	Correlation Coefficient	.447 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.459 (**)
	N 125	.000 n123

36.3

Some traditional practices are good because they work		
Spearman's rho = 1.000	Correlation Coefficient	.306 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.001
Pearson Correlation =1	Sig. (2-tailed)	.288 (**)
	N 125	.001 n123

36.4

I do not feel I have enough authority to change patients care practices to that of EB care		
Spearman's rho = 1.000	Correlation Coefficient	.313 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1	Sig. (2-tailed)	.329 (**)
	N 125	.000 n123

36.5

My mentors suggest alternative ways of practicing that are different to what I have been taught in Uni		
Spearman's rho = 1.000	Correlation Coefficient	.442 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1		.435 (**)
	Sig. (2-tailed)	.000
	N 125	n124

Negative Association

36.6

I would challenge my mentor if she does not employ EBP		
Spearman's rho = 1.000	Correlation Coefficient	-.373 (**)
I have used some of the traditional practices	Sig. (2-tailed)	.000
Pearson Correlation =1		-.345 (**)
	Sig. (2-tailed)	.00
	N 125	n124

Cross tabulations

The student's responses to the ordinal variables were compared with their University Base using the chi-square test to ascertain if the University base had any association with the students' responses. While this data was interesting, it yielded a great amount of information which did not contribute to answering the research question. As such, it was not possible to fully include, and discuss, the findings of this data. For this reason details of these findings are presented in Appendix V. However, Table 37 illustrates a summary of the concepts which revealed notable differences in the students' responses in accordance to their University base as follows:

Table 37:

Concepts which showed differences in the students' responses in accordance to their University base
Once I qualify, I foresee myself employing some of the traditional practices that my mentors use
Some traditional practices are good because they work
What is taught in University, in relation to practice, does not always match up to what happens in the workplace
I am more likely to employ what I have been taught in University than the practice ideas of my mentors
It is easier to go along with the way things are done because it is so important to 'fit in' with the staff
My mentors seem unwilling to change/try new ideas
The midwifery staff discuss up to date research and new ideas about care
Within my clinical setting research reports/articles are available

Research Findings (Open-ended data)

The questionnaire contained three open-ended questions which were placed in accordance to their relationship with a particular concept/aspect. The questions were as follows:

Aspect 1: The students were asked to comment on their overall thoughts about what they are taught in University in relation to midwifery practices.

Aspect 2: The students were asked to comment on their overall thoughts about the use of EBP's in the clinical setting.

Aspect 3: The students were asked to comment on their overall thoughts about challenging a practitioner's traditional practices (may or may not be their personal mentor).

As seen in Appendix there was a substantial amount of data gained from the three open-ended questions. However, as seen in Table 45 (p), a number of different themes emerged. The incidences of these themes were also noted, which were then placed in hierarchical order, with the most commonly cited theme appearing first.

In relation to the concept concerning 'What is taught in the University' (Aspect 1) there were a total of nine themes that emerged. However, the most commonly cited themes given by the students are as follows:

- There was a mismatch between University and practice
- Lectures are removed from reality
- University teaches up-to-date EBP.

In relation to the students thoughts on the use of EBP's in the clinical setting (Aspect 2) there were a total of twenty-five themes that emerged. However, the most commonly cited themes given by the students are as follows:

- Must do it the way midwife does
- Our Trust protocols/policies not based on best evidence
- Midwives are reluctant to change
- There is a need to adhere to Trust policies
- Some traditional practices are valuable
- Not having authority/being 'powerless' to change
- Midwife may fail me if I don't work their way
- Experienced 'older' staff use tradition

In relation to the students' thoughts about challenging a practitioner's traditional practices (Aspect 3), there were a total of twenty themes that emerged. However, the most commonly cited themes given by the students are as follows:

- There are way to challenge
- Not confident to challenge
- Difficult with experienced 'older' staff
- Feel you are battling against 'Hierarchy'
- Will 'get a bad name' - 'may fail me. Do not want to be seen as a 'trouble causer'
- Will use EBP when qualified
- People react different to being challenged

Table: 38**List of Themes and Order of Occurrences (*Most cited themes)**

What is taught in University	Use of EBPs in the clinical setting	Challenging traditional practices
Mismatch between University & practice *	We must do it the way the midwife does *	There are way to challenge *
University teaches ideal world *	The midwife may fail me if I don't work their way *	Not confident to challenge. It is difficult to challenge *
Lecturers removed from reality *	Out Trust protocols/policies not based on best evidence *	Difficult with experienced 'older' staff *
University teaches up-to date EBP *	Midwives are reluctant to change *	Battling against 'Hierarchy' *
↑*****↑	There is a need to adhere to Trust policies *	Will 'get a bad name' - they 'may fail me. Do not want to be seen as a 'trouble causer' *
Discord between University lecturers & clinical midwives	Some traditional practices are valuable *	Will use EBP when qualified *
Tutors who practice are up to date	Being powerless to change *	People react different to being challenged *
It is good that University teaches us EBP so we can use it when qualified	↑*****↑	↑*****↑
University encourages us to challenge	Workplace too busy	Important to 'fit in' to 'Getting a job'
University encourages use of EBP & be critical	Values anecdotal	Need to 'fit in'
	Mentors respect students knowledge	As senior student now confident to challenge
	Difficult to use knowledge of EBP in practice	To challenge-need knowledge of subject
	Bullied / Pressured into doing it the way midwife does	Would not challenge if tradition & benefits client
	Adopting midwives way for easier life	Dislikes word 'challenge'
	We are not seen as competent	Fears confrontation
	Not able to judge whether tradition is valuable	Negative experiences of challenging
	Difficult to use EBP when midwives use tradition	Challenging is necessary / beneficial
	Expect to be seen not heard	Will challenge
	Midwives not knowledgeable of EBP	As senior student more confident to do things differently to mentor
	Protocols / policies lack midwifery input	Would challenge if practice harmful
	Midwifery practice is reduced to policies	
	Powerless to refuse medical ideas	
	Are told when we qualify we will see that it is better to do it this way	
	Experience & tradition is relied upon where research is lacking	
	Going along with it because everyone else does	

Chapter 5

Discussion

Limitations

There is an abundance of literature claiming that it is essential midwifery practice is informed by the best available evidence. Indeed, in the context of professional education, it is seen as a prerequisite that, pre-registration educational programmes should incorporate, promote and equip future practitioners to utilise their knowledge of evidence-based research and research findings into practice (NMC 2004a, RCM 2003, ENB & DoH 2001).

With this in mind, it was positive to see that all the students in this study (see Table 6 p 44), had agreed their University lecturers taught and encouraged them to use EBP's within the clinical setting. Moreover, as illustrated in Tables 5 (p 43), all of the students had agreed that they understood what was meant by EBP. 96% also agreed that they were able to make a distinction between midwifery practices that are based on research-evidence and those practices are based on tradition. 98.4% also agreed that they knew how to apply evidence-based research and research findings to practice.

While these findings should undoubtedly satisfy the governing educational bodies, the students' overall comments in relation to this concept, appeared to counteract the creditability of these findings. In particular, 92% of the students had perceived that, what was taught in University did not correspond to what happened in the workplace and the most cited theme was that they perceived, that the University taught the 'ideal world'.

While these findings might appear to point the finger in the direction of the Universities, what is worth noting was that, most of the students expressed preference and credence towards what they were taught in the University, as opposed to what they were taught in the clinical setting. Indeed, many students provided examples of their clinical encounters which conflicted with what they had been taught in University. Much of these conflicts appeared to dampen their expectations and or self-esteem with some students expressing feeling of discontentment and or frustration in relation to what is taught in the practice setting. For example, one student wrote:

“Very different from reality. Can be demoralising and disappointing”. (29. B:6).

While some perceived themselves as being exposed to two different worlds, others gave examples of the constraints which prevented them from employing what they had been taught in University. For example

“As a student it is difficult to promote any EBP taught in the University. Some midwives are very set in their ways!” (26, A:3).

“University teaching (to me) is the ‘gold star’ of clinical practice. With hospital policies etc...it is sometimes difficult to practice in this way” (71, C:10).

Noticeably a number of students suggested the need to ‘store or guard’ what they had learnt in University so that they could utilise the evidence when they qualified. Some students provided descriptions of cognitive dissonance (Festinger 1957), in that, they wrote of the uncomfortable tensions that might have come from engaging in behaviour that conflicted with their beliefs. For example, the following student provided a solution, which appears to counteract and or, eliminate those behaviours that conflicted with her beliefs

“When with a mentor you feel you have to adopt your own practice to a degree to ‘come in line’ with their practice. However, you know that when you are qualified you will practice completely how you want to – EBP” (37, B: 8).

While the majority of the students had expressed preference towards what they were taught in University, some students regarded their lecturers to be far removed from reality and some perceived that this created a barrier to learning.

While these findings appear to correspond with Corlett’s (2000) study, there were only a few students that questioned the creditability of their lecturers and unlike Corlett’s study, the

students' in this study appeared to give credence to what they were taught in University as opposed to what they were taught in the clinical setting.

What is perhaps more pertinent, is that a number of students in this study suggested that the '*idealistic*' world of University teaching created a theory-practice gap and some suggested the need to bridge this gap which in turn might improve the employment of EBP's within the clinical setting. For example, some students criticised the '*idealistic*' approach by stating that

"It is unrealistic to teach in this manner... They should attempt to build bridges to close this gap. I believe this would go along way towards developing EBP in the clinical setting" (98. D: 19).

This finding corresponds with the findings of Maben et al's (2006) study and earlier suggestions of Upton (1999). Indeed, they suggested that, the theory-practice gap created difficulties with applying evidence-based research into practice and that the educational curriculum exposed students to the 'ideal versus reality'. Moreover, it seems absurd that it was nearly a decade ago that the NHS Executive (1998a) included recommendations to reduce the widening gap, yet despite this report, and successive reports (NMC 2002a, ENB & DoH 2001) the theory-practice gap remains forever problematic.

Against this, those studies that had investigated nursing students and practitioners perceptions of link-lecturers (Brown et al 2005, Koh 2002), and or practice educators/clinical facilitators (Ellis & Hogard 2003, Clarke et al 2003, Williamson & Webb 2001) was shown to improve collaboration between the HEI's and service providers which, in turn had a positive impact on minimising the theory-practice gap.

In light of the findings of this study it might appear that as far as midwifery is concerned we have fallen behind and perhaps there is a need to re-evaluate our existing support structures to rectify what the majority of the students in this study regarded a problem. Indeed, the comments of the following student appear to support this

“Huge theory-practice gap. Clinical midwives & university lecturers do not seem to communicate re: mentoring & students have little alternative but to do as their mentors do, even if it is not EB” (97. D: 19).

What was interesting was that, where the students perceived there was a mismatch between ‘what is taught in University and what happens in the workplace, this concept was shown to be associated with, (see Tables 10 p 53), ‘mentors suggest alternative ways of practicing that are different to what is taught in University’ and ‘in the clinical area there are practices based on tradition’.

In light this finding it was of not surprising to see that, 76% of the students had agreed that their mentors suggested alternative ways of practicing that were different to what they had been taught in University.

Interestingly, this concept (see Tables 11 p 54), was also shown to correlate with clinical practices are based on tradition and mentors favouring traditional practices rather than EBP, and they themselves having employed traditional practices.

This finding was further supported by the fact that some students provided examples of the discrepancies and indifference that existed between the two sectors. For example

“During training mentors often say-the theory is...but in practice this...works better- don’t tell anyone in Uni” (125, D: 16).

“Some midwives have said “what are you doing it like that for”? I don’t have the courage to say we’ve been taught it at uni” (57, C:14).

It was also interesting to see that some students appeared to be grateful that their lecturers had warned them of the discord they may encounter whereas, others felt that their mentors could not comprehend what they were been taught.

This supports Bendall’s (2006) theory and the findings of studies undertaken by Morgan (2006), Kyrkjebo and Hage (2005) and Corlett (2000). For example, the student nurses in

these studies had also perceived what they were taught in University was not practised in the wards and vice versa.

These author's findings also concur with Ramage (2004) and Clarke et al (2003) studies in that the students were aware of the disparity between the HEI intentions with that of the workplace and of the conflict between educationalists and practitioners.

Moreover, it was apparent that the majority of students perceived they did not always have the choice to practice what University had taught them, and more so if these practices conflicted with the ideologies of those that held authoritative positions. As far as the students were concerned it was a matter of conforming to the traditional values of others.

Indeed, while the majority of the students had expressed preference towards what they were taught in the University, there was a widespread response as to whether they were more likely to employ the practice recommendations that they had been taught in the University, than the practice ideas of their clinical mentors. For example, only 41% perceived that they were more likely to employ what I have been taught in University.

The reason why these findings appeared to conflict with their prior responses was evident in the students' comments. For example, a number of students implied that they adopt the practices of their clinical mentors, not out of choice, but as a means to survive. Indeed, one of the cited themes was that they perceived their mentors may fail them if they did not work their way. For instance, the following comment appears to support this

"As a student I feel I have to adopt my practice according to the practices of the individual mentor... as they... may fail my placement if I do not work the way they do" (72, C:10).

While some students perceived their mentors may fail them if they practiced differently, they also admitted they would adopt their mentors' practices despite the fact it went against their moral principles. For example

“As a student it is very difficult to practice in a way which is different to your mentor-even if you know it is wrong and not EB” (86, E: 21).

Others perceived that they had to adopt their mentor’s practices because their mentors were accountable for the student’s actions and or that ‘older midwives’ and or experienced midwives were a force was not to be reckoned with. For example

“It is a matter of survival. You are working under your mentor’s PIN and you have to practice in a way she approves of, EB or not” (97, D: 19).

“It is difficult to tell “old style” midwives ... that their way is wrong and if you are working with them, you adopt their ways for an easy life and so they will sign your sheets!!” (17. A:2).

These findings appear to contest Bandura’s (1977) theories of social and behavioural learning, whereby he maintained, a person will not adopt behaviours that go against their moral principles.

In contrast, these findings are comparable to the ideologies of Morrall’s (2005) and Pitts (1985) who claimed, the hidden curriculum is imposed upon students and the nature of socialisation is such that a student’s actual experience is one of control and coercion. Indeed, one student commented

“Although I know EB practice is usually better, I find myself being almost pushed/bullied into my mentors way of practice” (20. A: 3).

These findings also compare with studies undertaken by Swain et al (2003), Morgan (2006), Landers (2001) and May and Veitch (1998) whereby they revealed that when students worked with mentors who demonstrated ‘bad’ practices, the students would knowingly adopt those behaviours. Indeed, 23% of students in this study had agreed that they performed the practice in the same way as their mentor had taught them, even if it was not evidence-based.

It was also interesting to see, this concept (see Tables 24 p 77), was also shown to be linked with mentors favouring traditional practices rather than EBP, 'it is easier to go along with the way things are done because it is so important to 'fit in' with the staff' and students perceiving they did not have enough authority to change patients care practices to EB care. It was also associated with students finding it hard to apply EBP to their patients, and students perceiving that some traditional practices are good.

Perhaps a greater concern is that many of the students had perceived they might fail their clinical assessments if they did not employ their mentor's practices. Moreover, considering the students clinical competency examinations contain elements that require them to demonstrate their knowledge and application of evidence-based findings (NMC 2004a), it might suggest some students disregarded their clinical competency outcomes in favour of what their mentors believe to be more appropriate objectives. Indeed, a few students had implied that their mentors may not be aware of, and or agree with the evidence-based recommendations and might fail them if they were to practice this way.

While these findings appear to correspond with studies undertaken by Richmond (2006), Pulsford et al (2002), Watson et al (2002), Calman et al (2002), Begley's (2001a), Neary (2001 & 2000), Phillips et al (2000) and Hill's (1998), it was not the intention of this study to investigate clinical assessments and there was insufficient data to suggest whether this was significant problem.

Considering that most of the students had agreed that they knew how to apply evidence-based research and research findings to practice, it was surprising to see (see Tables 5 p 43), that so many students felt anxious about using research in practice and that they found it hard to apply evidence-based recommendations to their patients.

Why these findings conflicted with their prior responses was very much evident in the students' overall responses. Indeed, where students felt anxious about using research in practice, as seen in Tables 13 (p 56), this was associated with students perceiving that they did not have the authority to change practices to that of EB care and that midwifery practice was too busy to use EBP's. It was also linked to students perceiving their mentors might resent having their practices questioned. Likewise, where students found it hard to apply evidence-based recommendations to their patients, this was also shown, as seen in Tables 14 (p 58), to be associated with 'it is easier to go along with the way things are done because it works' and because it is important to 'fit in' with the staff.

Additionally, as to why some students felt anxious and or found it hard to apply EBP's and research to practice was more so apparent in their comments. For example the most cited themes given were that

1) It is difficult to use EBP's when midwives use tradition. 2) We must practice as the midwife does. 3) There is a need to practice according to Trust policy. 4) Trust policies are not based on best evidence. 5) We do not have the authority. 6) Midwives are reluctant to change.

As to why many of the students believed the employment of traditional practices should act as a barrier to using research findings and EBP's, was very much evident in the students open responses. For example

"We can't escape the fact that midwives use old practice, as you are practicing on their 'number', we must do it how they want" (13, A: 5).

However, the overriding reason given was that most of the students perceived that traditional practices were predominantly used and their mentors insisted they should practice in this way.

Indeed, 87% perceived some practices that were based on tradition. Moreover, the majority perceived that their mentors favoured and maintained traditional practices rather than EBP's.

It was also interesting, to see, as shown in Table 27 (p 85), where students perceived their mentors favoured traditional practices rather than EBP's, this concept was associated with students perceiving their 'mentors suggest alternative ways of practicing that were different to what is taught in University', and 'practices are based on tradition'. It was also linked to students perceiving that they were 'more likely to practice the same way their mentors had taught them, even if it was not EB' and their 'mentor resenting having their practice questioned'.

Against this, it appeared that the major barrier to utilising research findings and EBP's was not necessarily because the midwives themselves were dictators of practice, but that their practices were dictated by Trust policies or guidelines which were not always reflective of best practice. Indeed, the students' comments and the majority of responses supported this. For example

"When hospital policies are not based on current best evidence I do not feel able to practice EB care" (69, C: 10).

While this might appear to contradict and question the principal objective of policies in that, they should be founded on the best available evidence, many of the students perceived their Trust policies and guidelines were either out of date, were flawed and or, more often were based on the consultants' preferences. For example

"Sometimes a midwife believes they are informing you of EB research, when in actual fact it is not, it may be based on a consultant's opinion using older research" (24, A: 3).

In contrast, where students perceived their Trust policies were EB, and updated, they also perceived some of their mentors might not have understood them or were not aware of which practices were evidence-based.

These findings are comparable with findings of Banning 2005, Rycroft-et al (2004 & 2004a), Parahoo (1999) and McSherry (1997) who had suggested that some practitioners may lack knowledge of what is meant by evidence-based, or as MacGuire (2006) and Rodgers (2000) had suggested, they may be unaware of them. Indeed, 12% of the students in this study believed their mentors were unaware of EBP's and 25% had perceived their mentors were isolated from up to date knowledgeable colleagues with whom to discuss EBPs.

Moreover, where students perceived that their mentors were unaware of EBP's, (see Tables 31 p 99), this was also shown to be strongly associated with the students perceiving their mentors are isolated from knowledgeable colleagues with whom to discuss EBP' and their mentors paid lip-service to the value of research and were not interested in EBP.

Similarly, some students had also commented that their mentors were apprehensive of using the evidence into practice. This was also identified by Thompson et al (2005), Glacken and Chaney (2004), and Parahoo (2000).

Against this, the majority of students in this study believed their mentors were aware of EBP's and were not isolated from up to date knowledgeable colleagues with whom to discuss EBPs. While this was seen as a positive finding, a number of students perceived that, despite their mentors being knowledgeable of EBP's, they suggested that some of their mentors disregarded the evidence if it did not correspond with their own beliefs. For example

“Midwives know the evidence but are unwilling to change. They say “this is evidence but we do it like this instead”! (34, B: 8).

Correspondingly, quite a number of the students (27%) had felt their mentors were not willing to change/try new ideas and or their mentors paid lip-service to the value of research (26%) and or were not interested in implementing evidence-based findings (19%).

Moreover, these latter concepts were all shown to be associated with one another (see Tables 28 p 89). For example, where students perceived their mentors were unwilling to change/try

new ideas they also perceived their mentors were not interested in EBP's and were isolated from knowledgeable colleagues with whom to discuss EBP and they favoured traditional practices rather than EBP. They also perceived their mentors might resent having their practice questioned and that midwifery practice can be too busy to use EBP's.

As seen in Tables 29 (p 92), much of these associations were also shown to be linked with students perceiving their mentors were not being interested in EBP's. However, this concept was also linked with 'practices are based on tradition', 'my mentors are unaware of EBP' and 'medical staff do not permit the use of EBP'.

Some students also qualified their answers by suggesting some of their mentors would discount EBP's if their colleagues did not support it. For example

"In the main (EBP) is used however some midwives do continue to use methods not fully researched because other midwives use them" (90, E: 23)

However, many more students implied that, they were expected to abide by 'out-dated' Trust policies which were compiled mostly by obstetricians. More significantly, the vast majority of students had perceived medical staff did not always permit midwives to use EBP's and that midwifery managers imposed their 'own ideas' on how the midwives should practice.

What is interesting is many of these findings compare with those studies undertaken by Maben et al (2006), Wilson et al (2005), Veeramah (2004), Parsons (2004), Nutley et al (2003), Parahoo and McCaughan's (2001) Rodgers (2000), Retsas (2000), Le May et al (1998), Furber and Thomson (2006), French (2005), Ring et al (2005), Crawford et al (2002), Thompson, et al (2001, 2001a). In particular, they suggested practitioners might be knowledgeable of the EBP and know how to apply that evidence however they may discount it if it goes against their own beliefs and or the beliefs of their colleagues.

Interestingly, where students had perceived medical staff do not always permit the use of EBP, (see Tables 19 p 68) this was shown to be associated with students believing that practices are based on tradition, their mentors might resent having their practices questioned, mentors are not to be interested in EBP's, and are isolated from knowledgeable colleagues with whom to discuss EBP'. It was also associated with Trust policies and guidelines not being evidence-based.

These findings, when weighed against the ENB and DoH (2001) recommendations, it would appear that little has been done to ensure students are allocated to clinical placements where the provision of care is based on relevant research-based and evidence-based findings. Moreover, it should bring into question the fact the NMC (2004b) states qualified practitioners have a responsibility to deliver care based on current evidence, best practice and mentors should have a good knowledge base in order to identify, apply and disseminate research findings within their area of practice (NMC 2002, 2002a & 2004, ENB & DoH 2001a).

However, in respect of these recommendations, ensuring the workplace, and or individual practitioners use the best available evidence is by no means straightforward. Indeed, the students comments overall, suggested they had little choice but to adhere to the Trust policies regardless of whether they were supportive of best evidence or not. Moreover, where students perceived Trust policies and or guidelines were not based on the best available evidence (see Tables 18 p 67), this was shown to be associated with students perceiving that midwifery management imposed their own ideas on how midwives should practice and that medical staff did not permit the use of EBP' and practices were based on tradition.

These findings support the suggestions made by Russell (2007), Perez-Botella and Downe (2006), Symon (2003 & 1998), Kirkham (2000), Upton (1999), Ashcroft (1998), and

Chamberlain (1997) who claimed, there exists contradiction in terms of research-based evidence, trust policies and or consultant's preferences which may or may not be evidence-based, and the use of their own professional judgment.

Indeed, in terms of this research a significant number of students felt, their clients birth experiences were often medicalised and or controlled by policies which may not be based on the best available evidence.

Against this, Trust policies were not seen as an exclusive barrier to using EBP's. Indeed, 39% of the students had perceived that midwifery practice was too busy to use EBP's and a number of students qualified their answers in support of this. For example

“Use of EBP is subject to realities of busy ward or community setting” (7, A: 1).

It was also interesting to see, (see Tables 20 p 70), where students had perceived midwifery practice was too busy to use EBP's, was associated with students finding it hard to apply EBP to their patients and that they felt anxious about using research evidence in the clinical setting. They also perceived that, due to the time constraints, their mentors were unwilling to change or try new ideas and that they paid lip-service to the value of research.

These findings concur with Macleod Clark (2006) and Maben et al's (2006) whereby, they suggested an over-stretched workforce can be an inherent barrier as to why there is little opportunity for students and practitioners to change, and utilise their knowledge of best practice.

Moreover, in consideration of these findings, it might appear that NMC (2004a) proficiency statements', which advises students to influence midwives, and others, to change their practice to evidence-based care, is somewhat unrealistic.

Indeed, 78% of the students in this study perceived they did not have enough authority to change patient care practices to evidence-based care. Moreover, 'not having authority and or being 'powerless' to change practice was one of the most cited themes given by the students

and that, 'older' practitioners or those who occupied 'senior' positions created principal barriers to utilising EBP.

Furthermore, where students had perceived they did not have the authority to change practice this was shown (see Tables 15 p 60), to be related to students perceiving practices are based on tradition, the need to perform the practice in the same way as their mentor taught them and that they had used some traditional practices. They also perceived their mentors might resent having their practice questioned and it was easier to go along with the way things are done because it is so important to 'fit in' with the staff. This concept was also associated with students finding it hard to apply EBP to their patients and feeling anxious about using research evidence in their clinical setting.

These findings correspond with those studies that utilised Funk et al's (1991) '29 item 'BARRIERS Scale'. For example, Hutchinson and Johnston (2004), Oranta et al (2002), Parahoo and McCaughan (2001), Parahoo (2000), Retsas (2000), Closs et al (2000), Kajermo et al (1998) and Dunn et al (1997) identified the greatest barrier to research utilisation amongst registered nurses was that they did not feel they had the authority to implement research findings.

What was interesting was that, these studies had also identified there was insufficient time on the job to implement new ideas, management and or doctors would not allow and or cooperate with implementation and other staff were not supportive of implementation.

While many students had also perceived that, 'older, senior' and or the more 'experienced midwives' were more likely to use traditional practices they qualified their answers by claiming their mentor refused to accept alternative ways of practicing.

The following comments appear to support this:

"As a student we have the most up-to date knowledge, but are reviewed in practice as knowing little & still learning. If you do comment on another's traditional practice you are

often told that you will see that it is better than the evidence-based way when you've been qualified for a while" (86, E:21).

"Unfortunately there are senior midwives who would not accept your knowledge with regards to EBP" (115, D: 16)

These latter comments may support Seymour et al's (2003) theories and studies undertaken by Le May et al (1998), Dunn et al (1997) and Camiah (1997), whereby they suggested, nurses who occupied senior clinical positions created principal barriers to utilising EBP, not because they were more experienced, but they may have a limited understanding of research.

Against this, some students had perceived senior midwives were more likely to use tradition, because their intuitive knowledge, and or experience, enabled them to judge which practices might be more beneficial. Indeed, while the majority of students appeared to be supportive of EBP's, 68% also perceived, 'some traditional' practices were good because they seemed to work'. Some qualified their answers as follows:

"The use of EBP is not always used as other 'traditional methods' work better" (54, C: 13)

"Mostly, practices within my trust are evidenced based. However, a lot of the senior midwives decline these, as their experiences teach them other methods" (57, C: 14)

These findings compare with the opinions of Seymour et al (2003), Le May et al (1998) Kitson (2002), Benner (2001), Coyler and Kamah (1999), Upton (1999) Berragan (1998), and Enkin and Jadad (1998) who had suggested, practice may not solely informed by evidence-based research, but that practitioners often exercise their clinical judgment, intuition, and person-centred and humanist approaches to delivery care.

While arguably, using anecdotal information has an important role to play in healthcare decisions, what was interesting in this study was that, where students perceived practices were

based on tradition, (see Tables 21 p 72), this concept was shown to be associated with 'some traditional practices are good because they work' and 'I have used some of the traditional practices'. However, it was also associated with 'my mentors favour traditional practices rather than EBP', 'my mentors do not seem interested in EBP', and 'my mentors are isolated from knowledgeable colleagues with whom to discuss EBP' and 'I think my mentor might resent having her practice questioned'.

It was interesting to see, where the students had perceived 'some traditional practices are good because they work', this concept was also, (see Tables 22 p 74), shown to be associated with: 'rather than change my practice, I prefer to stick to my mentors tried and trusted methods', 'I perform the practice in the same way as my mentor has taught me, even if it is not EB', 'I have used some of the traditional practices' and 'once I qualify, I foresee myself employing some of the traditional practices that my mentors use'.

Moreover, it was remarkable to see that as many as 86% of the students had admitted that they had used some of the traditional practices. It was therefore not surprising this concept (see Tables 36 p 105), was shown to be associated with mentors favouring traditional practices rather than EBP's and students perceiving some traditional practices are good and once they had qualified, they would employ some of the traditional practices that their mentors used. However, this concept was also associated with 'I do not feel I have enough authority to change patients care practices to that of EB care'.

Corresponding with these latter findings, the majority of students believed it was easier to go along with the way things have always been done because it works. The majority had also perceived that once they were qualified, they foresaw themselves employing some of the traditional practices their mentors had used. These concepts were also shown to be associated with one another, as was their need to 'fit in' (see Tables 26 p 84).

While statistically there was a fairly evenly balanced response as to whether the students perceived it was important to 'fit in', some students qualified their answers by suggesting they needed to 'fit in' in order to improve their chances of securing a job, and or, they would go along with the way things are done because they desired to be part of the team.

However, most of the comments in relation to 'fitting in' and being accepted by the team were in response to the questions that asked students about challenging their mentor's practices.

For example

"It is easy to say that you would challenge your mentor however in reality it is difficult. It is also important to fit in because then you have more of a chance of securing a job once qualified" (31, B:2).

Interestingly, a number of students appeared to accept they should challenge practices. Indeed, some suggested their University lecturers encouraged them to challenge and be critical of their environment and they viewed this 'as being the right think to do'. Against this, the majority of the students perceived that, in reality this may not be a good thing as they would 'get a bad name'. As such, most of the students wrote of the need to tread carefully and sensitively, and or, that there are 'ways to challenge' and or they needed to selective as to whom they might challenge. Many also suggested that they did not feel confident to challenge and or, they needed to be "*be thick skinned to do this*" (50. C: 11).

The underlying reasons as to why these students perceived these tactful approaches to be necessary was that, by simply challenging their mentors they believed it could potentially jeopardise their clinical assessments and or their chances of securing a job.

The fact some students admitted using different behavioural approaches to achieve a favourable assessment outcome and or to increase their acceptance by the team was also identified by Begley's (2001a) and May and Veitch's (1998).

The students also perceived it was difficult to challenge, and more so, if challenging experienced 'older staff'.

These findings appear to oppose the NMC (2004) and the RCM (2003) recommendations in that, they advocate students should be brought into a culture that develops them to, examine knowledge, to be critical of the environment and they should be encouraged to challenge practices that are not supported by evidence. Indeed, 24% of the students in this study believed they would not challenge their mentors if they did not employ EBP's and whilst the majority of students perceived they would challenge their mentors (54%), this weighted response appeared to conflict with the fact that, 71% perceived their mentors might resent having their clinical practice questioned. Moreover, where students had agreed they would challenge their mentors, this was not always reflective of their open responses. One possible reason for this might be the students did not wish to admit they would not challenge their mentors. In particular, many of the students responded very negatively to this question. For example, a number of students suggested, it was unreasonable to expect students to challenge their mentors, while others had implied it would be detrimental and that being 'quiet' was the safest option. For example

"Students can sometimes be 'bullied' by mentors if they speak up, so it is often easier to be quiet" (47. C: 10).

Likewise, another student wrote

"Some mentors would see you as arrogant if you challenged their practice. They expect you to be seen and not heard. Students don't challenge as they don't want to get a name for themselves" (42. B: 7).

Additionally, some students described the psychological impact they had experienced as a result of challenging their mentors such as being humiliated and or victimised.

These findings, very much correspond with the theories of Morrall's (2005), Seymour et al (2003), Le May et al (1998) and Fielding and Llewelyn (1987) in that, they suggested if novices attempt to challenge practices or adopt new ways of practicing to that of their colleagues, it is likely to induce conflict.

Likewise, the fact some students had perceived they were expected to be '*seen and not heard*', this corresponded with the findings of Pearcey and Elliott's (2004), Begley's (2001a) and May and Veitch (1998).

Where students had perceived their mentors might resent having their practices questioned, (see Tables 25 p 80), this concept was associated with 'it is easier to go along with the way things are done because it works', 'it is easier to go along with the way things are done because it is so important to 'fit in' with the staff', 'my mentors favour traditional practices rather than EBP', and 'my mentors seem unwilling to change/try new ideas'.

It was also associated with 'my mentors do not seem interested in EBP', 'my mentors just pay lip-service to the value of research' and 'my mentors are isolated from knowledgeable colleagues with whom to discuss EBP'.

It was also interesting that the students' responses, in relation to some of these concepts, as seen in Appendix Table 42, were different according to their University base.

Some students had suggested their position in the hierarchical structure afforded them little chance to change practice. Indeed, 'Battling against Hierarchy' was a recurring theme. Many of the students comments also corresponded with the findings of Kyrkjebo and Hage (2005), Randle (2003), Seymour et al (2003), Swain, et al (2003), Begley (2002, 2001 & 2001a), Yearley (1999) and Cahill (1996).

It also appeared that most of the students accepted they were not only powerless, but they were also vulnerable in that, they feared their mentors might fail them '*if they spoke out of line*' and or they would not be offered a job.

Certainly, this latter theory was also shared by Papp et al (2003), Spouse (2003), Koh (2002), Welsh and Swann (2002), Chan (2002), Phillips et al (1996) and Boud et al (1994).

Against this, some students had had a positive experience of challenging their mentors and they had perceived their mentors had altered their practices in light of this.

It was also interesting that some students had again, expressed cognitive dissonance in terms of not challenging their mentors. For example, they used their lack of status to justify not challenging their mentors and, as a means to counteract these negative thoughts they sort to believe they would challenge such practices when they were qualified in the belief this would provide them the authority. Indeed, the following comment appears to demonstrate this

"I feel as a student I do not have the authority to challenge certain practices but look forward to doing this once qualified" (107. D: 16).

Irrespectively, a significant number of students had reported they would do things differently once they had qualified and this very much correspond with the findings of Kyrkjebo and Hage's (2005) and Pearcey and Elliott's (2004).

While 'aspiring to change their practice' to EBP's once they had qualified was a noticeable theme, statistically, 42% believed once they were qualified they would employ the traditional practices of their mentors. However, as to which data is the more valid is certainly debateable. Against this, the author believed it was important not to discredit one value over another, but to utilise both as a means to gain an in-depth understanding as to whether the students were influenced by the traditional practices of their clinical mentors.

When summarising all the available evidence there were certain aspects of this study that appeared to stand out more than most. The fact that so many students had believed they would do things differently from their mentors when they had qualified was certainly a significant finding in that, one has to question whether the students' expectations are entirely realistic. Indeed, considering most of the students had perceived there were a multitude of barriers that prevented them from employing EBP's, why might they not appear to perceive some of these barriers might still be present when they qualified. For example, many perceived there was a need to adhere to Trust policies, but they also perceived some of their policies were not always based on the best available evidence. Many also commented that policies restricted midwives from being able to deliver the type of care they were able to provide to women. It might also be argued that the desire to 'fit in' and behave like others might possibly be more compelling when those students qualify and essentially become part of the workforce. Indeed, in light of the study undertaken by Ball, Curtis and Kirkham (2002), it was revealed some midwives had left the profession because they had felt they did not 'fit in' with the team.

Likewise, many students had supported the idea that those who occupied authoritative positions can be barriers to using EBP and they felt powerless to challenge those practices that were not always in the best interests of their clients. Again, one has to question why might students feel they will behave differently towards authoritative figures when they become qualified.

Some students also perceived work constraints, such as staff shortages prevented them from employing EBP's and while the majority of students did not support this, it has been said that an overstretched workforce can be an inherent barrier for practitioners to employ EBP's.

Lastly, there was a sufficient amount of data to suggest the clinical environment was not always conducive to learning, (see Tables 16, 17, 33-35). In particular, where student perceived that their mentors did not support EBP's and or, were unaware of EBP's, this was

shown to have a negative impact on the students' ability to be, creative, to liberally express their thought processes and to act independently. Moreover, they were more likely to accept the traditional practices modelled by their mentors.

In contrast, where the clinical environment was conducive to learning, for example, where research reports were readily available in the clinical area, and mentors were knowledgeable of EBP's and discussed up to date research findings, they were more likely to encourage their students to be critical and to respect their knowledge. They were also more likely to provide students with sources of references and help them get to grips with research.

Against this, the overall the findings appeared to echo the ideas of Freire (2000). Indeed, it seems that, where there is the embedded use of traditional practice, and a strong hierarchical structure, there may be little chance for students and those that are newly qualified to introduce, and or influence others to adopt alternative ways of working.

Limitations:

Due to the varied number of respondents based in each University, and the substantial number of Trust sites to which the students were unevenly allocated, (see Table 4 p 42), it was not possible to draw any valid conclusions in terms of being able to compare the students' responses to their individual allocated sites.

Additionally, the findings of this research can only be representative of those students that were based at the selected midwifery cohorts, as the number of students surveyed overall was insufficient to make generalisations of the wider population (Bryman 2004).

Notwithstanding, this research produced far greater amounts of significant data than was expected, and while this was viewed as being highly beneficial, the discussion of such data was greatly restrained due to the word restriction of this paper.

It might be argued that the questionnaire had a number of weaknesses in relation those questions that asked the participants about their knowledge and or asked what actions they take. The problem with this, is that people tend to write down what they think you want to hear, and or how they themselves may wish to be seen, and or, desire to be (Bowling 2005, Lydeard 1991). Moreover, the author accepts that the validity of the closed knowledge-based questions is questionable in that, they offered only 'Yes or No' answers.

While a number of vignettes or multiple choice knowledge questions may have more effectively tested the students' knowledge, they can be quite lengthy, and because it was not the only aspect under investigation, to broadly investigate this component would have entailed greater use of resources. Against this, it might be said that the use of a Likert scale may have improved the validity of the knowledge-based questions. However, the author felt that there would be a high probability that the students would still opt for a more favourable

answer and therefore the findings may not have shown any different. Additionally, by using a Likert scale to measure this component would have overloaded the visual presentation of the questionnaire and in doing so it may have increased the risk of response fatigue. Furthermore, it was felt that if an observational and or interview approach had been employed, a participant may still respond in a manner that would be seen to be more socially desirable. Oppenheim (1992) also supports that, while singular response questions are less reliable and open to bias, where there are design limitations and a need to reserve the use of scaling for the more important key attitudinal variables, the use of single 'Yes or No' responses '*are better than nothing*' (p 144).

While the open-ended questions were purposed to elicit an in-depth data, Bell (2005) maintains that: surveys are a good way of asking the question: 'What'? 'Where'? 'When and How'? However, it is not so easy to find out the 'Why', and that '*causal relationships can rarely, if ever, be proved by a survey method*' (p 14).

Parahoo and McCaughan (2001) appears to support this view by claiming that, the information gained from their survey, whilst valid, was limited, in that the tool they utilised did not provide the answers as to why a participant may chose to agree or disagree to a particular statement. They suggested that, while quantitative studies are needed to explore relationships between key variables, a qualitative approach may help to gain in-depth understanding of how, concepts are interpreted and why for example, might these concepts affect a person's behaviour.

However, in terms of this research, the presence of open-ended questions did at least permit the students to qualify their answers, and the data gained from these entries provided an insight as to 'why' they had agreed or disagreed to a particular statement. Indeed, if the questionnaire had contained only Likert scales, the findings will have been limited in terms of being able to evaluate and draw conclusion of the students' attitudes *per se*.

Against this, while it was thought to be beneficial to have closed and open-ended questions, it was noted that a student's open-ended responses were not always consistent with their closed-ended responses. For example, some students had responded negatively to an open-ended question, but when answering an equivalent closed question, they had chosen to respond positively, or visa versa. More importantly, where there were apparent contradictions, it was difficult to ascertain which response was more representative of the truth. For example, some students may have responded to the closed-ended questions in a way that they would be wished to be seen, but that they might have been more truthful with their open-ended responses. Against this, these inconsistencies were present in a minority of cases and as such it was not thought to affect the validity and reliability of the tool. It might also be argued that, if the open-ended data had been analysed in isolation of a participant's closed responses, these inconsistencies would not have been presented. However, the open and closed-ended data were interrelated and as such they were not viewed in isolation.

Chapter 6:

Conclusion

Recommendations

Conclusion

Finding out whether student midwives are influenced by the traditional practices of their mentors appeared to be a reasonably defined question. However, it was an exceptionally broad in that, to gain a justifiable and trustworthy answer, it necessitated investigating a number of variables that were thought to be key influences as to whether students may adopt the traditional practices of their mentors.

Through the process of analysis it was possible to identify relationships, to test for differences, to draw conclusions and to make recommendations in light of the evidence. Moreover, by incorporating open-ended questions, it was possible to elicit in-depth information as to 'why' students may adopt such practices. Certainly, if the questionnaire had contained only closed-ended questions, the findings will have been limited in terms of being able to evaluate and draw conclusion of the students' attitudes toward a particular concept.

Indeed, by evaluating all the data, there was a sufficient amount of evidence to assert that the students in this study were influenced by their mentors' traditional practices. In addition, the findings also strongly supported the idea that what was taught in the HEI, did not always equate to the workplace realities and, while the HEI taught and advocated students to employ EBP's, the students were more likely to adopt the traditional practices of their mentors. However, it was difficult to ascertain whether a students desire to 'fit in' can outweigh them using EBP and or, challenging their mentor's practices. As such this hypothesis cannot be fully supported. Indeed, statistically, the majority of students perceived that they would challenge their mentors if they did not employ EBP's. There was also a balanced response in terms of whether students would employ their mentors' practices as a means to 'fit in'. Against this, the students overall comments conflicted with these latter findings in that they suggested that they needed to 'fit in' and would go along with their mentors ideas in order to pass their assessments and or, secure their chances of employment.

As to which data is the more valid is certainly debateable. However, the author felt it was important not to discredit one value over another, but to utilise both as a means to gain an in-depth understanding as to whether the students were influenced by the traditional practices of their mentors.

While there were limitations to this study, the amount of data gained was very worthwhile in that much of this data has greatly heighten the author's awareness of students perceptions in relation to this subject. In addition, the findings of this research have enabled the author to challenge and or, support existing theory. More so, it has developed theory, and in doing so, it has inspired the author, not just to disseminate this information, but to further explore certain concepts in order to make generalisations of the wider population. Moreover, in the context of professional education, undertaking this study was a truly valuable experience in that, not only has it developed the author's understanding of research, but the findings of this study has significantly impacted on her role as an educationalist.

It is also hoped that, the findings of this study will heighten the awareness of others and incite researchers to further explore the problems students may encounter in terms of mentorship, educational and professional conflicts and that of organisational constraints. In particular, it is important to address, all or anyone of these problems and that failure to do so, will not only impact on students learning, but it will inevitably cascade on the quality of healthcare provision.

It is also important to point out that these students are our professional graduates of the future and will be responsible for mentoring others. It is therefore hoped that some students, if not many, will find the strength to challenge those practices that are not supported by best practice and that they will be empowered to support their clients' individual needs.

However, to ensure the next generations of midwives positively impact on the experiences of our clients they need to be exposed to a liberal thinking and creative culture that places the needs of their clients first and foremost and that they themselves are supported by positive role models who are not fearful of change.

Recommendations

Firstly, it is important that professional stakeholders are made aware of the issues identified in this research, as such the author intends to disseminate these findings nationally and locally through publications (see Appendix V1). In doing so, it is hoped that the findings of this study may incite others to further explore some of concepts identified in this study. Indeed, by far the greatest limitation to this study was that it was not possible to make generalisations of the wider population and as such, it is recommended that a large scale study may help to overcome this. Alternatively, by using a multi-method approach it may provide a broader in-depth understanding and in doing so, it may further contribute to the development of theory.

Secondarily, given the fact that so many students perceived that they would employ EBP's when they qualified, it would be interesting to find out whether they do alter their practices accordingly. It might also be beneficial to investigate qualified midwives perceptions on the use of EBP's and research findings in practice by either adapting the author's measurement tool or utilising Funk et al's (1991) 'BARRIERS Scale'. In doing so, it may be possible to compare the findings of this study and or other studies that have used the 'BARRIERS Scale' tool from a midwives perspective.

Thirdly, the fact that the author's study had identified a multitude of constraints in relation to the employment of EBP's, much of which appeared to contribute to the widening theory-practice gap, it is highly recommended that individual organisations evaluate and, where necessary, address these constraints.

Indeed, the main barriers that appeared to contribute to the theory practice gap was that the majority of students perceived they were exposed to two dissimilar cultures which were often at odds with one another and that the clinical environment was not always conducive to

learning. Therefore, until such barriers are addressed the theory-practice gap will remain forever problematic.

Fourthly, in light of this study's findings, it appears that there is a need to re-evaluate existing support structures and it might be useful to utilise some of these findings as a framework to develop programmes of education. For example, to ensure the HEI teaching corresponds with what is taught in practice and visa versa, it is may be beneficial to employ a practice educator or clinical facilitator to lead and facilitate inter-professional learning. Indeed, this defined role has shown to improve collaboration between the HEI's and service providers which, in turn has reduced the theory-practice gap. Moreover, this role will not only support and improve the quality of professional learning, but more importantly, it should improve the quality of midwifery care.

Fifthly, where it is not feasible or possible to incorporate a practice educator, the author advises that, it may be advantageous if midwives mandatory study days include the dissemination of EBP's and research findings as part of their update sessions. Indeed, a number of students in this study had perceived that their mentors were keen to find out what students were taught, as they themselves were not given the opportunity to learn how to interpret the evidence or discuss research findings.

Lastly, in the event of these findings and recommendations being fully supported, it is a necessity that these recommendations are disseminated to as wide an audience as possible. In doing so, it should ensure that, it not only has a desired impact on organisations, but that it positively impacts on healthcare provision.

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Appendix I.

Responses to Open-ended Questions

Responses to Open-ended Questions

(Number represents a Student's ID. Number in brackets () represents University Base followed by Allocated Site)

Question: Aspect 1

What are you overall comments about what you are taught in the University setting in relation to midwifery practices

3. *Some of the things we are taught in college are exciting and make sense, but there is no way I would be able to override senior staff. I once tried to question an admission CTG for a normal labouring woman-I knew this was not evidence-based- but was told just to do it to keep the consultant happy! I was shocked and disheartened. (A:1)*
7. *Sometimes practices we are taught are “in an ideal world” and not subject to pressures of time and lack of staff, e.g. prolonged uninterrupted skin-to-skin contact –we all know is ideal but often there is “another multip waiting when this one is showered, computed and transferred upstairs”. We know NICE guidelines recommendations about 2 booking appointments and pre-test counseling prior to A/N screening –but time and resources do not permit. (A:1)*
8. *Overall the academia is research based and being able to marry that with practice is rewarding. However, anecdotal practice is probably the most rewarding in a normal labour. (A:1)*
9. *We are taught up to date EBP at University. Some midwives keep themselves up-to-date as well, however, some do not which can cause conflicting advice. (A:4).*
10. *University practice is up-dated easier than that in the clinical sites. However, as a student you need to consider the Trust policies when delivering care. (A:4).*
11. *There are some distinct differences in some areas, however in some areas there is no difference. (A:5)*

13. *Although the things we are taught in class are more up to date, we can't escape the fact that M/W's use old practice, as you are practicing on their 'number', we must do it how they want. (A:5)*
17. *It is difficult to tell "old style" midwives who have been qualified for 82 years, that their way is wrong and if you are working with them, you adopt their ways for an easy life and so they will sign your sheets!! (A:2)*
20. *Although I know EB practice is usually better, I find myself being almost pushed/bullied into my mentors way of practice. (A:3)*
21. *Does not always match what taught in college. (A:3)*
23. *What we are taught in Uni is often difficult to get across to the older midwives in practice. (A:3)*
24. *Up to -date evidence. Prepare you to be able to justify your practice. (A:3)*
26. *As a student it is difficult to promote any EBP taught in the University. Some midwives are very set in their ways! (A:3)*
27. *While the university teaches us to be aware of EBP, and to practice within its boundaries- it is also recognized that the student, as someone with little or no previous experience of midwifery prior to the course-is in a effect a sponge, mopping up and of learning experience from her more experienced mentors. If it is not safe practice, then it is often mirrored- if unsafe then it is questioned obviously! (A:1).*
28. *Initially shocking on first delivery suite practice to discover how controlled (by policies) the labour was for women. Difficult to actually experience fully 'normal' labours. (B:6).*
29. *Very different from reality. Can be demoralising and disappointing. (B:6).*
32. *The majority of what I was taught was linked and seen in practice, but there were occasions that I have seen different to what is taught in Uni. (B:2).*

34. *Sometimes lecturers are too far removed from reality. (B:8).*
35. *University presents an unrealistic image of childbirth, practice is very different and unfortunately as students we follow the mentors practice. (B:8)*
37. *There is definitely a 'theory practice' gap. (B:8)*
38. *I agree more strongly with what I am taught in university but don't often get a chance to carry it out in practice. What we learn in Uni to what we experience in practice are like two different worlds. (B:8).*
39. *It seems that University teaches us the "ideal world" and this is not what we see in practice, and it is quite difficult to stand up and practice according to the evidence in the clinical setting. (B:8).*
40. *We are taught in university what should happen out in practice and not informed or 'warned' that what we may see is not evidenced-based or what we learn e.g. sweeping the perineum. (B:8)*
42. *University teaches the ideal, however there are a wide range of barriers that prevent the ideal from being practiced in the hospital setting. (B:7)*
44. *Some of our midwifery lectures have not been in practice for some time and things have changed. We are also more likely to practice as our mentor does, as students it is difficult to challenge. (C:10)*
45. *It is difficult to apply something we are taught in university to a certain situation, but being flexible towards the woman's needs but still practicing safely. (C:10)*
46. *Some lecturers are not as up to date with current practices, as a midwife in the clinical setting. However, within some clinical settings some staff are reluctant to change and modernise their practice. In relation to question 7, I would take the recommendations from both uni & placement and develop my own way. (C:10)*
47. *Local policies are often different to what we are taught in University and as students we must adhere to these. (C:10)*

- 48.** *What we are taught in uni does not always reflect in practice. It is hard to comment though. Community midwives in my experience advocate research and current evidence. All mentors are different, some employ current evidence, others do not. (C:10)*
- 49.** *In relation to Q7, as a student I am more likely to practice as mentors have taught me as they assess me at the end of placement therefore; fear 'of doing something wrong' or being seen to go against the grain. Those tutors who practice and teach appear to be more up to date. (C:10)*
- 50.** *We are often taught things that contradict what we see in practice. What we are taught often seems to be an identical version of midwifery with no thought of the various constraints placed on us in practice. (C:11)*
- 51.** *I feel it is important to be aware of all current evidence in relation to midwifery practice and this is what we are taught in university. It is also good for us as students to observe other means of practice in order to understand how individual midwives work. The learning in university is up to date and always has appropriate further reading resources. The tutors teach us subjects that are in their area of expertise and they are fully aware of all new research available. (C:11)*
- 52.** *University provides references, reading lists and articles/studies relevant to topic areas. We have lecturers from areas of expertise who share their knowledge. I am able to link a lot of theory to practice and this fuels my knowledge and interest in the practical field. (C:12).*
- 53.** *We are taught to search and employ current best available evidence within midwifery practice. (C:12).*
- 54.** *I feel that some things taught in uni are not practiced and some topics taught are too research based that cannot be transferred to practice. (C:13).*
- 55.** *Whilst practicing on another midwife's pin, I often feel obliged to do things the way they want, even if it is not the way I would choose to practice. (C:13).*
- 56.** *It varies and relating theory to practice is very difficult especially if lectures are not fully up to date with clinical practices. (C:13)*

57. *The transition from theory to practice can be very difficult. Some midwives have said “what are you doing it like that for”? I don’t have the courage to say we’ve been taught it at uni. (C:14)*
58. *We are taught about EBP and given up to date studies to back up what we are taught. (C:14)*
59. *Some midwives tend to stick to their traditional ways of working, whether it is evidence based or not. I have encountered this several times but would not have questioned their practice as it may come across as me ‘questioning’ their knowledge/practice. (C:14)*
60. *It does not always link! (C:15)*
61. *Generally what we are taught in university is similar to that of hospital standards, however, policies and procedures maybe somewhat different to the current literature regarding practices. In my experiences its usually minor practices that are different i.e. palips grip, air dry for healing (C:15)*
62. *I have noticed that there is generally a correlation between teaching in university and midwifery practice in my trust. I cannot recall a situation where there has been any conflict between the two, but I would challenge a decision if I felt it to not reflect what I have been taught and take on board the response. (C:15)*
64. *What is taught in university is an ideal way of practicing and may not feasible in practice. (C:15)*
65. *Due to midwifery shortages it is not always possible to employ university recommendations for areas of clinical practice. And in doing how your mentor does is sometimes the only option for effective time management. (C:13)*
67. *Sometimes the theory practice gap is particularly wide however I think this also applies to the university who have unrealistic expectations of clinical practice. (C:14)*
68. *Policies differ because we are a smaller unit. I find that the majority of midwifery lecturers practiced at regional units & use those as examples. (C:14)*

- 69.** *There is a huge theory practice divide. In practice you have to do what your mentor wants you to do. (C:10)*
- 70.** *It depends what mentor you are working with. Some mentors would rather you work how they do rather than what we have been told is best practice at university. (C:10)*
- 71.** *University teaching (to me) is the 'gold star' of clinical practice. With hospital policies etc..it is sometimes difficult to practice in this way. For example, at my hospital admission CTG's have been re-introduced, so as a student I have to do them. (C:10)*
- 72.** *As a student I feel I have to adopt my practice according to the practices of the individual mentor I have been assigned as they are critical & may fail my placement if I do not work the way they do it means that I may complete the same task in many different ways. (C:10)*
- 73.** *Encouraged to always use EBP, & to think why we are doing every action. (C:15)*
- 74.** *It is important for us to be taught best evidence in university so when we qualify we can begin to implement it whether that is what we've done clinically previously or not. (C:15)*
- 75.** *University staff are not always aware of up to date clinical practices. (C:15)*
- 78.** *Sometimes in uni we are taught very 'idealistic' things which aren't appropriate to the clinical setting. (C:15)*
- 79.** *Generally are all evidence based. (C:15)*
- 81.** *We are encouraged to research thoroughly & critically analyse & not just accept what we read. (E:21)*
- 82.** *Traditional practices are not effectively critiqued in Uni sessions to enable me to reject traditional practice on placement-I have to undertake private study in order to do this. (E:21)*

- 83.** *I have sometimes found that some lecturers rely heavily on research & are lacking in clinical skills making them difficult to relate to & for them to relate to us. (E:21)*
- 84.** *Gap between theory taught in uni & experience of practice. Many lecturers no longer practicing so cannot always comment on most up to date protocols. (E:21)*
- 85.** *I have found that much of what is taught at Uni applies to what midwifery practices are employed at our unit. (E:21)*
- 86.** *We are taught current practice & made aware of new research. We are encouraged to find & use newly published findings. (E:21)*
- 87.** *In uni we are taught skills that relate to the standard we are at! However on placement, opportunities arise to perform skills that have not yet been taught yet in University, in my opinion I think this is good as long as being confident to do so, but some lecturers will disagree. (E:22)*
- 88.** *Usually go with mentors practices if following policies & procedures, based on EBP. (E:22)*
- 89.** *They are helpful & useful. I relate theory to practice, although can sometimes be difficult (E:23)*
- 90.** *Not easy to relate theory to practice because information is sometimes not detailed enough. (E:23)*
- 91.** *Alternative practices & thoughts are sometimes suggested but usually backed up with evidence from training days/articles (E:24)*
- 92.** *I especially in my 1st & 2nd year am likely to adopt my mentors practice, but they are usually safe & effective practices. They aren't always the specific way we are taught, but are still evidence-based. The practices used in the unit I work in are evidence based. (E:24)*
- 94.** *Sometimes unrealistic practices are taught in uni setting. Unlikely to be able to actually practice what we are taught as hospital settings are sometimes very different (E:25)*

- 95.** *Mentors do not always encourage EBP. (D: 17)*
- 97.** *Huge theory-practice gap. Clinical midwives & university lecturers do not seem to communicate re: mentoring & students have little alternative but to do as their mentors do, even if it is not EB. (D: 19)*
- 98.** *It is unrealistic to teach in this manner and expect a student to challenge midwifery practice. I find that tutors & clinical midwives do not have mutual respect. They should attempt to build bridges to close this gap. I believe this would go along way towards developing EBP in the clinical setting. (D: 19)*
- 99.** *Very keen to promote EBP & teach research practice. However, teaching could be improved or approached differently. (D: 18)*
- 102.** *That it depends on the situation, often mentors have alternative practices that they find useful that encourage you to do the same. E.g, weighing women that are admitted in labour. (D:16)*
- 104.** *Glad that lecturers make us aware of the discordance we may face & we do discuss ways which we can subtly question mentors practice. (D:16)*
- 106.** *I can sometimes feel pressured to practice the way my mentors practice especially in the delivery suite setting. University makes us challenge the practices of our mentors, if what we see is not EB. However, as a student it can sometimes be difficult to challenge the things we don't agree on. (D:16)*
- 107.** *There appears to be a vast difference between what is taught at university & on clinical placement (D: 16)*
- 110.** *The theory-practice gap is still quite large sometimes what is taught in university is the 'idealistic' view. (D:16)*
- 111.** *They differ greatly in certain aspects. (D:16)*

- 112.** *University is very EB as there are a wide variety of EB practitioners who lecturers us, however due to changes & updates in midwifery practice, some of our university information is not up to date so will have to change. (D:16)*
- 113.** *Some of the traditional methods do work better, than those taught in Uni, but not all by any means (D: 16)*
- 115.** *Is that it underpins practice (D: 16)*
- 116.** *As we are taught the most up to date research, if we witness alternative practice in the clinical setting I tend to see it as negative practice (D: 16)*
- 117.** *Unless dangerous practice is reported to university I feel no mention of differing practice is considered by university. Idealised practice is often portrayed by university & university does not fully consider the strain maternity services are currently under. (D: 16)*
- 118.** *There are often discrepancies between theory taught in uni & the reality of practice within the hospital setting (D: 16)*
- 119.** *I felt the same during my nurse training, often I felt that uni based learning conflicted with clinical learning. Many mentors believed 'that lecturers don't live in the real world' I feel more confident practicing what I have learnt in uni, rather than a clinical setting. I am happy to challenge clinical practice. (D: 16)*
- 121.** *It is difficult to implement new ideas to old school midwives (D: 16)*
- 122.** *Mentors are sometimes surprised by what we are taught- some are willing to adapt, but most wonder why we do it. (D: 16)*
- 123.** *The practice environment is not always receptive to change & as a student implementing changes does not seem a realistic concept (D: 16)*
- 124.** *The university education seems far removed from clinical practice (D: 16)*

125. *During training mentors often say-the theory is...but in practice this...works better- don't tell anyone in Uni (D: 16)*

Question: Aspect 3:

With reference to Questions 12-24, what are your overall thoughts about the use of EBPs in the clinical setting?

1. *Can be difficult as a student to use your own evidence based practice in the clinical setting (A:1)*
2. *Some traditions such as CTG on admission are ones I would like to stop, however, all midwives do this and would find it hard to break tradition (A:1)*
3. *Many (in fact all) the midwives I have worked with on CLS use a hands-on approach to the perineum despite the HOOP trial. I personally find a hands-on approach has resulted in less tears despite the evidence not supporting this. (A:1)*
7. *Use of EBP is subject to realities of busy ward or community setting. Even as 3rd yrs, we are still only students & uncertain about what practice is evidence based & what is tradition/routine (NB had ticked YES to knowledge based question 11. (A:1)*
8. *Many protocols are not up to date, therefore how can they be research based, the use of speculums for SROM when it is evident the waters have gone, is a total waste of time and money (A:1).*
9. *EBP is widely used inand encouraged, however, some midwives stick to 'tried & trusted. (A:4)*
10. *My mentor is open-minded with regards to new EBP and has been involved with audits and creating new policies. (A:4)*
11. *Some practice areas are not based upon evidence. Some guidelines are not evidence-based. (A:5)*

- 13.** *I feel it is essential to ensure safe practice. (A:5)*
- 14.** *EBP is crucial as it improves practice and overall care however, sometimes it is very difficult to implement into practice due to policy/guidelines which are 'out of date'; or practice traditions that some midwives are reluctant to change. (A:5)*
- 16.** *Midwives & mentors in the clinical area tend to use EBP and are happy to listen to any new information students have. (A:2).*
- 17.** *Few and far between. The policies are there, but I don't know how many midwives really know them or understand them. (A:2).*
- 19.** *Evidence based practice is used in the clinical setting the majority of the time however, traditional practices still go on. (A:3).*
- 20.** *I sometimes find it hard to introduce EB practice – some M/W are keen to learn new changes/practices-what we have learnt in Uni. (A:3)*
- 21.** *It is in use but not routinely followed. (A:3)*
- 24.** *Student refers to questions: 16. Sometimes a midwife believes they are informing you of evidence based research, when in actual fact it is not, it may be based on a consultants opinion using older research – encourages debate. (Question) 22. Abdominal palpation before 36 weeks harder to give women proactive advice. (A:3)*
- 25.** *Some midwives don't base their care on evidence based practice, but University highlights the importance of this and enables me to practice where possible current research. (A:3)*
- 26.** *EBP is vital for continuing high standard required by our clients. Hospital policies & guidelines enhance this! (A:3)*

- 27.** *I think overall care is taken to ensure EBP are fairly up to date within the clinical setting. Some 'rituals' continue despite a lack of evidence to support them however, I think the student begins to define 'good practice' by the 3rd year and becomes more confident using own initiative. Able to support doing something differently to mentor by offering evidence. (A:1).*
- 28.** *Older midwives appear to be stuck in 'tradition' and carry on as it works for them, however those more recently qualified do practice more EBP. (B:7).*
- 29.** *There needs to be a consensus on them as many are varied according to trust. Also most are outdated and are compiled mostly by obstetricians not midwives. (B:7).*
- 31.** *It is difficult to provide EBP care when your mentor uses practices that are based on tradition. I would like to change my practice to suit the needs of the woman however going against midwives can prove difficult. (B:2).*
- 32.** *As a student it can be difficult to question an experienced midwife, however in my final year I have felt more confident to do this. My mentor does practice EBP, I've only questioned other midwives practices I've worked with. (B:2).*
- 33.** *As a student it's sometimes difficult to practice evidence due to mentors' perception of what is good. (B:9).*
- 34.** *Midwives know the evidence but are unwilling to change. They say "this is evidence but we do it like this instead"! (B:8)*
- 35.** *I would like to use EBP as a qualified midwife but often a number of mentors don't facilitate it and with some I don't feel strong enough to challenge the mentors practice. (B:8)*
- 37.** *When with a mentor you feel you have to adopt your own practice to a degree to 'come in line' with their practice. However, you know that when qualified you will practice completely how you want to – EBP. (B:8)*

38. *It is only considered in certain situations. However anything 'out of the ordinary' like different positions in labour and anything along those lines tend to be disregarded. Traditional practice tends to dominate within the clinical environment. (B:8)*
39. *It is a proven method to change practice for the better so that can be a good thing. (B:8)*
40. *It is done in some cases however midwives do tend (what I've seen) to not follow EBP. (B:8)*
42. *EBP is under utilised, partly because people don't like change and are fearful of it! (B:7).*
44. *Hospital protocols & medical staff plus the nature of our highly medicalised unit, can sometimes mean every woman receives the same treatment, which in the case of low risk women the evidence does not support this. (C:10)*
45. *It sometimes comes across that EBP is used by some members of staff, but not all, even if new guidelines have been set some people find it hard to change their ways. (C:10)*
46. *I understand that EBP should underline all clinical practice, this does not always happen. As a student I don't feel that I can change practice, therefore I copy what my mentor does. However, I am building my own way of practicing evidence. I look forward to working like this once qualified. (C:10)*
47. *Some local policies are not evidence based re-routine admission CTG's. However, as a student we would be thought of as 'cocky' if we were to challenge traditional practice. (C:10)*
48. *Some midwives are more knowledgeable of current evidence than others. These midwives will practice/inform women etc using current evidence. Others are unaware and practice how they have always done i.e. some midwives still don't allow eating following C Section & will wait for 'bowel sounds. Up to date midwives are happy to allow diet following CS. (C:10)*

- 49.** *Some policies are not based on current EBP e.g. CTG's. Think you have to take into account learning experience and learning through experience into account particularly in areas where there is a lack of research. Think we can learn a lot from some 'traditional' methods if they appear to work. (C:10)*
- 50.** *It is difficult to pass information on to women that I care for: sometimes I know that what I tell them is not evidence-based, and I also find that there is a lack of input from midwifery researchers into the formulation of practice guidelines. (C:11)*
- 51.** *In the clinical setting EBP is apparent in most protocols. NICE guidelines are followed which is based on up to date current evidence. Some policies within the clinical setting do not take into account current evidence such as admission CTG's for all women which evidence has proven should only be carried out on high risk women. (C:11)*
- 52.** *I think at the trust I am based does practice evidence based midwifery care. I have read through protocols and have, however seen they are not based on best evidence i.e. CTG on low risk women (admission CTG), no eating and drinking in labour. (C:12)*
- 53.** *Local policies make it very difficult to employ EBP e.g. local policy dictates that every woman has an admission CTG but this is not supported by evidence. (C:12)*
- 54.** *I feel the use of EBP are not always used as other 'traditional methods' work better. (C:13)*
- 55.** *In my unit most of the midwives practices evidence based midwifery most of the time. Our protocols on the whole, are also evidence based. (C:13)*
- 56.** *Sometimes as students changing practice is difficult and very often after a mentor has taught you a particular way of performing practice they expect you to do it their way. Very often no considering of the EBP. (C:13)*
- 57.** *Mostly, practices within my trust are evidenced based. However, a lot of the senior midwives decline these, as their experiences teach them other methods. (C:14)*

58. *Some midwives are set in their ways and do things as they always have. (C:14)*
59. *They are largely adopted policies/protocols but not as much on an individual bases. (C:14)*
60. *The basic principle is there, it is just not always employed. (C:15)*
61. *Generally, EBP is only really part of a guideline or policy. Those midwives that challenge practices are generally highly skilled and academic. In the third year your more likely to justify your changes in practice as a 3rd year “knowledge is power”. (C:15)*
62. *Although practices are evidence-based (e.g. guidelines that influence practice) some are based on research that has been proven/ recognised to be flawed (e.g. IOL). So the midwife should be up to date herself. But this also poses a difficulty as you know you are practicing on flawed evidence. (C:15)*
63. *I do feel that sometimes tried and tested measures, although not evidence based are beneficial and work. E.g. where is the evidence based regarding use of savoy cabbages for engorgement and yet it is seen to be good and beneficial. (C:15)*
64. *EBP is of the up most importance within my hospital however some practices are based upon traditional practices. (C:11)*
65. *EBP is an essential part of midwifery practice to reduce morbidity & mortality. However, it doesn't take into account staff shortages & number of staff on duty at any given time. (C:13)*
67. *All guidelines are evidenced based, however some traditional practices are not covered by evidence but do in practice work. (C:14)*
68. *It is evidence base but is it qualitative –does it take the patient into account, her thoughts & feelings. (C:14)*
69. *When hospital policies are not based on current best evidence e.g. NICE guidelines on admission CTG's, I do not feel able to practice evidence based care. (C:10)*

- 70.** *As I mentioned earlier, midwives (mentors) sometimes question our practice even though evidence based. For example during deliveries, hands off or hands on, each midwife wants you to practice how they do. (C:10)*
- 71.** *I can see big efforts have been made to introduce EBP. However this is more visible with 'medical obstetric issues. I feel it can diminish the natural, caring, intuitive part of a women's birth experience. It can make midwifery more medical. (C:10)*
- 72.** *Midwives work within the limitations of the policies of the unit so as long as these are up to date & evidence based then most midwives practice should be. (C:10)*
- 73.** *99% of all midwives use up to date, EBP. (C:15)*
- 74.** *Often we get taught different ways of doing things depending on which midwives we work with. It is unreasonable to expect students to question experienced midwives practice as this requires confidence & assertiveness. Sometimes I have been told to do something & thought 'I won't do it this way when I'm qualified because I know the evidence says not to. (C:15)*
- 76.** *It very much depends on the situation. (C:15)*
- 78.** *Within my Trust all protocols & most of the practice I have seen is evidence-based. (C:15)*
- 79.** *EBP is promoted. (C:15)*
- 80.** *The majority of clinical practice are evidence based. (C:15)*
- 81.** *I have different mentors on every placement so I get the opportunity to get a feel of mixed experience different MW's offer. (E:21)*
- 82.** *Some medicalised practices e.g. CTG admission trace, continuous monitoring, use of ARM & episiotomy are more difficult to refuse. It seems that the non-medicalised but not evidence based traditional midwifery methods are more readily rejected. (E:21)*

- 83.** *I have found 'traditional' practices are more readily used by older MW's who have been practicing for many years, whereas more recently qualified & senior MW's use research that influences current practice. (E:21)*
- 84.** *I would find it difficult to question the practice of a mentor if I felt it was not evidence-based. (E:21)*
- 85.** *As a student you feel you have to work as your mentor does-not always aware which practices are EBP & which are traditional. The protocols are based on evidence & in general are adhered to. (E:21)*
- 86.** *As a student it is very difficult to practice in a way which is different to your mentor-even if you know it is wrong & not evidenced based as your mentor will only pass you if they deem your practice safe & they may not be open to, aware of or trust new evidence-based recommendations. (E:21)*
- 87.** *I think some EBP's have worked & therefore carried out, but there are some practices that are traditional & do not change. (E:22)*
- 88.** *Most practice is EB, although some practices that I have done over my training I am beginning to question. (E:22)*
- 89.** *Sometimes used, mainly more than traditional. I prefer to use evidence based (E:23)*
- 90.** *In the main (EBP) is used however some MW's do continue to use methods not fully researched because other MW's use them (E:23)*
- 92.** *The mentors I have worked with practice using evidence based guidelines & only don't in exceptional circumstances. (E:24)*
- 93.** *Overall if I have been taught something that's evidence based at uni, if I feel confident enough (i.e. depends on the mentor) then I will practice this. (E:25)*

94. *It is used by some midwives more than others, therefore if you get a mentor who is pro-EBP you are more likely to consider & use it than if you are with a 'traditional midwife' (E:25)*
95. *Guidelines & policies / protocols do not always reflect EBP. (D: 17)*
96. *EBP is employed in most guidelines, policies & protocols. I feel the problem is keeping them up-dated. (D: 20)*
97. *It is not a case of sticking to mentor's practice because they have been doing it for years. It is a matter of survival. You are working under your mentor's PIN Number & you have to practice in a way she approves of, EB or not. (D: 19)*
98. *It should be done but progress is slow & some are unwilling to change. (D: 19)*
99. *Mostly good EBP but improvements could be made & some are out of date & should be updated more regularly. (D: 18)*
100. *I believe that things are changing. However, there is still a strong underlying tradition with certain practices & especially more experienced senior midwives. The newly-qualified are much more open to change especially those doing masters. (D:16)*
102. *There is a lack of time for teaching, reflection in clinical practice time. The practicing can be very varied between practitioners. (D:16)*
104. *I think mentors are sadly lacking using EB to their practice or chose to ignore it due to their own intuition & time constraints/ poor staffing in the institution. I also think its an individual rather than institutional thing whether mentors practice EBP & certain mentors do have reputations for not doing. (D:16)*
105. *Most guidelines are EB, however, a prime example where older midwives revert to traditional practice is admission CTG, as they feel 'happier' that they do this. Younger/ newer midwives comply more to EBP (D: 16)*

106. *I often find that some guidelines are robust but in contrast some guidelines lack EB – possibly due to lack of research, ethical limitations etc. (D: 16)*
107. *I feel as a student I do not have the authority to challenge certain practices but look forward to doing this once qualified (D: 16)*
108. *“As practicing midwives we should be implementing EBP. Guidelines should be up to date & regularly examined & altered if necessary. Research should be widely available in the local setting of the maternity unit & in update study days” (D: 16)*
109. *Ref Q 22- feet on hips & using valsalva’s manoeuvre (D: 16)*
110. *There is not an evidence-base for all aspects of practice as there isn’t any research been carried out, therefore practice goes on experience & tradition. (D:16)*
111. *EBP does exist on most aspects of midwifery. Traditional practices still exist this tends to be midwives who have been qualified for a number of years when these methods were first used. (D:16)*
112. *It is very much dependent on who your mentor is as to how much you are encouraged to discuss/apply current research. I have been very lucky as all my mentors encourage me to do this. However, some medical staff can be very authoritarian so I feel I don’t have the authority but I challenge them via my mentor if I feel I need to (D:16)*
113. *It is difficult to go against the way your mentor does things, especially as they are the person who is marking your practice (D: 16)*
114. *Some midwives practice without reference to EBP & are reluctant to change, but not all midwives operate in this way (D: 16)*
115. *Unfortunately there are senior midwives who would not accept your knowledge with regards to EBP. As a student you are a number & used to alleviate some of the demands placed on the environment (D: 16)*

117. *It depends on your mentor. It depends if your mentor is newly qualified, some newly qualified m/w are very up to date with current practice! Some is routine & not EBP, glucose testing for diabetes with dipstick (D: 16)*
118. *Good in theory however at present seems a long way off having all practices based on evidence, a lot remains ritualistic (D: 16)*
119. *EBP ensures a high standard of care with positive outcomes. However not all evidence & research is good quality & some are flawed e.g. Breech trial (D: 16)*
121. *I would clinically practice in an EB manner however I would not challenge my mentor as they would take no notice of a student (D: 16)*
122. *Mentors sometimes insist on things being done their way (D: 16)*
123. *It is always in the back of my mind that my mentor will grade my performance & irrespective of uni stating this will be fair-its not!! (D: 16)*
124. *It is difficult to change things as midwifery culture & tradition seem strong & fixed I have not worked in delivery suite yet (D: 16)*

Question Aspect 4:

What are your overall comments about challenging a practitioner's traditional practices (may or may not be your personal mentor)?

1. *I have challenged practice before but I find it difficult especially when approaching experienced staff. (A:1).*

- 2.** *I would ask questions so the M/W does not feel I am challenging her practice and then explain how I am taught at University. I have never actually done this. (NB see student's previous comments to aspect 3. (A:1).*
- 7.** *Have huge variety of mentors at Would challenge if felt confident with that person and could think how to put it before opportunity passes. Often so busy-no time to reflect or ask questions/challenge afterwards. (A:1).*
- 8.** *Providing it is safe practice, i.e. re-visiting the purple line instead of doing VE to determine full dilatation and is less stressing for the client. (A:1).*
- 9.** *I have challenged my mentor on practice and she agreed with me and has now changed her practice. I am always encouraged to challenge by University. (A:4).*
- 10.** *My mentor is always open to discussing and building upon performances through reflection and examining new procedures, therefore recommending new practice isn't an issue. (A:4).*
- 11.** *Myself and my personal mentor have such a relationship that I could question her practice. However, I may not always feel confident to challenge certain midwives /doctors. (A:5).*
- 13.** *I do not have the confidence to challenge another midwives practice. (A:5).*
- 14.** *I feel it is dependant on who/what I am challenging. Midwives that I work with often and have a good relationship with I would feel confident in entering a discussion with. However, with some medical staff or M/W I do NOT know very well I would probably not challenge them directly due to lack of confidence/ fear of confrontation. (A:5).*
- 17.** *It would depend who she was. There are some that I absolutely would not challenge. (A:2)*
- 19.** *Very difficult to challenge practitioners when you are a 'student' as you don't want to get a name for yourself. (NB Student had ticked agree to question 25 & ticked disagree to question 27 & 28. (A:3)*

20. Refers to: *question 25 depends on M/W some totally resent change.* (A:3)
21. *Difficult, but must do to seek their opinion.* (A:3)
24. Refers to: *question 25 I proactively debate / challenge a practitioner's traditional practice. Q 26: Depends on midwife. Q 28. I have found practitioners open to new ideas, as they are also keen to keep their practice up to-date, depending on practitioner some are authoritarian and resent new ideas, or challenges, one has to judge it.* (A:3)
25. *I have challenged some practitioners traditional practices (even a senior consultant). However, if you can do this in a sensitive way it normally evokes a stimulating debate and a positive outcome.* (A:3)
26. *Some mentors are very strong characters and will not be challenged. Can make student's life difficult.* (A:3).
27. *Some mentors are easily approachable and it is not a problem to question an outdated practice. This can be done humorously in fact! However, there are others who may not accept, or who may be offended by the questioning of her practice by a student. I have experienced both types.* (A:1).
28. *It is difficult, care must be taken to challenge an experienced midwife with some tact.* (B:6).
29. *I have done so and found I have been labeled as a trouble maker and as a result I was not spoken to by certain members of the midwifery team* (B:6).
31. *It is easy to say that you would challenge your mentor however in reality it is difficult. It is also important to fit in because then you have more of a chance of securing a job once qualified.* (B:2).
32. *As a student it can be difficult to question an experienced midwife, however in my final year I have felt more confident to do this. My mentor does practice EBP, I've only questioned other midwives practices I've worked with.* (B:2).

- 34.** *You do not want to challenge midwives so they don't see you as the trouble causer. (B:8)*
- 35.** *As a student it is difficult because of attitudes, many mentors resent students because of this questioning. This is not always the case with all mentors. (B:8)*
- 37.** *Regarding challenging a mentor- if it was a dangerous situation then I would express my concerns but it will depend on the particular midwife. As mentioned above –there is an element of 'going along with it' to 'not rock the boat' whilst you are with a particular midwife. (B:8)*
- 38.** *Very, very difficult! You get yourself a bad name if you choose to speak out, our year have been labelled the 'trouble makers' as we have previously challenged the views of midwives with something so simple as a use of a birthing ball. (B:8)*
- 39.** *I have challenged mentors and have been humiliated in front of the woman and her family and also the other midwives and Dr's, but if I think what she is doing is wrong I will continue to challenge. (B:8)*
- 40.** *I wouldn't feel confident to do it. (B:8)*
- 42.** *Some mentors would see you as arrogant if you challenged their practice. They expect you to be seen and not heard. Students don't challenge as they don't want to get a name for themselves. (B:7).*
- 44.** *It is difficult to challenge you do not know how they will react and I want people to like me & fit in with the team rather than appearing difficult (I know this is wrong). (C:10)*
- 45.** *I haven't challenged anyone yet, but I think staff should be encouraged to attend skill's updates etc. It is difficult to confront an experienced member of staff 1). I don't like confrontation. 2). I, as a student don't want to say I don't like the way someone practices based on evidence. (C:10)*

46. *If I felt confident with the mentor I would say something like 'at university we have been told to..., do you think it is better to do it this way?' I would not challenge a midwife if I didn't know her or had only worked with her once. However, if I felt something was dangerous, I would speak up. (C:10)*
47. *Students can sometimes be 'bullied' by mentors if they speak up so it is often easier to be quiet. (C:10)*
48. *It is hard for junior members to challenge senior staff. I wouldn't challenge staff as they are 'above me' and I am not assertive enough. I also don't want to be disliked (as I want a job when I qualify) or perceived as being 'cocky'. (C:10)*
49. *Some mentors have explicitly 'given me permission' to challenge their practice & actively encourage me to bring in my own ideas and studies I have read which has been good. Not all mentors encourage this though. Obviously it is easier to challenge a practitioner's practice if you have evidence to support it & you have a good working relationship with them. I do think that there is an element to 'fit in' especially as a student. (C:10).*
50. *You swiftly learn which practitioners or mentors you can challenge! A student must be thick skinned to do this. There is also a problem in that you may become known as a dissident, and so have problems in gaining a job at the end of your training? (C:11)*
51. *I do express my evidence based learning from university to my mentors, and I feel they do listen and take the information on board. I don't feel this will definitely change their own traditional practice but at least they have been made aware of research that they otherwise may not have known about. (C:11).*
52. *I would never challenge a midwife but I have no problem asking why they did something different to either a) evidence based, b) another midwife. I see questioning them different to challenging. (C:12).*
53. *It is very difficult to challenge some one who has been practicing for 25 years when you have only been a student for 2 years! (C:12).*

- 54.** *As a student, some practitioners are happy to know current EBP, but some feel that you are criticising their experience & practice. (C:13).*
- 55.** *I often challenge practice, asking for clarification, but would never go against a direct instruction. Q 26- depends on the individual mentor! (C:13).*
- 56.** *I would challenge if I was confident about the evidence, but there is always an element of doubt, especially when the mentors have more experience. (C:13).*
- 57.** *I feel powerless to challenge someone else's practice-all I can do is alter the way I practice when I qualify. (C:14)*
- 58.** *I would find this difficult to do, especially if I was not equipped with the evidence in my hands to back points up. (C:14)*
- 59.** *I think most staff would be 'offended' if I questioned their practice. (C:14)*
- 60.** *It depends if you have research to back you up and if the outcomes would be seriously affected. (C:15)*
- 61.** *Time where I have challenged a practitioner, I have received a sharp response, as if I'm attacking them, when in fact I'm looking out for the woman's best interest. Intrapartum is the most difficult time place to challenge a midwife. (C:15)*
- 62.** *Difficult to do, but beneficial to both parties i.e. you could present the evidence, but the mentor may have experience in practice. Challenging a practice is not just about showing who knows best, but about sharing info. (C:15)*
- 64.** *I would challenge a practitioner if I thought their practices were harmful. (C:11)*
- 65.** *Challenging is the wrong word but I would certainly 'suggest' current research/evidence if it is proved to improve practice. (C:13)*

67. *This would depend upon the person I was challenging & my knowledge of the subject. (C:14)*
68. *All the mentors that I have worked with are very interested in EBP & frequently ask which way we are taught at university. (C:14)*
70. *As we are students I find it very difficult to question other midwives practices. I don't want them to have negative thoughts about me even though it's probably for the best if I said something! (C:10)*
71. *If I know the mentor I will always ask & most of them are fine with this & discuss the issue. Some aren't & you make sure you don't work with them. Doctors sometimes have very little time for a lowly midwifery student. (C:10)*
72. *It is difficult to challenge a qualified member of staff as a student as they say things like you will think differently when you are qualified. (C:10)*
73. *There are ways to bring your own knowledge into the clinical setting without upsetting people, though it can be difficult. (C:15)*
74. *Experiences vary massively in clinical practice depending on which midwife/mentor you are working with. It's difficult to complete this question as a result because I might 'strongly agree' if thinking about one person but 'strongly disagree' if thinking about another. (C:15)*
75. *I would not challenge a practitioners practice but depending on the individual would have a discussion with them. (C:15)*
78. *It depends on the way you challenge their practice e.g. not appropriate to challenge in front of woman but better if done when on your own. (C:15)*
79. *Feel awkward about challenging but would still comment on evidence. (C:15)*
80. *I agree it is difficult to challenge traditional practice in individual midwives, but would now as a senior student. (C:15)*

- 81.** *It is difficult to question clinical staff when they have practiced for so long. (E:21)*
- 82.** *Although it is easier to go with the flow, I cannot, because the care I give a woman & her experience of pregnancy / labour is more important than my 'fitting in' on the ward. (E:21)*
- 83.** *It's always difficult to challenge the practice of a qualified MW when you're a student, you're not always seen as capable or competent-unless they do not practice safely. (E:21)*
- 84.** *As a student I would have to think that the non EBP was detrimental to the woman in order to challenge it as I have less experience than a qualified MW. (E:21)*
- 85.** *I don't think my mentors stray too far from the protocols set in our unit. I have not had much experience of a time when I have felt the need to challenge what my MW is doing. However, she always values my opinion & I do feel I could question her practice if I was unsure of why she was doing something. (E:21)*
- 86.** *As a student we have the most up-to date knowledge are reviewed in practice as knowing little & still learning. If you do comment on anothers traditional practice you are often told that you will see that it is better than the evidence-based way when you've been qualified for a while. Some take offence at having their practice challenged. (E:21)*
- 87.** *I feel as a student that I am not confident enough to question a practitioners practice. I feel I do not have the authority to do so. (E:22)*
- 88.** *It depends on the way you challenge, rather than trying to undermine your mentor. Quite often a MW will ask about current research. (E:22)*
- 89.** *As a student MW I don't feel I am the person who should challenge a qualified MW. (E:23)*
- 90.** *Not a good idea this undermines the MW & gives you a poor reputation. Difficult to respect them. (E:23)*

91. *It would depend on my own beliefs & evidence or evidence-based guidelines I had read as to what I would chose to do but would not criticise the method my mentor chose if they are happy & confident with it. (E:24)*
92. *If a MW did employ traditional practices instead of EBP, I think this would be questioned (E:24)*
93. *I'd like to think I would challenge if I felt strongly about something but then again it depends who the practitioner is, & the consequences of doing so. (E:25)*
94. *Very difficult – as a student (or NQ Midwife) I would feel I lacked experience or authority to challenge a practitioner unless what they did was clearly dangerous. (E:25).*
95. *As a student midwife I am wary to challenge his/her (mentors) methods as that person will be responsible for my assessment. (D: 17)*
96. *If EB research goes against clinical practices then I would challenge the guidelines with my mentor through just stating the EB research I have been taught at University. (D: 20)*
97. *You have to be very careful. This is the person who assesses & grades your clinical practice. You have to be familiar with your mentor & 'challenge' her in a non-threatening way. Even then I would still practice as she practices. It's a matter of respect. (D: 19)*
98. *I mostly would not challenge my mentor. I have strong ideas about how I will practice. (D: 19)*
99. *Most mentors & practitioners react well to challenges regarding EBP but this needs to be approached in the right way as some mentors do react badly. (D: 18)*
100. *I think that it is much easier as a more senior student but even then it depends on the mentor themselves. (D:16)*
102. *Mentors comment on not having time to keep up with EBP, so they often enjoy having discussions about new research. (D:16)*

- 104.** *Some mentors get offended if you try to question their way & think that your being 'uppity' to challenge their authority. I think they are more likely to stick to guidelines rather than EBP to guide their practice. I know its shallow but sometimes I am reluctant to challenge mentors as I don't want to upset them & fair badly on the mark they give me. (D:16)*
- 105.** *I feel qualified staff can often feel offended of you challenging their practice & because of the state of staffing in midwifery it is often impossible to change mentors if you do not agree with their practice. I would question things & ask for reasoning why they revert to traditional practice but I don't think I'd be able to get them to change their practice. (D: 16)*
- 106.** *I don't feel I have the power or enough confidence to challenge all midwives who I have met who haven't practiced with sound EB (D: 16)*
- 107.** *I would not challenge my mentor in front of the woman & her family. My mentors seem to enjoy discussing their methods of clinical practice although whether this is discussion or justification is questionable. I think it is easier to go with the way things are done but this is not a good reason to do so (D: 16)*
- 108.** *It is very difficult as a student to question a 'qualified' midwife's practice, particularly early on in the course. However, this becomes easier as you become more senior, and this can be done in a sensitive & careful way! NOT in front of staff or the woman. (D: 16)*
- 110.** *Don't feel I would have the confidence as a student to challenge practices due to the midwives experiences. (D:16)*
- 111.** *Depends on the practitioner & if they would react in a good way to comments. Some are not approachable. (D:16)*
- 112.** *Again it is very much dependent on the relationship you have with your mentor. "Challenge" implies confrontation –I have never confronted, I have, however, always been encouraged to question, I think that is the more beneficial approach as it encourages learning and understanding. (D:16)*

- 113.** *It would be easier to challenge if the feeling was that you would be marked down, or labeled as difficult. (D: 16)*
- 114.** *Some mentors are easier to approach than others. Therefore some mentors I would ask for rationale for their practice. Others I feel too intimidated by them & by what their reaction will be to being asked to explain why practice is so. (D: 16)*
- 115.** *Some mentors appreciate your knowledge. However, some can become quite defensive with # regards to their traditional practices. (D: 16)*
- 116.** *The women is the main concern (D: 16)*
- 117.** *It is very difficult to challenge a mentor if she/he is busy & they may be offended. It is difficult to challenge practice because your mentor has to sign your clinical document & grade you. She may grade you harshly if you challenge her. You may be ostracized if you challenge practice & be excluded from break-times & social niceties (D: 16)*
- 119.** *Its hard sometimes but for my learning, I think it's important. Some mentors are more approachable & easier to talk to. (D: 16)*
- 122.** *Tentative suggestions can be made-but I am sure I will conform to the norm whilst training & then become an evidence based maverick when I qualify!!! (D: 16)*
- 123.** *The culture on the midwifery wards seems to make midwives uncomfortable if as a student you try to discuss or question practices. (D: 16)*
- 124.** *Do not generally have problems challenging & sometimes feel like I don't fit in (D: 16)*

Appendix II.

Coding Open-ended Responses

Appendix II: Coding Open-ended Responses (Number represents a Student's ID)

Student ID	What are your <u>overall</u> comments about what you are taught in the Uni setting in relation to midwifery practices?	What are your <u>overall</u> thoughts about the use of EBP's in the clinical setting?	What are your <u>overall</u> comments about challenging a practitioner's traditional practices?	<u>Development of Themes</u>
1 (A:1)		<i>Can be difficult to use knowledge of EBP in the clinical setting</i>	<i>I have challenged practice before but I find it difficult when approaching experienced staff</i>	Difficult to use knowledge of EBP in practice/ difficult to challenge experienced staff
2 (A:1)		<i>Some traditions I would like to stop, however, all MW's do this & would find it hard to break</i>	<i>Would ask questions so the M/W does not feel I am challenging her & then explain how I am taught at Uni. I have never done this</i>	Would like to stop some traditions but are hard to break. There are ways to challenge
3 (A:1)	What is taught in Uni is good	<i>All the MW's I have worked with use a traditional approach to... I personally find the traditional approach is better despite the evidence not supporting this.</i>	<i>Once tried to question practice that -I knew this was not EB- but was told just to do it to keep the consultant happy! I was shocked & disheartened.</i>	Uni is good. Workplace is: Obeying orders / Feeling disheartened Powerless Supports Tradition
7 (A:1)	<i>Sometimes practices we are taught are "in an ideal world" & not subject to pressures of time, lack of staff, time & limited resources</i>	<i>Use of EBP is subject to realities of workplace. Even as 3rd yrs, still uncertain about what practice is EB & what is tradition</i>	<i>Would challenge if felt confident with that person & could think how to put it. Often so busy-no time to reflect or ask questions/challenge afterwards.</i>	Uni teaches 'ideal world' Workplace is: Too busy-no time to question. Not confident to challenge
8 (A:1)	What is taught in Uni is EBP. anecdotal practice is probably the most rewarding	<i>Many protocols are <u>not</u> up to date, therefore how can they be research based, & abiding by them even when it is unnecessary is a total waste of time & money</i>	<i>Providing it is safe practice, would not challenge if it benefits the client</i>	Uni teaches EBP Values anecdotal / Protocols are not EB. Would not challenge if benefits client
9 (A:4)	<i>Taught up to date EBP at Uni. Some MW's keep themselves up-to-date, some do not, which can cause conflicting advice</i>	<i>EBP is widely used in ..., however, some MW's stick to 'tried & trusted'</i>	<i>Have challenged my mentor who agreed with me & has now changed her practice. I am always encouraged to challenge by Uni</i>	Uni teaches EBP & encourages to challenge <i>some MW's stick to 'tried & trusted causes conflict</i>
10 (A:4)	<i>Uni..is up-to date. However, as a student you need to consider the Trust policies</i>	<i>My mentor is open-minded with regards to EBP</i>	<i>My mentor is open to discussing & improving practice... , therefore recommending new practice isn't an issue.</i>	Uni.is up-to date. need to consider Trust policies mentor is open to discussion
11 (A:5)	<i>Some distinct differences</i>	<i>Some practices & guidelines are not EBP</i>	<i>have a relationship with my mentor that I could question her practice. However, I may not always feel confident to challenge MW's Drs!</i>	Distinct differences. practices & guidelines not EBP lacks confidence to challenge
13 (A:5)	<i>Uni ..is up-to date, we can't escape the fact that M/W's use old practice, as you are practicing on their 'number', we must do it how they want.</i>		<i>do not have the confidence to challenge another MW's practice</i>	Uni.is up-to date mws use old practice. as practicing on their 'no', must do it how they want. lacks confidence to challenge
14 (A:5)		<i>Sometimes very difficult to implement into practice due to policy/guidelines which are 'out of date'; or practice traditions that some MW's are reluctant to change</i>	<i>Dependant on who/what I am challenging .if I have a good relationship I would feel confident. Some Dr's or M/W I would not challenge due to lack of confidence/ fear of confrontation</i>	Difficult c/o out of date policies/ traditions some reluctant to change. not challenge c/o lack of confidence fear of confrontation
16 (A:2)	<i>MWs tend to use EBP...are happy to listen to any new information students have</i>			MWs use EBP...are happy to listen to new information
17 (A:2)	<i>difficult to tell "old style" MW's who have been qualified for years, that their way is wrong, you adopt their ways for an easy life & so they will sign your sheets!!</i>	<i>Few & far between...policies are there, but I don't know how many MW's really know them or understand them.</i>	<i>depend who she was. There are some that I absolutely would not challenge</i>	Difficult to tell "old style" MW's, that their way is wrong you adopt their ways for an easy life & so they will pass you

19 (A:3)		<i>EBP is used in the clinical setting the majority of the time however, traditional practices still go on</i>	<i>Very difficult to challenge practitioners as you don't want to get a name for yourself. (NB ticked agree to Q 25 & ticked disagree to Q 27, 28</i>	EBP used in practice traditional practices go on difficult to challenge don't want a bad name
20 (A:3)	<i>Although I know EB practice is usually better, I find myself being almost pushed/ bullied into my mentors way of practice</i>	<i>I sometimes find it hard to introduce EBP some M/W are keen to learn what we have learnt in Uni</i>	<i>depends on M/W some totally resent change.</i>	I know EB practice is usually better, but am almost pushed /bullied into my mentors way of practice who resent change
21 (A:3)	<i>Does not always match what taught in Uni</i>	<i>It is in use but not routinely followed</i>	<i>Difficult, but must do to seek their opinion</i>	Does not always match what taught in Uni. Must challenge to get their opinion
23 (A:3)	<i>What is taught in Uni is often difficult to get across to the older MW's in practice</i>			What is taught in Uni is difficult to get across to the older MW's
24 (A:3)		<i>Sometimes a mw believes they are informing you of EBP, when it is not, it may be based on a consultants opinion. Can be hard to give women proactive advice</i>	<i>proactively challenge a MW's traditional practice. Depends on MW some open to new ideas, some are authoritarian & resent new ideas, or challenges, one has to judge it</i>	Mw believes they are informing you of EBP, when it is not can resent new ideas, or challenges There are ways to challenge
25 (A:3)		<i>Some MWs don't base their care on EBP, but Uni highlights the importance of this & enables me to practice current research</i>	<i>have challenged some traditional practices (even a consultant). if done in a sensitive way normally evokes a stimulating debate & a positive outcome</i>	Uni highlights the importance of using EBP There are ways to challenge
26 (A:3)	<i>difficult to promote any EBP taught in Uni. <u>Some</u> MW's are <u>very</u> set in their ways!</i>	<i>Employing EBP is vital</i>	<i>Some mentors are very <u>strong</u> characters & will not be challenged. Can make student's life difficult</i>	Difficult to promote EBP some mws set in their ways will not be challenged. make life difficult
27 (A:1)	<i>uni teaches us EBP, if mentors practice is safe, then it is often mirrored- if unsafe then it is questioned obviously!</i>	<i>clinical setting uses EBP. Some 'rituals' continue despite a lack of evidence students begin to define 'good practice' by the 3rd year & becomes more confident Able to do things different to mentor by offering evidence</i>	<i>Some mw are approachable & it is not a problem to question outdated practice. This can be done humorously others may not accept, or who may be offended by the questioning of her practice</i>	Uni teaches us EBP, but traditions continue. By 3 rd year more confident to do things differently to mentor by using EBP. There are ways to challenge
28 (B:6)	<i>Initially shocking to discover how controlled (by policies) the labour was for women</i>	<i>Older MW's appear to be stuck in 'tradition' & carry on as it works for them</i>	<i>is difficult, care must be taken to challenge an experienced midwife with some tact</i>	There are ways to challenge
29 (B:6)	<i>Very different from reality. Can be demoralising & disappointing</i>	<i>There needs to be a consensus on them as many are varied according to trust. Also most are out-dated & are compiled mostly by obstetricians not MW's</i>	<i>I have done so & found I have been labeled as a trouble maker & as a result I was not spoken to by certain members of the midwifery team</i>	Different from reality. Can be demoralising & disappointing
31 (B:2)		<i>difficult to give EBP care when your mw uses traditional practices. would like to change my practice to suit the needs of the woman however going against mw can prove difficult</i>	<i>It is easy to say that you would challenge your mentor however in reality it is difficult. It is also important to fit in because then you have more of a chance of securing a job</i>	Difficult to give EBP care when mw use traditional practices important to fit in c/o increase chance of getting a job
32 (B:2)	<i>majority of what is taught is linked in practice, but there were occasions that are seen different to what is taught in Uni.</i>		<i>can be difficult to question an experienced midwife, however in my final year I have felt more confident to do this.</i>	Mostly linked but some differences. Difficult to question now in 3 rd yr feel more confident
33 (B:9)		<i>sometimes difficult to practice evidence due to mentors' perception of what is good</i>		Difficult to practice EBP as depends on mw ideas of what is best
34 (B:8)	<i>Sometimes lecturers are too far removed from reality</i>	<i>MW's know the evidence but are unwilling to change. They say "this is evidence but we do it like this instead"!</i>	<i>You do not want to challenge MW's so they don't see you as the trouble causer.</i>	Lecturers removed from reality. Mw unwilling to change. Don't want to be seen as trouble causer

35 (B:8)	<i>Uni presents an unrealistic image, practice is very different & unfortunately we follow the mentors practice</i>	<i>I would like to use EBP as a qualified midwife but often a number of mentors don't facilitate it. I don't feel strong enough to challenge some mentors</i>	<i>it is difficult because of attitudes, many mentors resent students because of this questioning</i>	Uni gives unrealistic image, sadly we follow mws. Not strong to challenge & mws resent it. Will use EBP when qualified
37 (B:8)	<i>definitely a 'theory practice' gap</i>	<i>you feel you have to adopt your practice to 'come in line' with your mentors. you know that when qualified you will practice completely how you want to – EBP</i>	<i>if it was a dangerous then I would express my concerns but it will depend on the mw. there is an element of 'going along with it' to 'not rock the boat'</i>	Definitely a 'theory practice' gap. Need to adopt mw practice- 'come in line, not rock the boat'. Will use EBP when qualified
38 (B:8)	<i>I agree more strongly with what I am taught in uni but don't often get a chance to carry it out in practice. what we do in uni & practice are like 2 different worlds</i>	<i>It is only considered in certain situations. But facilitating normal holistic care is disregarded. Traditional practice tends to dominate</i>	<i>Very, very difficult! You get yourself a bad name if you choose to speak out, we have been labeled the 'trouble makers' as we have challenged mws</i>	Supports uni but does not correspond with practice-traditional practice dominates get a bad name if you speak out
39 (B:8)	<i>Uni teaches us the "ideal world" & this is not what we see in practice. difficult to practice according to the evidence in the clinical setting.</i>	<i>I think EBP is good/improves practice</i>	<i>have challenged mentors & been humiliated in front of the woman, her family other mws & Dr's, but if I think what she was wrong I will continue to challenge</i>	Uni teaches us the "ideal world" & EB but this is not what we see in practice. Have challenged mw & been humiliated. Not put off
40 (B:8)	<i>We are taught in Uni what should happen in practice & not informed or 'warned' that what we will see may not be EBP</i>	<i>It is done in some cases however MW's do tend to not follow EBP</i>	<i>I wouldn't feel confident to do it</i>	What is taught in Uni should happen not warned mws don't use EBP. Not confident challenge
42 (B:7)	<i>Uni teaches the ideal, - are a wide range of barriers that prevent the ideal from being practiced in the hospital setting.</i>	<i>EBP is under utilised, partly because people don't like change & are fearful of it!</i>	<i>Some mentors would see you as arrogant if you challenged their practice. They expect you to be seen & not heard. Students don't challenge as they don't want to get a name for themselves</i>	Uni teaches ideal, many barriers prevent the ideal from being practiced- people don't like change you are expected to be seen & not heard. we don't challenge as will get a bad name
44 (C:10)	<i>Some of lectures have not been in practice for some time & things have changed. We are more likely to practice as our mentor does, it is difficult to challenge</i>	<i>Hospital protocols, Drs & highly medicalised unit, can sometimes mean every woman receives the same treatment, evidence does not support this</i>	<i>difficult to challenge you do not know how they will react I want people to like me & fit in with the team rather than appearing difficult (I know this is wrong).</i>	Some lecturers are out of date with practice more likely to do as mw does, difficult to challenge want people to like me / fit in with team I know this is wrong
45 (C:10)	<i>difficult to apply somethings we are taught in Uni</i>	<i>It comes across that EBP is used by some staff, but not all, even if new guidelines have been set some find it hard to change their ways</i>	<i>haven't challenged anyone, staff should attend skill's updates. difficult to challenge- don't like confrontation</i>	Difficult to apply what is taught in Uni staff should attend up dates some find it hard to change not challenged c/o confrontation
46 (C:10)	<i>Some lecturers are not as up to date as mw's. Some clinical staff are reluctant to change/update their practice. I take from both & develop my own way</i>	<i>EBP does not always happen. I don't feel that I can change practice therefore I copy what my mentor does. I am finding a way of using evidence look forward to working like this once qualified</i>	<i>If confident with the mw would say something like 'at Uni we have been told. would not challenge a mw if I didn't know her if something was dangerous, I would speak up</i>	Lecturers not up to date can't change practice therefore copy my mw Will use EBP when qualified. There are ways to challenge
47 (C:10)	<i>Local policies are often different to what we are taught in Uni as students we must adhere to these</i>	<i>Some policies are not EBP. we would be thought of as 'cocky' if we were to challenge traditional practice</i>	<i>Students can sometimes be 'bullied' by mentors if they speak up so it is often easier to be quiet</i>	Need to adhere to policies which are not EB & are different to what uni teach. can be 'bullied' by mws if speak up or been seen as 'cocky' so it is easier to be quiet
48 (C:10)	<i>What we are taught in uni does not always reflect in practice</i>	<i>Some MW's are more knowledgeable of current evidence than others. Others are unaware & practice how they have always done</i>	<i>Wouldn't challenge 'above me' not assertive enough. don't want to be disliked or perceived as 'cocky' (want a job)</i>	Uni does not always reflect practice Wouldn't challenge above me- don't want to be disliked / perceived as being 'cocky' wants a job

49 (C:10)	<i>more likely to practice as mws do as they assess me do not want to go against the grain. Tutors who practice are up to date</i>	<i>Some policies are not based on EBP can learn a lot from some 'traditional' methods if they appear to work</i>	<i>Some mws have encouraged me to challenge-bring in my own ideas if you have evidence & good relationship there is an element to 'fit in'</i>	Policies not EB supports traditional methods. practices as mw do as they assess me. Don't want to go against grain. Tutors who practice are up to date. Is element to 'fit in'
50 (C:11)	<i>often taught things that contradict what we see in practice often does not take into account the constraints placed in practice</i>	<i>difficult to pass information onto women sometimes I know that what I tell them is not EBP. there is a lack of input from mw researchers into the forming practice guidelines</i>	<i>swiftly learn who you can challenge! must be thick skinned to do this & may become known as a dissident, & so have problems in gaining a job</i>	Uni teach things that contradict what we see in practice does not take into account practice constraints need to be thick skinned to challenge-seen as trouble maker & may not get job
51 (C:11)	<i>taught in Uni is good & in practice it is good to observe other means of practice.</i>	<i>most protocols include EBP. but some policies don't take into account current evidence</i>	<i>I discuss EBP to my mws I feel they listen & take on board. I don't feel this will change their traditional practice but at least aware of research that they otherwise may not have known</i>	Is good to observe other means of practice policies not up dated. Shared info with mw don't feel they will change their traditional ways
52 (C:12)	<i>Uni good fuels my knowledge</i>	<i>I have read through protocols however seen they are not based on best evidence</i>	<i>I would never challenge a mw but have no problem asking why they did something different</i>	Protocols not EB. Uncomfortable with word 'challenge' but there are ways to challenge
53 (C:12)	<i>taught in uni to employ current best available evidence</i>	<i>Local policies make it very difficult to employ EBP eg local policies are not supported by evidence.</i>	<i>It is very difficult to challenge some one who has been practicing for years</i>	Taught in uni to employ EBP policies make it very difficult to employ EBP. difficult to challenge those who have practiced for years
54 (C:13)	<i>some things taught in uni are not practiced & some are too research based that cannot be transferred to practice</i>	<i>I feel the use of EBP are not always used as other 'traditional methods' work better</i>	<i>some practitioners are happy to know current EBP, but some feel that you are criticising their experience & practice</i>	Taught in uni not practiced & too research based -can't be used. EBP are not always used as other traditional methods work better. Mw act differently to being challenged
55 (C:13)	<i>Whist practicing on another mw's pin, I feel obliged to do things the way they want, even if it is not the way I would choose to practice</i>	<i>most of the MW's practice EBP</i>	<i>depends on mw but often challenge practice, asking for clarification, would never go against a direct instruction.</i>	Practicing on mw's pin- feel obliged to do things the way mw wants, even if it is not the way I would choose Different views of challenging & ways to challenge
56 (C:13)	<i>relating theory to practice is very difficult especially if lectures are not fully up to date with clinical practices</i>	<i>changing practice is difficult, very often after a mentor has taught you a particular way they expect you to do it their way-Very often does not consider EBP</i>	<i>would challenge if I was confident about evidence, but always an element of doubt, especially when the MW have more experience</i>	Theory-practice difficult c/o lectures not clinically up to date. if mw has taught you a way they expect you to do it their way-may be EB Not confident to challenge
57 (C:14)	<i>Theory-practice can be very difficult. MW's have said "what are you doing it like that for" don't have courage to say we've been taught it at uni</i>	<i>Mostly, practices are EBP. However, a lot of the senior MW's decline these, as their experiences teach them other methods</i>	<i>I feel powerless to challenge someone else's practice-all I can do is alter the way I practice when I qualify</i>	In practice told do things differently. senior mws decline EBP as know other ways powerless to challenge. Will do differently when qualified
58 (C:14)	<i>taught about EBP in Uni</i>	<i>Some MW's are set in their ways & do things as they always have.</i>	<i>I would find this difficult to do, especially if I was not equipped with the evidence in my hands</i>	MW's are set in their ways To challenge-need knowledge of subject
59 (C:15)	<i>Some MW's stick to traditional ways. would not question their practice as may come across as 'questioning' their knowledge</i>	<i>They are used in policies/protocols but not as much on an individual bases</i>	<i>I think most staff would be 'offended' if I questioned their practice</i>	MW's are set in their ways. Most would be 'offended' if I questioned their practice

60 (C:15)	<i>does not always link!</i>	<i>The basic principle is there, it is just not always employed</i>	<i>It depends if you have research to back you up & if the outcomes would be seriously affected</i>	What is taught <i>doesn't</i> match EBP not always used. To challenge need knowledge of subject
61 (C:15)	<i>Generally what we are taught in Uni is similar to hospital however, policies & procedures maybe somewhat different</i>	<i>MW's that challenge practices are generally highly skilled & academic. In the 3rd year your more likely to justify changing your practice "knowledge is power".</i>	<i>have challenged a practitioner & received a sharp response, as if I'm attacking them, when I'm looking out for the woman's best interest</i>	What is taught in Uni is similar, policies maybe different. Mw's that challenge are skilled academic. In 3 rd yr can justify changing knowledge is power have challenged-received bad response
62 (C:15)	<i>generally a correlation between Uni & practice I would challenge if I felt it to not reflect what I have been taught & take on board the response</i>	<i>Although practices are EBP some are based on research that is flawed</i>	<i>Difficult to do, but beneficial to both parties can present the evidence, but the mw may have the experience. Challenging practice is not about showing who knows best, but about sharing info</i>	what is taught in Uni is similar practice based on research that is flawed Has different views of challenging & views it as beneficial
63 (C:15)		<i>I feel some tried & tested measures, although not evidence based are beneficial & work</i>		Supports traditional seen it work
64 (C:11)	<i>What is taught in Uni is an ideal way of practicing & may not feasible in practice</i>	<i>EBP is of the up most importance within my hospital however some practices are based upon traditional practices</i>	<i>I would challenge a practitioner if I thought their practices were harmful</i>	Uni –'ideal world'-not always feasible in practice. Would challenge if practice harmful
65 (C:13)	<i>Due to shortages not always possible to employ what Uni teach doing how your mentor does is sometimes the only option for effective time management</i>	<i>EBP is an essential. However, it doesn't take into account staff shortages & number of staff on duty at any given time</i>	<i>Challenging is the wrong word but I would certainly 'suggest' current research/evidence if it is proved to improve practice</i>	Due to shortages not possible to employ what Uni teach doing how mw do is needed do to limited time Sees challenging as wrong word mentions alternative
67 (C:14)	<i>Sometimes theory practice gap is particularly wide however I think this applies to the Uni who have unrealistic expectations of clinical practice</i>	<i>All guidelines are evidenced based, however some traditional practices are not covered by evidence but do in practice work</i>	<i>Depend on person I was challenging & my knowledge of subject</i>	Theory practice gap wide uni unrealistic. Traditional can work. To challenge need knowledge of subject & depends on person
68 (C:14)	<i>Policies differ</i>	<i>It is evidence base but is it qualitative –does it take the individual pt into account?</i>	<i>All mentors that I worked with are interested in EBP & ask what we're taught in Uni</i>	Policies differ values anecdotal care mws supportive of EBP & students
69 (C:10)	<i>There is a huge theory practice divide. In practice you have to do what your mentor wants you to do</i>	<i>When hospital policies are not based on EBP I do not feel able to practice evidence based care</i>		Huge theory practice divide you have to do what your mw wants. As policies are not EBP I do not feel able to practice differently
70 (C:10)	<i>Some mentors would rather you work how they do rather than what we have been told is best practice at Uni</i>	<i>MW's sometimes question our practice even though evidence based, each midwife wants you to practice how they do</i>	<i>very difficult to question MW's practices. I don't want them to have negative thoughts about me even though it's probably for the best if I said something!</i>	Mws wants you to practice how they do. Difficult to question mws as don't want them to have negative thoughts about me even though it's for the best if I said something!
71 (C:10)	<i>Uni teaching is the 'gold star' of clinical practice. hospital policies etc-makes it difficult to practice in this way so I have to do them</i>	<i>EBP is more visible with 'medical obstetric issues. I feel it can diminish the value of anecdotal care making midwifery more medical</i>	<i>If I know the mentor I will always ask & most of them are fine. Some aren't & you make sure you don't work with them. Drs sometimes have very little time for a lowly student</i>	Uni teaches best but policies-make it difficult to practice this way so I have to do them Refers to hierarchy & ways to get by values anecdotal
72 (C:10)	<i>have to adopt my practice according to the mws who may fail me if I do not work the way they do. This means that I do the same task in many different ways</i>	<i>MW's work within the limitations of the policies of the unit</i>	<i>Difficult to challenge a qualified member as they say things like you will think differently when you are qualified</i>	Have to practice according to mw may fail me if I don't work their way. mws work is limited to policies difficult to challenge they say I will think differently when qualified

73 (C:15)	<i>Encouraged to always use EBP, & to be critical</i>	<i>99% of all MW's use up to date, EBP</i>	<i>There are ways to bring your own knowledge into the clinical setting without upsetting people, though it can be difficult.</i>	Encouraged to use EBP & be critical. ways to challenge
74 (C:15)	<i>Is important to be taught best evidence in Uni so when we qualify we can begin to implement it whether that is what we've done previously or not</i>	<i>Get taught different ways of doing things unreasonable to expect students to question mw requires confidence. told to do things & thought 'won't do it this way when qualified as not EBP</i>	As mws practices vary it can be difficult but depends on mw as to whether I would challenge	Important to be taught EBP in uni so when qualified will use even if not used prior unreasonable to expect us to question mws requires confidence
75 (C:15)	<i>Uni staff are not always aware of up to date clinical practices</i>		<i>would not challenge a practitioners practice but depending on the individual would have a discussion with them</i>	Lecturers out of date with practice ways to challenge
76 (C:15)		<i>Depends on situation</i>		Depends of situation
78 (C:15)	<i>Sometimes in uni we are taught very 'idealistic' things which aren't appropriate to the clinical setting</i>	<i>All protocols & most of the practice I have seen are evidence-based.</i>	<i>depends on the way you challenge their practice</i>	Uni teaches 'idealistic'-aren't appropriate in practice. Ways to challenge
79 (C:15)	<i>Generally are evidence based</i>	<i>EBP is promoted</i>	<i>Feel awkward about challenging but would still comment on evidence.</i>	Feel awkward about challenging ways to challenge
80 (C:15)		<i>Majority of clinical practice are evidence based</i>	<i>it is difficult to challenge mws traditional practice, but would now as a senior student</i>	Difficult to challenge but would now as senior student
81 (E:21)	<i>are encouraged to research & critically analyse & not just accept what we read</i>	<i>have different mentors on every placement so get to see different practices</i>	<i>difficult to question clinical staff when they have practiced for years</i>	Encouraged to use EBP & be critical. Difficult to challenge
82 (E:21)	<i>Traditional practices not critiqued in Uni to enable me to reject traditional practice</i>	<i>Some medicalised practices are difficult to refuse but non-medicalised & traditional methods are more readily rejected</i>	<i>Although it is easier to go with the flow, I cannot, because the care I give is more important than my 'fitting in' on the ward</i>	Traditional practices not looked at in uni therefore unable to reject. Can't refuse medical ideas. Care I give is more important than fitting in
83 (E:21)	<i>some lecturers rely heavily on research & are lacking in clinical skills making it difficult</i>	<i>'traditional' practices are more used by older, MW's who have been practicing for many years</i>	<i>It's always difficult to challenge the practice of MW you're not always seen as capable or competent-unless they do not practice safely</i>	Lecturers not aware of practice older mws use tradition difficult to challenge as not seen as competent
84 (E:21)	<i>Gap between theory taught in uni & practice. Many lecturers no longer practicing so cannot always comment on most up to date protocols</i>	<i>would find it difficult to question the practice of a mentor if I felt it was not evidence-based</i>	Would only challenge if the non EBP was detrimental to the woman	Theory-practice difficult c/o lectures not clinically up to date. Would not challenge if not EB, but would if detrimental
85 (E:21)	<i>much of what is taught at Uni applies to practice</i>	<i>you have to work as your mentor does. not always aware which practices are EBP & which are traditional</i>	<i>My mentor values my opinion & I feel I could question her practice if I was unsure of why she was doing something</i>	Uni & practice matches overall. You have to do as mw does. Not sure which practices are EB or tradition. Ways to challenge
86 (E:21)	<i>are taught current practice & made aware of new research</i>	<i>very difficult to practice in a way which is different to your mentor-even if you know it is wrong & not EB. mentor may not pass you if they are not aware of or trust EBP</i>	<i>Despite knowing the up-to date info, in practice we are seen as knowing little. If you comment on a traditional practice you are told that you will see that it is better when qualified Some take offence at having their practice challenged</i>	Difficult to practice in a way which is different to mw-even if you know it is wrong & not EB. May not pass you Are seen as knowing little. If you question are told you will see that it is better when qualified Some take offence at being challenged

87 (E:22)	<i>In uni taught skills to stage we are at! But on placement, do skills that have not yet been taught in Uni- this is good, some lecturers disagree</i>	<i>some EBP's are carried out, but there are some practices that are traditional</i>	<i>I am not confident enough to question a practitioners practice. I feel I do not have the authority to do so</i>	Not confident to challenge do not have authority
88 (E:22)	<i>Usually go with mentors practices if following policies & procedures, based on EBP</i>	<i>Mostly EB, although some practices that I have done in my training I am beginning to question</i>	<i>Depends on the way you challenge, rather than trying to undermine your mentor. Quite often a MW will ask about current research</i>	If following policies go with mws ways to challenge
89 (5:23)	<i>They are helpful & useful. I relate theory to practice, although can sometimes be difficult</i>	<i>Sometimes used, more than traditional. I prefer to use evidence based</i>	<i>I don't feel I am the person who should challenge a qualified MW</i>	Hierarchy
90 (E:23)	<i>Not easy to relate theory- practice because information is sometimes not detailed enough</i>	<i>Mainly EBP is used, some MW's continue to use methods not fully researched because other MW's use them</i>	<i>Not a good idea this undermines the MW & gives you a poor reputation. Difficult to respect them.</i>	Mws use traditions because other mw do. Not good to challenge gives you bad reputation/ undermines mw.
91 (E:24)	<i>Alternative practices sometimes suggested but usually taught practices backed by evidence</i>		<i>Depends on my own beliefs & the evidence I had read as to what I chose. would not criticise my mentor ways if they are confident with it</i>	Sees challenging as criticising. trusts own & mws judgment
92 (E:24)	<i>in 1st & 2nd yr am likely to adopt my mentors practice, they aren't always the way we are taught</i>	<i>mentors I have worked with overall use EBP</i>	<i>If a MW did employ traditional practices instead of EBP, I think this would be questioned</i>	Mismatch of what is taught
93 (E:25)		<i>if taught EB in uni if I feel confident enough (depends on mentor) then I will practice this</i>	<i>I'd like to think I would challenge if I felt strongly about something but it depends who it is, & the consequences of doing so</i>	Depends on mw as to whether I would challenge
94 (E:25)	<i>Sometimes unrealistic practices are taught in uni. Unlikely to practice what we are taught as practice area sometimes very different</i>	<i>if you get a mentor who is pro-EBP you are more likely to use it than if you are with a 'traditional midwife'</i>	<i>Very difficult I feel I lacked experience or authority to challenge a practitioner unless what they did was dangerous</i>	Uni teaches unrealistic more likely to adopt mw ways Difficult to challenge as feels lacks experience & authority
95 (D:17)	<i>Mws do not always encourage EBP.</i>	<i>Guidelines & policies / protocols do not always reflect EBP</i>	<i>I am wary to challenge mws methods as that person will be responsible for my assessment</i>	Mws do not always encourage EBP Guidelines /policies not always EBP mw may fail me if I challenge
96 (D:20)		<i>EBP is employed in most guidelines, policies & protocols, the problem is keeping them up-dated</i>	<i>If EB research goes against practices then I would challenge the guidelines with my mw</i>	EBP is in most guidelines, policies but may not be up-to date Would challenge policies with support
97 (D: 19)	<i>Huge theory-practice gap. mws & lecturers do not communicate re: mentoring & students have little alternative but to do as their mentors do, even if it is not EB</i>	<i>Not a case of sticking to mw's practice because they have been doing it for years. It is a matter of survival. When working under mw's PIN you have to practice in a way she approves of, EB or not</i>	<i>Have to be careful- this person assesses & grades you. Need to be familiar with mw & 'challenge' her in a non-threatening way. Even then would practice as she practices out of respect</i>	Huge theory-practice gap. mws & lecturers don't communicate re: mentoring To survive you have to practice in a way mw approves, EB or not, as mw assesses you –there are ways to challenge
98 (D: 19)	<i>Unrealistic to teach this way & expect students to challenge practices. Tutors & mws do not have mutual respect. Should build bridges to close this gap -this would go along way to using EBP in practice</i>	<i>It should be done but progress is slow & some are unwilling to change.</i>	<i>I mostly would not challenge my mentor. I have strong ideas about how I will practice</i>	Uni unrealistic. Tutors & mws no mutual respect. Should build bridges & could help the uptake of EBP Would not challenge. Have strong ideas about how I will practice
99 (D: 18)	<i>Keen to promote EBP & teach research. However, teaching could be improved or approached differently.</i>	<i>Mostly EBP but improvements could be made, some are out of date</i>	<i>Most react well to challenging but needs to be approached in the right way as some mentors do react badly</i>	Uni promotes EBP. Policies etc EB but some are out of date. Ways to challenge

100 (D:16)		<i>There are strong traditions with certain practices, especially experienced senior mws. Newly-qualified are more open to change & those doing masters</i>	<i>It is much easier as a senior student but even then it depends on the mw</i>	Senior mws use tradition, newly-qualified more open to change. As senior student easier to challenge but depends on mw
102 (D:16)	<i>Mws have alternative practices they find useful & will encourage you to do same.</i>	<i>There is a lack of time for teaching & reflection in practice. Practices vary between practitioners</i>	<i>Mws comment on not having time to keep up with EBP, so they often enjoy hearing about new research.</i>	Mws find other practices useful & encourage you to do same. Mws don't have time to keep up with EBP, but enjoy listening
104 (D:16)	<i>Glad that lecturers make us aware of the discordance we may face & how we can subtly question mws practice</i>	<i>mws are sadly lacking using EB to their practice or chose to ignore it due to their own intuition & work constraints. Certain mws have reputation for not using EBP.</i>	<i>Some mws get offended if you try to question their way & think that your being 'uppity' to challenge their authority. they are more likely to stick to guidelines rather than EBP. I don't want to upset them & fair badly on the mark they give me</i>	Uni warn us of discord. mws chose to ignore EBP due to their intuition & work constraints. mws get offended, think your 'uppity' don't want to upset them & get a bad mark
105 (D: 16)		<i>Most guidelines are EB, however, older midwives revert to traditional practice Younger/ newer midwives comply more to EBP</i>	<i>Staff can be offended if you challenge their practice & because of the hierarchy in midwifery it is often impossible to change mws practices. I would question & ask why they use traditional practice but I don't think they will change</i>	Most guidelines are EB, older midwives use tradition, because of the hierarchy in midwifery it is often impossible to change practices. I would question & ask why they use traditional practice
106. (D: 16)	<i>Sometimes feel pressured to practice the way my mws practice Uni makes us challenge if what we see is not EB.</i>	<i>Some guidelines are robust but some lack EB – possibly due to lack of research, ethical limitations</i>	<i>I don't feel I have the power or confidence to challenge all midwives who do not use EBP</i>	Uni makes us challenge if what we see is not EB feel pressured to practice the way mws practice Some guidelines lack EB Lacks 'power' & confidence
107 (D: 16)	<i>A vast difference between what is taught at university & on clinical placement</i>	<i>I do not have the authority to challenge certain practices but look forward to doing this once qualified</i>	<i>Mws enjoy discussing their methods -but whether this is discussion or justification is questionable. It is easier to go with the way things are done but this is not a good reason to do so</i>	Mismatch between uni & practice. Is easier to go with the way things are done but admits not a good reason. lacks authority to challenge looks forward to doing this once qualified
108. (D: 16)		<i>We <u>should</u> be implementing EBP. Guidelines should be up dated. Research should be available in the clinical unit & included in mw's study days</i>	<i>Very difficult to question mws practice. However, this becomes easier as you become more senior, & this can be done in a sensitive & careful way!</i>	Supportive of EBP. Difficult to question mws practice. easier now as more senior, ways to challenge
109 (D: 16)		<i>feet on hips & using valsalva's maneuver</i>		Supports some traditions
110 (D: 16)	<i>Theory-practice gap is still quite large sometimes what is taught in university is the 'idealistic' view</i>	<i>There is not an EB for all aspects of practice as there isn't any research been carried out, therefore practice goes on experience & tradition</i>	<i>Don't have the confidence to challenge experienced mw's</i>	Wide theory-practice gap what is taught in uni is the 'idealistic' view Practice relies on experience & tradition c/o there is insufficient research. Lacks confidence
111 (D: 16)	<i>They differ greatly in certain aspects.</i>	<i>EBP exist on most aspects of midwifery. But traditional practices are still used by mws who have been qualified for years</i>	<i>Depends on the practitioner & if they would react in a good way. Some are not approachable</i>	Mismatch between theory & practice Mostly EBP exist traditions used by mws who have been qualified for yrs Depend on person
112 (D: 16)	<i>Uni is very EB, however due to changes & updates in midwifery practice, some of our uni information is not up to date</i>	<i>Depends who your mw is as to how much you are encouraged to discuss/apply current research, some medical staff can be very authoritarian so I challenge them via my mw</i>	<i>Depends on the relationship you have with your mw. "Challenge" implies confrontation –I have never confronted, I have always been encouraged to question, I think this is a better approach</i>	Uni very EB, some uni info not up to date Depend on person relation. Challenge implies confrontation, encouraged to question

113 (D: 16)	<i>Some of the traditional methods do work better, than those taught in Uni</i>	<i>Difficult to go against the way your mw does things, as they mark your practice</i>	<i>To challenge -feel you would be marked down, or labeled as difficult</i>	Some traditions work better Difficult to do different to mw may be marked down /labeled as difficult
114 (D: 16)		<i>Some midwives practice without reference to EBP & are reluctant to change</i>	<i>Some mentors are easy to approach. Others I feel too intimidated & uncertain of their reaction</i>	Some mws don't practice EBP & are reluctant to change Depends on mw
115 (D: 16)	<i>EBP underpins practice</i>	<i>There are senior mws who would not accept your knowledge of EBP. We are a number, used to alleviate some of the clinical demands</i>	<i>Some appreciate your knowledge, some are quite defensive with regards to their traditions</i>	Senior mws do not accept your knowledge of EBP & some defend traditions. Used as a 'pair of hands'
116. (D: 16)	<i>Uni teaches the most up to date research, I see alternative practices as being negative</i>		<i>The women is the main concern</i>	Uni teaches up to date research, disapproves alternative practices
117 (D: 16)	<i>Alternative practices are not discussed in uni & is idealistic' i.e. does not consider the strain services are currently under</i>	<i>Depends on mw, if she is newly qualified they are very up to date with current practice Others use routine & not EBP</i>	<i>Difficult to challenge mw if they are busy & may be offended & difficult because they may grade you harshly & you may be ostracised & excluded from break-times & social niceties</i>	Difficult to challenge if busy & may be offended, may grade you harshly may be ostracised & excluded from breaks & social affairs
118 (D: 16)	<i>Often discrepancies between theory taught in uni & the reality of practice</i>	<i>Good in theory but seems a long way off having all practices based on evidence a lot remain ritualistic</i>		Mismatch between theory & practice. We're a long way off having all practices based on evidence, a lot remain ritualistic
119 (D: 16)	<i>Same as my nurse training- uni conflicted with clinical. Mw believe 'that lecturers don't live in the real world' I am confident to practice what I have learnt in uni</i>	<i>EBP ensures a high standard of care with positive outcomes. However not all evidence & research is good quality & some are flawed</i>	<i>Hard but for my learning, it's important. Some mws are more approachable. I am happy to challenge clinical practice</i>	Same as my nurse training- uni conflicted with clinical. Mws believe 'lecturers don't live in the real world'. Aware that some research recommendation are flawed Difficult to challenge but necessary
121 (D: 16)	<i>It is difficult to implement new ideas to old school midwives</i>	<i>I would use EBP however I would not challenge mw as they would take no notice of a student</i>		Would not challenge as they would take no notice of a student difficult to implement new ideas to old school midwives
122 (D: 16)	<i>Mws are sometimes surprised by what we are taught some are willing to adapt, but most wonder why we do it</i>	<i>Mws sometimes insist on things being done their way</i>	<i>will conform to the norm whilst training & then become an evidence based maverick when I qualify</i>	Mws surprised by what we are taught, most wonder why we do it, others insist on doing it their way. Will use EBP when qualified
123. (D: 16)	<i>Clinical area not always receptive to change. Is unrealistic for student to change</i>	<i>Aware my mentor grades my performance & irrespective of uni stating this will be fair-its not</i>	<i>It upsets the culture of midwifery if a student tries to discuss or question practices</i>	Workplace not receptive to change. Unrealistic for students to change Mw may fail me. Questioning can upset the culture
124 (D: 16)	<i>uni education seems far removed from clinical practice</i>	<i>Difficult to change things as midwifery culture & tradition seem strong & fixed</i>	<i>Do not generally have problems challenging & sometimes feel like I don't fit in</i>	Mismatch between uni & practice. Difficult to change things as culture/traditions are strong & fixed Do not have problems challenging but sometimes feel that I don't fit in
125 (D: 16)	<i>mws often say-the theory is...but in practice this...works better- don't tell anyone in Uni</i>			Midwives say: 'the theory is...but in practice this...works better-don't tell anyone in Uni

Appendix III.

Labelling of Data

Appendix III: Labelling of data

Themes on what is taught in the University	Themes on the use of EBPs in the clinical setting	Themes on challenging a practitioner's traditional practices	<u>Labelling</u>
	Difficult to use knowledge of EBP in practice	Difficult to challenge experienced staff	Difficult to use knowledge of EBP in practice Difficult with experienced 'older' staff
	Would like to stop some traditions but are hard to break	There are ways to challenge	Difficult to use knowledge of EBP in practice Ways to challenge
Uni teaches up-to date EBP	Obeying orders / Feeling disheartened Supports Tradition	Powerless	Uni teaches up-to date EBP Must do it the way midwife does / Powerless to change. Some traditional practices are valuable
Uni teaches us the 'ideal world'	Too busy-no time to question	Not confident to challenge	Uni teaches the 'ideal world' Workplace too busy Not confident to challenge
Uni teaches up-to date EBP	Values anecdotal / Protocols are not EB.	Would not challenge if benefits client	Uni teaches up-to date EBP Protocols / policies not based on best evidence Values anecdotal Would not challenge if tradition & benefits client
Uni teaches up-to date EBP & encourages to challenge	Some MW's stick to 'tried & trusted causes conflict		Uni teaches EBP & encourages to challenge Midwives reluctant to change
Uni teaches up-to date EBP	You need to consider Trust policies	Mentor is open to discussion	Uni teaches up-to date EBP Need to adhere to Trust policies Protocols / policies not based on best evidence Mentors respect students knowledge
Distinct differences	Practices & guidelines not EBP	Lacks confidence to challenge	Mismatch between uni & practice Protocols / policies not based on best evidence Lacks confidence to challenge
Uni teaches up-to date EBP	Mws use old practice. As practicing on their 'number', must do it the way midwife does.	Lacks confidence to challenge	Uni teaches up-to date EBP Must do it the way midwife does Lacks confidence to challenge Midwives reluctant to change
	Difficult c/o out of date policies/ traditions some reluctant to change	Not challenge c/o lack of confidence fear of confrontation	Protocols / policies not based on best evidence Need to adhere to Trust policies Lacks confidence to challenge fears confrontation
	MWs use EBP.,are happy to listen to new information		Mentors respect students knowledge
	Difficult to tell "old style" MW's, that their way is wrong you adopt their ways for an easy life & so they will pass you		Difficult to challenge experienced /'older' staff Adopting midwives way for easier life Adopting midwives way so they will pass you
	EBP used in practice traditional practices go on	Difficult to challenge don't want a bad name	Difficult to challenge-Get a bad name
	I know EB practice is usually better, but am almost pushed /bullied into my mentors way of practice who resent change		Mismatch between uni & practice Midwives reluctant to change Bullied into doing it the way midwife does
Does not always match what taught in Uni	Must challenge to get their opinion		Mismatch between uni & practice Challenging is beneficial
	EBP's Difficult to get across to the older Mw's		Difficult with experienced 'older' staff

	Mw believes they are informing you of EBP, when it is not	Mw can resent new ideas, or challenges There are ways to challenge	Midwives reluctant to change Midwives not knowledgeable of EBP Ways to challenge
Uni highlights importance of using EBP		There are ways to challenge	Uni teaches up-to date EBP Ways to challenge
	Difficult to promote EBP some mws set in their ways	Mw will not be challenged. make life difficult	Midwives reluctant to change Difficult to challenge
Uni teaches us EBP	Traditions continue	By 3 rd year more confident to do things differently to mentor by using EBP. Ways to challenge	Uni teaches up-to date EBP As senior student more confident to do things differently to mentor Ways to challenge
		There are ways to challenge	Ways to challenge
Different from reality	Can be demoralising & disappointing		Uni gives unrealistic image Powerless to change
	Difficult to give EBP care when mw use traditional practices important to fit in c/o getting a job		Difficult to use EBP when midwives use tradition Important to 'fit in' - Getting a job
Mostly linked but some differences		Difficult to question, but now in 3 rd yr feel more confident	Mismatch between uni & practice. As senior student now confident to challenge
	Difficult to practice EBP as depends on mw ideas of what is best		Must do it the way midwife does
Lecturers removed from reality	Mw unwilling to change	Don't want to be seen as trouble causer	Lecturers removed from reality Midwives reluctant to change Not wanting to be 'trouble causer'
Uni gives unrealistic image	Sadly we follow mws	Not strong to challenge & mws resent it. Will use EBP when qualified	Uni gives unrealistic image Must do it the way midwife does Will use EBP when qualified
Definitely a 'theory practice' gap	Need to adopt mw practice-come in line. Will use EBP when qualified	Not rock the boat'	Mismatch between uni & practice Must do it the way midwife does Not wanting to be 'trouble causer' Will use EBP when qualified
Support uni but does not correspond with practice	Traditional practice dominates	Get a bad name if you speak out	Mismatch between uni & practice Traditional practice dominates Get a bad name
Uni teaches us the "ideal world" & EB but this is not what we see in practice		Have challenged mw & been humiliated. Not put off	Uni teaches the 'ideal world' Bad experience of challenging Will challenge
What is taught should happen not warned in Uni mws dont use EBP		Not confident challenge	Mismatch between uni & practice Lacks confidence to challenge
Uni teaches ideal, many barriers prevent the ideal from being practiced	People don't like change you are expected to be seen & not heard	We don't challenge as will get a bad name	Uni teaches the 'ideal world' Midwives reluctant to change Expect to be seen not heard Get a bad name
Some lecturers are out of date with practice	More likely to do as mw does	Difficult to challenge want people to like me / fit in with team I know this is wrong	Lecturers removed from reality Must do it the way midwife does Need to 'fit in'

Difficult to apply what is taught in Uni	Staff should attend up dates some find it hard to change	Not challenged c/o confrontation	Mismatch between uni & practice Midwives reluctant to change Midwives not knowledgeable of EBP Lacks confidence to challenge fears confrontation
Lecturers not up to date	Can't change practice therefore copy my mw Will use EBP when qualified	There are ways to challenge	Lecturers removed from reality Must do it the way midwife does Powerless to change Will use EBP when qualified Ways to challenge
Practice different to what uni teach.	Need to adhere to policies which are not EB	Can be 'bullied' by mws if speak up or been seen as 'cocky' so it is easier to be quiet	Mismatch between uni & practice Need to adhere to Trust policies Protocols / policies not based on best evidence Bullied into doing it the way midwife does Adopting midwives way for easier life
Uni does not always reflect practice		Wouldn't challenge 'above me' not assertive enough. don't want to be disliked or perceived as 'cocky' -wants a job	Mismatch between uni & practice Lacks confidence- refers to 'Hierarchy' Important to 'fit in' - Getting a job
Tutors who practice are up to date	Policies not EB supports traditional methods. practices as mw do as they assess me.	Don't want to go against grain. Is element to 'fit in'	Tutors who practice are up to date Protocols / policies not based on best evidence Some traditional practices are valuable Midwife may fail me if I don't work their way Not wanting to be 'trouble causer' Important to 'fit in'
Uni teach things that contradict what we see in practice does not take into account practice constraints	lack of input from mw researchers into the forming practice guidelines	Need to be thick skinned to challenge-seen as trouble maker & may not get job	Mismatch between uni & practice Workplace too busy Protocols / policies lack midwifery input Not wanting to be 'trouble causer' Important to 'fit in' - Getting a job
	Is good to observe other means of practice policies not up dated	Shared info with mw don't feel they will change their traditional ways	Protocols / policies not based on best evidence Some traditional practices are valuable Powerless to change Mentors respect students knowledge
	Protocols not EB.	Uncomfortable with word 'challenge' but there are ways to challenge	Protocols / policies not based on best evidence Dislikes word 'challenge' Ways to challenge
Taught in uni to employ EBP	policies make it very difficult to employ EBP	Difficult to challenge those who have practiced for years	Protocols / policies not based on best evidence Need to adhere to Trust policies Difficult with experienced 'older' staff
EBP taught in uni but is too research based -can't be used.	EBP are not always used as other traditional methods work better	Mw act differently to being challenged	Mismatch between uni & practice Some traditional practices are valuable People react different to being challenged
	If practicing on mw's pin- feel obliged to do things the way mw wants, even if it is not the way I would choose	Different views of challenging & ways to challenge	Must do it the way midwife does Ways to challenge
Theory-practice difficult c/o lectures not clinically up to date.	If mw has taught you a way they expect you to do it their way-may be EB	Not confident to challenge	Lecturers removed from reality Must do it the way midwife does Lacks confidence to challenge

In practice told to do things differently	Senior mws decline EBP as know other ways	Powerless to challenge. Will do differently when qualified	Mismatch between uni & practice Experienced 'older' staff use tradition Powerless to change Will use EBP when qualified
	MW's are set in their ways	To challenge-need knowledge of subject	Midwives reluctant to change To challenge-need knowledge of subject
	MW's are set in their ways	Most would be 'offended' if I questioned their practice	Midwives reluctant to change Difficult to challenge
What is taught doesn't match	EBP not always used	To challenge need knowledge of subject	Mismatch between uni & practice To challenge-need knowledge of subject
What is taught in Uni is similar	Policies maybe different. Mws that challenge are skilled academic. In 3 rd yr can justify changing. Knowledge is power	Have challenged-received bad response	Protocols / policies not based on best evidence Bad experience of challenging As senior student now confident to challenge
What is taught in Uni is similar practice	Some based on research that is flawed	Views of challenging as beneficial as is about sharing info	Protocols / policies not based on best evidence Challenging is beneficial
	Supports traditional seen it work		Some traditional practices are valuable
Uni -'ideal world'-not always feasible in practice		Would challenge if practice harmful	Uni teaches the 'ideal world' Would challenge if practice harmful
Due to shortages not possible to employ what Uni teach	doing how mw do is needed do to limited time	Sees challenging as wrong word mentions alternative	Uni teaches the 'ideal world' Workplace too busy-Must do it the way midwife does. Ways to challenge
Theory practice gap wide uni unrealistic	Traditional can work	To challenge need knowledge of subject & depends on person	Uni teaches the 'ideal world' Some traditional practices are valuable To challenge-need knowledge of subject Depends on person
	Policies differ mws supportive of EBP & students ideas		Protocols / policies not based on best evidence Values anecdotal care Mentors respect students knowledge
Huge theory practice divide	You have to do what your mw wants. As policies are not EBP I do not feel able to practice differently		Mismatch between uni & practice Protocols / policies not based on best evidence Need to adhere to Trust policies Must do it the way midwife does
	Mws wants you to practice how they do	Difficult to question mws as don't want them to have negative thoughts about me even though it's for the best if I said something	Must do it the way midwife does Important to 'fit in'
Uni teaches best BUT-	Policies-make it difficult to practice this way so I have to do them. Values anecdotal	Refers to hierarchy & ways to get by	Mismatch between uni & practice Protocols / policies not based on best evidence Need to adhere to Trust policies Values anecdotal Depends on person -refers to Hierarchy Ways to challenge
	Have to practice according to mw may fail me if I don't work their way. mws work is limited to policies	Difficult to challenge they say I will think differently when qualified	Midwife may fail me if I don't work their way Midwifery practice is reduced to policies
Encouraged to use EBP & be critical.		Ways to challenge	Uni encourage use of EBP & be critical Ways to challenge

Important to be taught EBP in uni so when qualified will use even if not used prior		Unreasonable to expect us to question mws requires confidence	It is good that Uni teaches us EBP so we can use it when qualified Lacks confidence to challenge
Lecturers out of date with practice		Ways to challenge	Lecturers removed from reality Ways to challenge
		Depends of situation	Depends of situation
Uni teaches 'idealistic'-aren't appropriate in practice		Ways to challenge	Uni teaches the 'ideal world' Ways to challenge
		Feel awkward about challenging Ways to do it	Difficult to challenge Ways to challenge
		Difficult to challenge but would now as senior student	As senior student now confident to challenge
Encouraged to use EBP & be critical.		Difficult to challenge	Uni encourage use of EBP & be critical Difficult to challenge
Traditional practices not looked at in uni therefore unable to reject.	Can't refuse medical ideas	Care I give is more important than fitting in	Not able to judge whether tradition is valuable Powerless to refuse medical ideas Not my priority to fit in
Lecturers not aware of practice	older mws use tradition	Difficult to challenge as not seen as competent	Lecturers removed from reality Experienced 'older' staff use tradition Not seen as competent
Theory-practice difficult c/o lectures not clinically up to date.		Would not challenge if not EB, but would if detrimental	Mismatch between uni & practice Lecturers removed from reality Would not challenge if tradition & benefits client
Uni & practice matches overall	You have to do as mw does. Not sure which practices are EB or tradition	Ways to challenge	Not able to judge whether tradition is valuable Must do it the way midwife does Ways to challenge
	Difficult to practice in a way which is different to mw- even if you know it is not EB. may not pass you Are seen as knowing little	If you question are told you will see that it is better when qualified Some take offence at being challenged	Must do it the way midwife does Midwife may fail me if I don't work their way Not seen as competent. Are told when we qualify we will see that it is better to do it this way
		Not confident to challenge do not have authority	Lacks confidence to challenge Refers to Hierarchy
	If following policies go with mws	Ways to challenge	Need to adhere to Trust policies Must do it the way midwife does Ways to challenge
		Not my responsibility to challenge	Hierarchy
	Mws use traditions because other mw do	Not good to challenge gives you bad reputation/ undermines mw.	Going along with it because everyone else does Bad name
		Sees challenging as criticising. Trusts own & mws judgment	Dislikes word 'challenge'
Mismatch of what is taught			Mismatch between uni & practice
		Depends on mw as to whether I would challenge	Depends on person
Uni teaches unrealistic	More likely to adopt mw ways	Difficult to challenge as feels lacks experience & authority	Uni teaches the 'ideal world' Must do it the way midwife does Difficult to challenge Hierarchy

	Mws do not always encourage EBP. Guidelines /policies not always EBP	Mw may fail me if I challenge	Protocols / policies not based on best evidence Difficult to challenge-Get a bad name/may fail me
	EBP is in most guidelines, policies but may not be up-to date	Would challenge policies with support	Policies not based on best evidence Ways to challenge
Huge theory-practice gap. mws & lecturers don't communicate re: mentoring	To survive you have to practice in a way mw approves, EB or not, as mw assesses you	Ways to challenge	Mismatch between uni & practice Must do it the way midwife does Ways to challenge
Uni unrealistic.	Tutors & mws no mutual respect. Should build bridges & could help the uptake of EBP	Would not challenge. Have strong ideas about how I will practice	Uni gives unrealistic image Discord with Uni & practice Not confident to challenge Will use EBP when qualified
Uni promotes EBP..	Policies etc EB but some are out of date	Ways to challenge	Uni encourage use of EBP & be critical Ways to challenge
.	Senior mws use tradition, newly-qualified more open to change	As senior student easier to challenge but depends on mw	Experienced 'older' staff use tradition As senior student now confident to challenge
	Mws prefer traditional practices & encourage you to do same. Mws don't have time to keep up with EBP,	Mws enjoy listening to new ideas	Traditional practice dominates Midwives not knowledgeable of EBP Mentors respect students knowledge
Uni warn us of discord.	Mws chose to ignore EBP due to their intuition & work constraints.	Mws get offended, think your 'uppity' don't want to upset them & get a bad mark	Discord with Uni & practice Midwives reluctant to change Workplace too busy Refers to 'Hierarchy' Difficult to challenge-Get a bad name/ may fail me
	Most guidelines are EB, older midwives use tradition, because of the hierarchy in midwifery it is often impossible to change practices.	I would question & ask why they use traditional practice	Refers to 'Hierarchy' Experienced 'older' staff use tradition Powerless to change Will challenge
Uni makes us challenge if what we see is not	EB feel pressured to practice the way mws practice Some guidelines lack EB	Lacks 'power' & confidence	Bullied / Pressured into doing it the way midwife does Uni encourages to challenge Not confident to challenge
Mismatch between uni & practice.	Is easier to go with the way things are done but admits not a good reason.	lacks authority to challenge looks forward to doing this once qualified	Mismatch between uni & practice Adopting midwives way for easier life Refers to 'Hierarchy' Will use EBP when qualified
	Supportive of EBP	Difficult to question mws practice. easier now as more senior, ways to challenge	Difficult to challenge As senior student now confident to challenge
	Some traditional practices are valuable		Some traditional practices are valuable
Wide theory-practice gap what is taught in uni is 'idealistic'	Practice relies on experience & tradition c/o there is insufficient research.	Lacks confidence	Uni gives unrealistic image Experience & tradition is relied upon where research is lacking. Not confident to challenge

Mismatch between theory & practice	Mostly EBP exist traditions used by mws who have been qualified for yrs	Depends on person	Mismatch between uni & practice Depends on person Experienced 'older' staff use tradition
Uni very EB, some uni info not up to date		Depends on person. Challenge implies confrontation, encouraged to question	Uni teaches up-to date EBP Dislikes word 'challenge'
	Some traditions work better Difficult to do different to mw may be marked down /labeled as difficult		Some traditional practices are valuable Midwife may fail me if I don't work their way Not wanting to be 'trouble causer'
	Some mws don't practice EBP & are reluctant to change	Depends on mw	Midwives reluctant to change Depends on person
	Senior mws do not accept your knowledge of EBP & some defend traditions. Used as a 'pair of hands'		Not seen as competent Expect to be seen not heard
Uni teaches up to date research,	Disapproves of practices that are not EBP		Uni teaches up-to date EBP Challenging is necessary/beneficial
		Difficult to challenge if busy. May be offended, may grade you harshly may be ostracised & excluded from breaks & social affairs	Difficult to challenge Workplace too busy Need to 'fit in'
Mismatch between theory & practice.	We're a long way off having all practices based on evidence, a lot remain ritualistic		Mismatch between uni & practice Traditional practice dominates
Same as my nurse training- uni conflicted with clinical. Mws believe 'lecturers don't live in the real world'	Aware that some research recommendations are flawed.	Difficult to challenge but necessary	Discord with Uni & practice Difficult to challenge Challenging is beneficial
	Difficult to implement new ideas to old school midwives	Would not challenge as they would take no notice of a student	Difficult with experienced 'older' staff Refers to 'Hierarchy'
	Mws sometimes surprised by what we are taught, most wonder why we do it, others insist on doing it their way	Will use EBP when qualified	Midwives not knowledgeable of EBP Must do it the way midwife does Will use EBP when qualified
	Workplace not receptive to change. Unrealistic for students to change. Mw may fail me if I don't work their way	Questioning can upset the culture	Midwives reluctant to change Powerless to change Mw may fail me Not wanting to be 'trouble causer'
Mismatch between uni & practice.	Difficult to change things as culture/ traditions are strong & fixed	Do not have problems challenging but sometimes feel that I don't fit in	Mismatch between uni & practice Powerless to change Traditional practice dominates Not 'fitting in'
	Midwives say: 'the theory is...,but in practice this...,works better- don't tell anyone in Uni		Difficult to use EBP when midwives use tradition Discord with Uni & practice

Appendix IV.: List of Themes and Order of Occurrences

(*Most cited themes)

What is taught in University	Use of EBPs in the clinical setting	Challenging traditional practices
Mismatch between uni & practice *	Must do it the way midwife does *	Ways to challenge *
Lecturers teaches the 'ideal world' & are removed from reality *	Protocols/policies not based on best evidence*	Not confident to challenge *
University teaches up-to date EBP *	Midwives reluctant to change *	Difficult with experienced 'older' staff *
-----	Need to adhere to Trust policies *	Battling against 'Hierarchy' *
Discord between University lecturers & clinical midwives	Some traditional practices are valuable *	Difficult to challenge *
Tutors who practice are up to date	Powerless to change *	Will 'Get a bad name' / 'May fail me'
It is good that University teaches us EBP so we can use it when qualified	Midwife may fail me if I don't work their way*	Not wanting to be 'trouble causer' *
University encourages us to challenge	Experienced 'older' staff use tradition *	Will use EBP when qualified *
University encourages use of EBP & be critical	-----	People react different to being challenged *
	Workplace too busy	-----
	Values anecdotal	Important to 'fit in' to 'Getting a job'
	Mentors respect students knowledge	Need to 'fit in'
	Difficult to use knowledge of EBP in practice	As senior student now confident to challenge
	Bullied / Pressured into doing it the way midwife does	To challenge-need knowledge of subject
	Adopting midwives way for easier life	Would not challenge if tradition & benefits client
	We are not seen as competent	Dislikes word 'challenge'
	Not able to judge whether tradition is valuable	Fears confrontation
	Difficult to use EBP when midwives use tradition	Negative experiences of challenging
	Expect to be seen not heard	Challenging is necessary/beneficial
	Midwives not knowledgeable of EBP	Will challenge
	Protocols / policies lack midwifery input	As senior student more confident to do things differently to mentor
	Midwifery practice is reduced to policies	Would challenge if practice harmful
	Powerless to refuse medical ideas	
	Are told when we qualify we will see that it is better to do it this way	
	Experience & tradition is relied upon where research is lacking.	
	Going along with it because everyone else does	

Appendix V.

Cross tabulations: Student Responses V University Base

The student's responses to the ordinal variables were compared with their University Base using the chi-square test. This test was used to compare the expected frequencies (fE), with that of the observed (fo) and to ascertain if the University base had any association with the students' responses.

The highlighted counts, as shown in Tables: 39-46 (p-), demonstrate counts that were greater than four between the observed and expected frequencies and or high counts or values that show extreme differences according to the University base.

Comparative responses with ‘University Base’ and ‘Once I qualify, I foresee myself employing some of the traditional practices that my mentors use’:

As seen in table 39 (p) a total of 37.1% ($fo = 46$) students ($N = 124$) had ‘Agreed’ that ‘once they had qualified they foresaw themselves employing some of the traditional practices that their mentors use’.

Breakdown of the total that had ‘Agreed’ (37.1% $fo = 46$) per University

21.7% were based in University A ($n=27$) ($fo = 10$)

10.9% were based in University B ($n=15$) ($fo = 5$)

41.3% were based in University C ($n=37$) ($fo = 19$)

15.2% were based in University D ($n=30$) ($fo = 7$)

10.9% were based in University E ($n=14$) ($fo = 5$)

Number of students that had ‘Agreed’ in a given University

Of the total number of students based at University A ($n=27$) 37% ($fo = 10$) had agreed. This equalled the expected count of 37% ($fE=10$)

Of the total number of students based at University B ($n=15$) 33.3% ($fo = 5$) had agreed. The expected count was 37% ($fE = 5.6$).

Of the total number of students based at University C ($n=37$) 51.4% ($fo = 19$) had chosen to agree. The expected count was 37% ($fE = 13.7$).

Of the total number of students based at University D ($n=30$) 22.6% ($fo = 7$) had chosen to agree. The expected count was 37% ($fE = 11.5$)

Of the total number of students based at University E ($n=14$) 35.7% ($fo = 5$) had chosen to agree. The expected count was 37% ($fE = 5.2$).

Table 39

A – E = University Base	Once I qualify, I foresee myself employing some of the traditional practices that my mentors use					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
A Count	1	8	6	10	2	27
Expected Count	1.3	7.2	7.2	10.0	1.3	27.0
% within The students University Base	3.7%	29.6%	22.2%	37.0%	7.4%	100%
% response to question	16.7%	24.2%	18.2%	21.7%	33.3%	21.8%
B Count	3	4	3	5	0	15
Expected Count	.7	4.0	4.0	5.6	.7	15.0
% within The students University Base	20.0%	26.7%	20.0%	33.3%	.0%	100%
% response to question	50.0%	12.1%	9.1%	10.9%	.0%	12.1%
C Count	0	6	11	19	1	37
Expected Count	1.8	9.8	9.8	13.7	1.8	37.0
% within The students University Base	.0%	16.2%	29.7%	51.4%	2.7%	100%
% response to question	.0%	18.2%	33.3%	41.3%	16.7%	29.8%
D Count	2	11	10	7	1	31
Expected Count	1.5	8.3	8.3	11.5	1.5	31.0
% within The students University Base	6.5%	35.5%	32.3%	22.6%	3.2%	100%
% response to question	33.3%	33.3%	30.3%	15.2%	16.7%	25.0%
E Count	0	4	3	5	2	14
Expected Count	.7	3.7	3.7	5.2	.7	14.0
% within The students University Base	.0%	28.6%	21.4%	35.7%	14.3%	100%
% response to question	.0%	12.1%	9.1%	10.9%	33.3%	11.3%
Total Count	6	33	33	46	6	124
Expected Count	6.0	33.0	33.0	46.0	6.0	124.0
% within The students University Base	4.8%	26.6%	26.6%	37.1%	4.8%	100%
	100.0%	100.0%	100.0%	100.0%	100.0%	100%

Comparative responses with ‘University Base’ and ‘Some traditional practices are good because they work’:

As seen in table 40 (p) a total of 53.7% ($f_o = 66$) students ($N = 123$) had ‘Agreed’ that ‘some traditional practices are good because they work’.

Breakdown of the total that had ‘Agreed’ (53.7% $f_o = 66$) per University

21.2% were based in University A ($n=27$) ($f_o = 14$).

4.5% were based in University B ($n=15$) ($f_o = 3$).

40.9% were based in University C ($n=37$) ($f_o = 27$).

15.2% were based in University D ($n=30$) ($f_o = 10$)

18.2% were based in University E ($n=14$) ($f_o = 12$).

Number of students that had ‘Agreed’ in a given University

Of the total number of students based at University A ($n=27$) 51.9% ($f_o = 14$) had agreed. The expected count was 53.7% ($f_E = 14.5$)

Of the total number of students based at University B ($n=15$) 20% ($f_o = 3$) had agreed, but the expected count was 53% ($f_E = 8$). In contrast, 53.3% ($f_o = 8$) of the students responded ‘neither disagree nor agree’. The expected count was 22% ($f_E = 3.3$).

Of the total number of students based at University C ($n=37$) 73.0% ($f_o = 27$) had chosen to agree. The expected count was 54% ($f_E = 19.9$).

Of the total number of students based at University D ($n=30$) 33.3% ($f_o = 10$) had chosen to agree. The expected count was 53.6% ($f_E = 16.1$).

Of the total number of students based at University E ($n=14$) 85.7% ($f_o =12$) had chosen to agree. The expected count was 53.5 % ($f_E =7.5$).

Table 40

A - E University Base		Some traditional practices are good because they work				Total
		Disagree	Neither	Agree	Strongly Agree	
A	Count	2	6	14	5	27
	Expected Count	2.9	5.9	14.5	3.7	27.0
	% within The students University Base	7.4%	22.2%	51.9%	18.5%	100.0%
	% in response to question	15.4%	22.2%	21.2%	29.4%	22.0%
B	Count	3	8	3	1	15
	Expected Count	1.6	3.3	8.0	2.1	15.0
	% within The students University Base	20.0%	53.3%	20.0%	6.7%	100.0%
	% in response to question	23.1%	29.6%	4.5%	5.9%	12.2%
C	Count	3	3	27	4	37
	Expected Count	3.9	8.1	19.9	5.1	37.0
	% within The students University Base	8.1%	8.1%	73.0%	10.8%	100.0%
	% in response to question	23.1%	11.1%	40.9%	23.5%	30.1%
D	Count	5	9	10	6	30
	Expected Count	3.2	6.6	16.1	4.1	30.0
	% within The students University Base	16.7%	30.0%	33.3%	20.0%	100.0%
	% in response to question	38.5%	33.3%	15.2%	35.3%	24.4%
E	Count	0	1	12	1	14
	Expected Count	1.5	3.1	7.5	1.9	14.0
	% within The students University Base	.0%	7.1%	85.7%	7.1%	100.0%
	% in response to question	.0%	3.7%	18.2%	5.9%	11.4%
Total	Count	13	27	66	17	123
	Expected Count	13.0	27.0	66.0	17.0	123.0
	% within The students University Base	10.6%	22.0%	53.7%	13.8%	100.0%
		100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘What is taught in University, in relation to practice, does not always match up to what happens in the workplace’

As seen in table 41 (p) a total of students 65.6% (f_o 82) $N= 125$) had ‘Agreed’ that ‘what is taught in University in relation to practice does not always match up to what happens in the workplace’. 26.4% (33) had also chosen to ‘Strongly Agree’.

Breakdown of the total that had 'Agreed' (65.6 % fo =82) per University

20.7% were based in University A ($n=27$) ($fo =17$).

9.8% were based in University B ($n=16$) ($fo =8$).

30.5% were based in University C ($n=37$) ($fo =25$).

25.6% were based in University D ($n=31$) ($fo =21$)

13.4% were based in University E ($n=14$) ($fo =11$)

Of the total that had 'Strongly Agreed': (26.4% $n=33$)

21.2% were based in University A ($n=27$) ($fo =7$).

15.2% were based in University B ($n=16$) ($fo =5$).

33.3% were based in University C ($n=37$) ($fo =11$).

27.3% were based in University D ($n=31$) ($fo =9$)

3.0% were based in University E ($n=14$) ($fo =1$)

Number of students that had 'Agreed' and 'Strongly Agreed' in a given University

Of the total number of students based at University A ($n=27$) 63% ($fo =17$) had agreed that 'what is taught in University in relation to practice does not always match up to what happens in the workplace'. The expected count was 65.5% ($fE =17.7$).

The number of students that 'Strongly Agreed' was 25.9% ($fo =7$). The expected count was 26.2% ($fE =7.1$).

Of the total number of students based at University B ($n=16$) 50% ($fo =8$) had agreed. The expected count was 65.6% ($fE =10.5$). The number of students that 'Strongly Agreed' was 31.3% ($fo =5$). The expected count was 26.2% ($fE =4.2$).

Of the total number of students based at University C ($n=37$) 67.6% ($fo =25$) had chosen to agree. The expected count was 65.6% ($fE =24.3$). The number of students that ‘Strongly Agreed’ was 29.7% ($fo =11$). The expected count was 26.4% ($fE =9.8$).

Of the total number of students based at University D ($n=31$) 67.7% ($fo =21$) had chosen to agree. The expected count was 65.4% ($fE =20.3$). The number of students that ‘Strongly Agreed’ was 29% ($fo =9$). The expected count was 26.4 % ($fE =8.2$).

Of the total number of students based at University E ($n=14$) 78.6% ($fo =11$) had chosen to agree. The expected count was 65.7% ($fE =9.2$). The number of students that ‘Strongly Agreed’ was 7.1% ($fo =1$). The expected count was 26.4% ($fE =3.7$).

Table 41

A - E University Base	What is taught in Uni in relation to practice, does not always match up to what happens in the workplace					Total	
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
A	Count	0	3	0	17	7	27
	Expected Count	.4	.9	.9	17.7	7.1	27.0
	% within The students University Base	.0%	11.1%	.0%	63.0%	25.9%	100.0%
	% response to question	.0%	75.0%	.0%	20.7%	21.2%	21.6%
B	Count	2	0	1	8	5	16
	Expected Count	.3	.5	.5	10.5	4.2	16.0
	% within The students University Base	12.5%	.0%	6.3%	50.0%	31.3%	100.0%
	% response to question	100.0%	.0%	25.0%	9.8%	15.2%	12.8%
C	Count	0	0	1	25	11	37
	Expected Count	.6	1.2	1.2	24.3	9.8	37.0
	% within The students University Base	.0%	.0%	2.7%	67.6%	29.7%	100.0%
	% response to question	.0%	.0%	25.0%	30.5%	33.3%	29.6%
D	Count	0	1	0	21	9	31
	Expected Count	.5	1.0	1.0	20.3	8.2	31.0
	% within The students University Base	.0%	3.2%	.0%	67.7%	29.0%	100.0%
	% response to question	.0%	25.0%	.0%	25.6%	27.3%	24.8%
E	Count	0	0	2	11	1	14
	Expected Count	.2	.4	.4	9.2	3.7	14.0
	% within The students University Base	.0%	.0%	14.3%	78.6%	7.1%	100.0%
	% response to question	.0%	.0%	50.0%	13.4%	3.0%	11.2%
Total	Count	2	4	4	82	33	125
	Expected Count	2.0	4.0	4.0	82.0	33.0	125.0
	% within The students University Base	1.6%	3.2%	3.2%	65.6%	26.4%	100.0%
	% response to question	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘I am more likely to employ what I have been taught in University than the practice ideas of my mentors’

As seen in table 42 (p) a total of 38.4% (*fo* 48) students (*N*= 125) had ‘Neither Agreed nor Disagreed’ that ‘they were more likely to employ what they had been taught in University than the practice ideas of their mentors’.

Breakdown of the total that ‘Neither Agreed nor Disagreed’ per University (31.2% (*fo* =39)

23.1% were based in University A (*n*=27) (*fo* =9).

15.4% were based in University B (*n*=16) (*fo* =6).

28.2% were based in University C (*n*=37) (*fo* =11).

28.2% were based in University D (*n*=31) (*fo* =11)

5.1% were based in University E (*n*=14) (*fo* =2)

Universities that had the majority of counts of the total that ‘Neither Agreed nor Disagreed’:

37.5% were based in University C (*n*=37). A total of 48.6% (*fo* =18) of the students based in University C had chosen to ‘Neither Agree nor Disagree’. The expected count was 38.4 % (*fE* =14.2).

29.2% were based in University D (*n*=31). A total of 45.2% (*fo* =14) of the students based in University C had chosen to ‘Neither Agree nor Disagree’. The expected count was 38.4% (*fE* =11.9).

Total that had ‘Agreed’ and ‘Strongly Agreed’

A total of 31.2% (*n*=39) students (*N*= 125) had ‘Agreed’ and 9.6% (*n*=12) of students had ‘Strongly Agreed’.

Breakdown of the total that had 'Agreed' per University (31.2% (fo =39)

23.1% were based in University A ($n=27$) ($fo =9$).

15.4% were based in University B ($n=16$) ($fo =6$).

28.2% were based in University C ($n=37$) ($fo =11$).

28.2% were based in University D ($n=31$) ($fo =11$)

5.1% were based in University E ($n=14$) ($fo =2$)

The University that had the majority of counts of the total that had 'Strongly Agreed'

The majority that 'Strongly Agreed' were from students based at University B ($n=16$) which represented 41.7% ($N=125$) of the total. Of the students based in University B 31.3% ($fo =5$) had chosen to 'Strongly Agree'. The expected count was 9.3% ($fE=1.5$).

While this University represented only 15.4% of the total number of students that had 'Agreed', of the students that were based in that University, ($n=16$), 37.5% ($fo =5$), had chosen to 'Agree'. The expected count was 31.2% ($fE=5$).

Total that that had 'Disagreed'

A total of 19.2% ($n=24$) students ($N= 125$) 'Disagreed' that 'they were more likely to employ what they had been taught in University than the practice ideas of their mentors'.

Breakdown of the total that had 'Disagreed' per University (19.2% (fo =24)

29.2% were based in University A ($n=27$) ($fo =7$).

12.5% were based in University B ($n=16$) ($fo =3$).

25.0% were based in University C ($n=37$) ($fo =6$).

12.5% were based in University D ($n=31$) ($fo =3$)

20.8% were based in University E ($n=14$) ($fo =5$)

The Highest Percentage of students that had ‘Disagreed’ in a given University

Of the total number of students based at University A ($n=27$) 25.9% ($fo =7$) had disagreed that ‘they were more likely to employ what they had been taught in University than the practice ideas of their mentors’. The expected count was 19.2% ($fE =5.2$).

Of the total number of students based at University E ($n=14$) 35.7% ($fo =5$) had disagreed. The expected count was 19.2% ($fE =2.7$).

Table 42

A - E University Base	I am more likely to employ what I have been taught in Uni, than the practice ideas of my clinical mentors					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
A Count	0	7	8	9	3	27
Expected Count	.4	5.2	10.4	8.4	2.6	27.0
% within The students University Base	.0%	25.9%	29.6%	33.3%	11.1%	100.0%
% response to question	.0%	29.2%	16.7%	23.1%	25.0%	21.6%
B Count	0	3	2	6	5	16
Expected Count	.3	3.1	6.1	5.0	1.5	16.0
% within The students University Base	.0%	18.8%	12.5%	37.5%	31.3%	100.0%
% response to question	.0%	12.5%	4.2%	15.4%	41.7%	12.8%
C Count	1	6	18	11	1	37
Expected Count	.6	7.1	14.2	11.5	3.6	37.0
% within The students University Base	2.7%	16.2%	48.6%	29.7%	2.7%	100.0%
% response to question	50.0%	25.0%	37.5%	28.2%	8.3%	29.6%
D Count	1	3	14	11	2	31
Expected Count	.5	6.0	11.9	9.7	3.0	31.0
% within The students University Base	3.2%	9.7%	45.2%	35.5%	6.5%	100.0%
% response to question	50.0%	12.5%	29.2%	28.2%	16.7%	24.8%
E Count	0	5	6	2	1	14
Expected Count	.2	2.7	5.4	4.4	1.3	14.0
% within The students University Base	.0%	35.7%	42.9%	14.3%	7.1%	100.0%
% response to question	.0%	20.8%	12.5%	5.1%	8.3%	11.2%
Total Count	2	24	48	39	12	125
Expected Count	2.0	24.0	48.0	39.0	12.0	125.0
% within The students University Base	1.6%	19.2%	38.4%	31.2%	9.6%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘It is easier to go along with the way things are done because it is so important to 'fit in' with the staff’:

As seen in table 43 (p) a total of 28.2% ($fo = 35$) students ($N = 124$) had ‘Agreed’ that ‘It is easier to go along with the way things are done because it is so important to 'fit in' with the staff’.

Breakdown of the total that had ‘Agreed’ (28.2% $fo = 35$) per University

20.0% were based in University A ($n=27$) ($fo = 7$).

17.1% were based in University B ($n=15$) ($fo = 6$).

40.0% were based in University C ($n=37$) ($fo = 14$).

8.6% were based in University D ($n=30$) ($fo = 3$)

14.3% were based in University E ($n=14$) ($fo = 5$).

Number of students that had ‘Agreed’ in a given University

Of the total number of students based at University A ($n=27$) 25.9% ($fo = 7$) had agreed. The expected count was 28% ($fE = 7.6$)

Of the total number of students based at University B ($n=15$) 40% ($fo = 6$) had agreed. The expected count was 28% ($fE = 4.2$).

Of the total number of students based at University C ($n=37$) 37.8% ($fo = 14$) had chosen to agree. The expected count was 28% ($fE = 10.4$).

Of the total number of students based at University D ($n=30$) 9.7% ($fo = 3$) had chosen to agree. The expected count was 29.3% ($fE = 8.8$).

Of the total number of students based at University E ($n=14$) 35.7% ($f_o =5$) had chosen to agree. The expected count was 28.5% ($f_E =4.0$).

In contrast a total of 33.1% ($f_o =41$) students ($N= 124$) had 'Disagreed' that 'It is easier to go along with the way things are done because it is so important to 'fit in' with the staff'.

Breakdown of the total that had 'Disagreed' (33.1% $f_o =41$) per University

26.8% were based in University A ($n=27$) ($f_o =11$).

9.8% were based in University B ($n=15$) ($f_o =4$).

26.8% were based in University C ($n=37$) ($f_o =11$).

22.0% were based in University D ($n=30$) ($f_o =9$)

14.6% were based in University E ($n=14$) ($f_o =6$).

Number of students that had 'Disagreed' in a given University

Of the total number of students based at University A ($n=27$) 40.7% ($f_o =7$) had agreed. The expected count was 32.9% ($f_E =8.9$)

Of the total number of students based at University B ($n=15$) 26.7% ($f_o =6$) had agreed. The expected count was 33.3% ($f_E =5.0$).

Of the total number of students based at University C ($n=37$) 29.7% ($f_o =14$) had chosen to agree. The expected count was 33.2% ($f_E =12.3$).

Of the total number of students based at University D ($n=30$) 29.0% ($f_o =3$) had chosen to agree. The expected count was 34.3% ($f_E =10.3$).

Of the total number of students based at University E ($n=14$) 42.9% ($f_o =5$) had chosen to agree. The expected count was 32.8% ($f_E =4.6$).

The Highest Percentage of students that had ‘Neither Agreed nor Disagreed’ in a given University

Of the total number of students based at University D ($n=30$) 45.2% ($f_o = 14$) had chosen to ‘Neither Agreed nor Disagreed’. This represented 42.4% ($N=124$) of the total. However, the expected count for this University was 27.6% ($fE = 8.3$).

Table 43

A - E University Base	It is easier to go along with the way things are done because it is so important to 'fit in' with the staff					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
A Count	1	11	5	7	3	27
Expected Count	.9	8.9	7.2	7.6	2.4	27.0
% within The students University Base	3.7%	40.7%	18.5%	25.9%	11.1%	100.0%
% response to question	25.0%	26.8%	15.2%	20.0%	27.3%	21.8%
B Count	0	4	3	6	2	15
Expected Count	.5	5.0	4.0	4.2	1.3	15.0
% within The students University Base	.0%	26.7%	20.0%	40.0%	13.3%	100.0%
% response to question	.0%	9.8%	9.1%	17.1%	18.2%	12.1%
C Count	1	11	9	14	2	37
Expected Count	1.2	12.2	9.8	10.4	3.3	37.0
% within The students University Base	2.7%	29.7%	24.3%	37.8%	5.4%	100.0%
% response to question	25.0%	26.8%	27.3%	40.0%	18.2%	29.8%
D Count	2	9	14	3	3	31
Expected Count	1.0	10.3	8.3	8.8	2.8	31.0
% within The students University Base	6.5%	29.0%	45.2%	9.7%	9.7%	100.0%
% response to question	50.0%	22.0%	42.4%	8.6%	27.3%	25.0%
E Count	0	6	2	5	1	14
Expected Count	.5	4.6	3.7	4.0	1.2	14.0
% within The students University Base	.0%	42.9%	14.3%	35.7%	7.1%	100.0%
% response to question	.0%	14.6%	6.1%	14.3%	9.1%	11.3%
Total Count	4	41	33	35	11	124
Expected Count	4.0	41.0	33.0	35.0	11.0	124.0
% within The students University Base	3.2%	33.1%	26.6%	28.2%	8.9%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘My mentors seem unwilling to change/try new ideas’

As seen in Table 44 a total of 46.8% ($fo = 58$) students ($N = 124$) had ‘Disagreed’ that ‘My mentors seem unwilling to change/try new ideas’.

Of that total 36.2% ($N = 124$) of the students were based in University C

Of the total number of students based at University C ($n = 37$) 56.8% ($fo = 21$) had chosen to disagree. The expected count was 46.7% ($fE = 17.3$). In contrast, only 10.8% ($fo = 4$) had ‘Agreed’, but the expected count was 23.5% ($fE = 8.7$)

In contrast, a total of 23.4% ($fo = 29$) students ($N = 124$) had ‘Agreed’. However, unlike University C, of that total ($N = 124$)

27.6% were based in University A

27.6% were based in University B

27.6% were based in University D

While these percentages are equal, University B, had the highest percentage of students that had ‘Agreed’ in a given University with 53.3% ($fo = 8$) ($n = 15$). However, the expected count was 23.3% ($fE = 3.5$)

Table 44

A - E University Base	My mentors seem unwilling to change/try new ideas					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
A Count	1	13	4	8	1	27
Expected Count	1.3	12.6	5.7	6.3	1.1	27.0
% within The students University Base	3.7%	48.1%	14.8%	29.6%	3.7%	100.0%
% response to question	16.7%	22.4%	15.4%	27.6%	20.0%	21.8%
B Count	0	2	4	8	1	15
Expected Count	.7	7.0	3.1	3.5	.6	15.0
% within The students University Base	.0%	13.3%	26.7%	53.3%	6.7%	100.0%
% response to question	.0%	3.4%	15.4%	27.6%	20.0%	12.1%
C Count	4	21	7	4	1	37
Expected Count	1.8	17.3	7.8	8.7	1.5	37.0
% within The students University Base	10.8%	56.8%	18.9%	10.8%	2.7%	100.0%
% response to question	66.7%	36.2%	26.9%	13.8%	20.0%	29.8%
D Count	0	14	7	8	2	31
Expected Count	1.5	14.5	6.5	7.3	1.3	31.0
% within The students University Base	.0%	45.2%	22.6%	25.8%	6.5%	100.0%
% response to question	.0%	24.1%	26.9%	27.6%	40.0%	25.0%
E Count	1	8	4	1	0	14
Expected Count	.7	6.5	2.9	3.3	.6	14.0
% within The students University Base	7.1%	57.1%	28.6%	7.1%	.0%	100.0%
% response to question	16.7%	13.8%	15.4%	3.4%	.0%	11.3%
Total Count	6	58	26	29	5	124
Expected Count	6.0	58.0	26.0	29.0	5.0	124.0
% within The students University Base	4.8%	46.8%	21.0%	23.4%	4.0%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘The midwifery staff discuss up to date research and new ideas about care’

As seen in Table 45 (p) a total of 41.1% ($f_o = 51$) students ($N = 124$) had ‘Agreed’ that ‘midwifery staff discuss up to date research and new ideas about care’

Of that total 43.1% ($N = 124$) of the students were based in University C

Of the total number of students based at University C ($n = 37$) 59.5% ($f_o = 22$) had chosen to agree. However, the expected count was 41% ($fE = 15.2$).

In contrast, there were 0% ($f_o = 0$) of students based at University B ($n = 15$) that had ‘Agreed’. However, the expected count was 41.3% ($fE = 6.2$)

In contrast, a total of 25.8% ($f_o = 32$) students ($N = 124$) had ‘Disagreed’ that ‘midwifery staff discuss up to date research and new ideas about care’

Of that total 43.8% ($N = 124$) of the students were based in University D and 37.6% were based in University D and B.

Of the total number of students based at University D ($n = 31$) 45.2% ($f_o = 14$) had chosen to disagree. However, the expected count was 25.8% ($fE = 8.0$).

Of the total number of students based at University B ($n = 15$) 40% ($f_o = 6$) had chosen to disagree. However, the expected count was 26% ($fE = 3.9$).

Additionally, 26.7% ($f_o = 4$) of the students based at University B had ‘Strongly Disagreed’, but the expected count was 8.0% ($fE = 1.2$).

This accounted for 40% of the total ($N = 124$) number of students that had ‘Strongly Disagreed’

Table 45

A - E University Base	Midwifery staff discuss up to date research & new ideas about care					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
A Count	2	6	8	11	0	27
Expected Count	2.2	7.0	6.1	11.1	.7	27.0
% within The students University Base	7.4%	22.2%	29.6%	40.7%	.0%	100.0%
% response to question	20.0%	18.8%	28.6%	21.6%	.0%	21.8%
B Count	4	6	5	0	0	15
Expected Count	1.2	3.9	3.4	6.2	.4	15.0
% within The students University Base	26.7%	40.0%	33.3%	.0%	.0%	100.0%
% response to question	40.0%	18.8%	17.9%	.0%	.0%	12.1%
C Count	1	3	9	22	2	37
Expected Count	3.0	9.5	8.4	15.2	.9	37.0
% within The students University Base	2.7%	8.1%	24.3%	59.5%	5.4%	100.0%
% response to question	10.0%	9.4%	32.1%	43.1%	66.7%	29.8%
D Count	2	14	5	10	0	31
Expected Count	2.5	8.0	7.0	12.8	.8	31.0
% within The students University Base	6.5%	45.2%	16.1%	32.3%	.0%	100.0%
% response to question	20.0%	43.8%	17.9%	19.6%	.0%	25.0%
E Count	1	3	1	8	1	14
Expected Count	1.1	3.6	3.2	5.8	.3	14.0
% within The students University Base	7.1%	21.4%	7.1%	57.1%	7.1%	100.0%
% response to question	10.0%	9.4%	3.6%	15.7%	33.3%	11.3%
Total Count	10	32	28	51	3	124
Expected Count	10.0	32.0	28.0	51.0	3.0	124.0
% within The students University Base	8.1%	25.8%	22.6%	41.1%	2.4%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparative responses with ‘University Base’ and ‘Within my clinical setting research reports/articles are available

As seen in Table 46 (p) a total of 39.0% ($f_o = 48$) students ($N = 123$) had ‘Agreed’ that within the clinical setting research reports/articles are available

Of that total 43.8% ($N = 123$) of the students were based in University C

Of the total number of students based at University C ($n = 37$) 56.8% ($f_o = 21$) had chosen to agree. However, the expected count was 38.9% ($f_E = 14.4$).

In contrast, there were only 9.7% ($f_o = 3$) of students based at University D ($n = 31$) that had ‘Agreed’. However, the expected count was 39.0% ($f_E = 12.1$)

In contrast, a total of 33.3% ($f_o = 41$) students ($N = 123$) had ‘Disagreed’ that within the clinical setting research reports/articles are available

Of that total 36.6% ($N = 123$) of the students were based in University D and 17.1% were based in University C

Of the total number of students based at University D ($n = 31$) 48.4% ($f_o = 15$) had chosen to disagree. However, the expected count was 33.2% ($f_E = 10.3$).

Of the total number of students based at University C ($n = 37$) 18.9% ($f_o = 7$) had chosen to disagree. However, the expected count was 33.2% ($f_E = 12.3$).

Of the total number of students based at University B ($n = 15$) 40.0% ($f_o = 6$) had chosen to disagree. The expected count was 33.3% ($f_E = 5.0$).

Additionally, 12.9% ($f_o = 4$) of the students based at University B had ‘Strongly Disagreed’.

The expected count was 10.0% ($f_E = 1.5$). This accounted for 66% of the total ($N = 124$) number of students that had ‘Strongly Disagreed’

Table 46

A - E University Base	In the clinical setting research reports are available					Total	
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree		
A	Count	1	9	2	13	1	26
	Expected Count	1.3	8.7	4.0	10.1	1.9	26.0
	% within The students University Base	3.8%	34.6%	7.7%	50.0%	3.8%	100.0%
	% response to question	16.7%	22.0%	10.5%	27.1%	11.1%	21.1%
B	Count	1	6	4	4	0	15
	Expected Count	.7	5.0	2.3	5.9	1.1	15.0
	% within The students University Base	6.7%	40.0%	26.7%	26.7%	.0%	100.0%
	% response to question	16.7%	14.6%	21.1%	8.3%	.0%	12.2%
C	Count	0	7	7	21	2	37
	Expected Count	1.8	12.3	5.7	14.4	2.7	37.0
	% within The students University Base	.0%	18.9%	18.9%	56.8%	5.4%	100.0%
	% response to question	.0%	17.1%	36.8%	43.8%	22.2%	30.1%
D	Count	4	15	5	3	4	31
	Expected Count	1.5	10.3	4.8	12.1	2.3	31.0
	% within The students University Base	12.9%	48.4%	16.1%	9.7%	12.9%	100.0%
	% response to question	66.7%	36.6%	26.3%	6.3%	44.4%	25.2%
E	Count	0	4	1	7	2	14
	Expected Count	.7	4.7	2.2	5.5	1.0	14.0
	% within The students University Base	.0%	28.6%	7.1%	50.0%	14.3%	100.0%
	% response to question	.0%	9.8%	5.3%	14.6%	22.2%	11.4%
Total	Count	6	41	19	48	9	123
	Expected Count	6.0	41.0	19.0	48.0	9.0	123.0
	% within The students University Base	4.9%	33.3%	15.4%	39.0%	7.3%	100.0%
	% response to question	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix VI.

Proposal for Disseminating Research Findings

It was thought to be essential that the research findings are disseminated to as wide an audience as possible. This being necessary to ensure that it not only has a desired impact on the participating institutions, but that it also impacts on midwifery care.

However, in accordance with the Data Protection Act (1998) it is by no means straightforward in that disclosure of information needs to be handled sensitively and appropriately to avoid exposing the identity of the participants, the clinical mentors and or the specific organisations. Likewise, it was thought that prior to the dissemination, whether it is to be presented in the format of a local presentation and or via national publication, permissions would have been sought and gained from all interested parties.

Against this, this study involved a student population that were allocated to a large number of NHS clinical sites and as such, it would not be feasible, or appropriate for the author to personally disseminate the findings to all the educational stakeholders. However, to counterbalance the effects of not being able to disseminate the research findings with all interested parties, it was thought to be appropriate to invite the Universities Heads of Midwifery to attend a seminar at the author's host institution. Alternatively, if it is not feasible for such persons to attend the seminar, it is the author's intention to provide them a copy of the findings. Thereafter, it will be suggested that, where appropriate, the link-lecturers should communicate the research findings to the relevant clinical managers and or practice educators.

Appendix VII.

Resources

The core modular component of a Master's degree in Professional Education involves undertaking research and as such, students are expected to utilise their own time to pursue this activity. However, enrolment on this programme included access to learning resources and tutorials, both of which were valuable and accessible.

While the dissertation module fee, paper, and travelling costs to and from the different University sites were self-funded, the cost involved overall, did not exceed the benefits of achieving accreditation of a Master's degree.

Time Management

A Gantt chart was used to plan the timescale of the research. It was anticipated that the research activities would progress along a continuum from small-scale planning activities to large-scale implementations, thus the time denoted for the completion of each stage varied.

By adhering to a timescale it not only assisted with time management, but it ensured that each research aspect was accounted for and that the targets would be met within the allocated timescale. Against this, it was not always possible to rigidly keep to the allotted time, as some of the activities took longer than anticipated which necessitated assigning additional free time to ensure the task in hand was completed.

A diary was also used to monitor progress. This was useful as a point of reference in that, when it came to writing up the dissertation it was possible to retrieve some of the entries.

**Appendix VIII:
Gantt Chart – Outline Planning: Timescale for Research**

Task	Date 2006 Sept-Nov	Dec	2007 Jan	Feb	March	April	May	June	July-Nov
Prepare Research Proposal to Ethics Committees									
Contact different sites to establish sample size & relevant detail.									
Build on Literature Search & refine context									
Revise any aspects highlighted from the ethics committees									
Do Pilot study: Amend where necessary & Re-pilot									
Met with midwifery lecturers - Set date to distribute questionnaires									
Prepare / print questionnaires for distribution									
Met with students & distribute questionnaires									
Analyse completed questionnaires									
Diary & Evaluation of all aspects & Liaise with Supervisor									
Write up Dissertation									
Disseminate finding to students, midwifery lecturers &, interested parties									

Appendix IX.

Standard Measuring Instruments Used and Adapted for this Research

Authors Instruments (*):

Hicks C (1995) *

Upon D & Upon P (2006) **

Glacken, Michèle & Chaney (2004) (Funk et al's 1991 '29 item BARRIER scale') ***

Chow F & Suen L (2001) ****

Questions used to measure students thoughts on the use of evidence-based practices within the clinical setting:

1. I find it hard to relate the evidence-based recommendations to my patients ***
2. I do not feel I have enough authority to change patient care practices to that of evidence-based care ***
3. Within my clinical setting, research reports and midwifery articles are readily available ***
4. The midwifery staff discusses up to date research findings and new ideas about care **
5. Midwifery practice is so busy that there is no time for using evidence-based practices ***
6. Rather than changing my practice, I prefer to stick to my mentors 'tried and trusted' methods as they have been using them for years **
7. Midwifery management & or Doctors impose their 'own ideas' on how the midwives should practice *** & **

Questions used to measure students thoughts on Challenging traditional practices:

8. I think my mentor might resent having her clinical practice questioned **

Questions used to measure students thoughts on their mentors attitudes are about the use of evidence-based practices:

9. My mentors seem unwillingly to change/try new ideas ***
10. My mentors do not seem interested in implementing evidence-based findings *& ***
11. My mentors just pay lip-service to the value of research, they aren't really convinced of its worth *&***
12. My mentors are unaware of the evidence-based practices ***
13. My mentors are isolated from up to date knowledgeable colleagues with whom to discuss evidence- based practices ***
14. My mentors respect my knowledge of research data and that of evidence-based practices *****
15. My mentors stimulate me to think critically *****
16. My mentors often recommend sources of relevant references to me *****
17. My mentors are committed to help me get to grips with using research in my work **

Appendix X.:

**Questions to Pilot Sample
and
Pilot Questionnaire**

Piloting the Questionnaire

The purpose of piloting the questionnaire is to assess whether there are any problems with the design and or any of the questions prior to distribution. Any problems that are highlighted will be taken into account and thereafter amendments will be made. Therefore, your comments will be extremely valuable.

Initially, for you to comment on the questionnaire you should first try to complete it. Please write down the time you started and finished completing the questionnaire.

Once you have completed the questionnaire please could you comment on the following points:

- Is the letter attached to the questionnaire sufficiently informative?
- Is the questionnaire design simple and easy to follow?
- Is the design attractive i.e. is the format sufficiently spaced out or does it appear to be demanding?
- Is there any questions that appear ambiguous / unclear? Please write down which question (s) that you feel are unclear. (You need only to write down the question number)
- Are there any questions that you feel should be included? Please comment
- Is there any questions that you feel should be excluded? Please comment
- Were there any questions that you did not like answering or that you found difficult to answer? Please comment
- Is the questionnaire too lengthy?
- How long did it take you to complete?

Your completed questionnaire and comments will be strictly confidential and will not be used as part of the research findings

Thank you very much for volunteering to assess & complete the attached Pilot Questionnaire

Pilot Questionnaire

Definition of tradition: ‘the handing down from generation to generation of customs, beliefs & practices’

Definition of evidenced-based practice: ‘involves the application of research findings & using the best available evidence for the purpose of making clinical decisions’

1. **Your Age:** Please place a **X** in the box:

Under 20

20-29

30-39

40-49

2. **Your Allocated Midwifery Site** Please place a **X** in the box

xxx

xxx

xxx

xxx

Below is a list of statements that relate to a particular aspect. Please place a **X** in the box either box which overall best applies to you on the attitude scale

Aspect 1: Your overall thoughts about what you are taught in relation to evidence-based practices in the University setting

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
3. In the University, we are taught & encouraged to carry out evidence-based practices within the clinical setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. What we are taught in the University, in relation to midwifery practice, does not always equate to what happens in the workplace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q4 Please comment on this question in the box below					
5. My mentors have suggested alternative ways of performing a task that are different to what I have been taught in the University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I am more likely to take on board the practice recommendations of my University lecturers than my clinical mentors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My mentors chose their own ways of assessing my clinical performance rather than strictly adhering to the clinical objectives set by the University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your comments on question 4

Aspect 2: Knowledge-based questions: Please place a **X** in the box either box which best applies to you

- | | | |
|--|--------------------------|--------------------------|
| 8. I understand the basic principles of research | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. I understand what is meant by evidenced-based practice | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. I know how to apply the research evidence to practice | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. I am able to make a distinction between those midwifery practices that are based on research-evidence & those practices are based on tradition | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |

Aspect 3: Your overall thoughts about using evidence-based practices in the clinical setting:

Please place a X in the box which best applies to you	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
12. I feel anxious about using research evidence in my clinical setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I find it hard to relate the evidence-based recommendations to my patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I do not feel I have enough authority to change patient care practices to that of evidence-based care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Within my clinical setting, research reports & midwifery articles are readily available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. The midwifery staff discusses up to date research findings & new ideas about care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Some of our clinical policies & guidelines are not really based on research evidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Midwifery management impose their 'own ideas' on how the midwives should practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Midwifery practice is so busy that there is no time for using evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Some of the computerised care plans are not in line with evidence-based care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
21. In the clinical setting there are some practices that are based on tradition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I think there are some 'traditional' practices' that are good because they seem to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Rather than changing my practice, I prefer to stick to my mentors 'tried & trusted' methods as they have been using them for years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I perform the practice in the same way my mentor has taught me, even if it is not evidence-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are your overall thoughts about using evidence-based practices in the clinical setting?

Aspect 4: Challenging traditional practices

25. I would challenge my mentor if she does not employ evidence-based practices	<input type="checkbox"/>				
26. I think my mentor will resent having her clinical practice questioned	<input type="checkbox"/>				
27. I think it is much easier to go along with 'the way things have always been done' because it works	<input type="checkbox"/>				
28. I think it is much easier to go along with 'the way things have always been done' because it is so important to 'fit in' & to be accepted by my mentor & other midwifery staff	<input type="checkbox"/>				

What are your overall comments about challenging a midwife's traditional practices (may or may not be your personnel mentor)?

Aspect 5: What do you think your mentors overall attitudes are about the use of evidence-based practices:

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
29. My mentors maintain & favour the traditional practices rather than the evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. My mentors seem unwillingly to change/try new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. My mentors do not seem interested in implementing evidence-based findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. My mentors just pay lip-service to the value of research, they aren't really convinced of its worth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. My mentors are unaware of the evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. My mentors are isolated from up to date knowledgeable colleagues with whom to discuss evidence based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. My mentors respect my knowledge of research data & that of evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. My mentors stimulate me to think critically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. My mentors often recommend sources of relevant references to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. My mentors are committed to help me get to grips with using research in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I think the traditional practices of my mentors have influenced the way I practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Once I have qualified, I foresee myself employing some of the traditional practices that my mentors use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Many thanks for your time

Appendix XI.
Questionnaire Post Pilot

Appendix XII.: Information for Participants

Nicky Armstrong
Clinical Midwife
email: (Presented to Sample)

Ref: Student Questionnaires

Dear Final Year Student Midwives

I am currently undertaking a Master's Degree in Professional Education. As part of this programme of study, with the support of the University and my research supervisor I am hoping to research:

‘Are student midwives influenced by the traditional (non-evidence-based) practices of their clinical mentors’

The reasons why I have chosen this topic is that literature has identified that some midwives employ practices that are not evidence-based. It has also been suggested that within the clinical setting some students readily abandon the clinical practice recommendations of their University's lecturers', in preference to that of their clinical mentor's ideas. Correspondingly, in terms of clinical practice, it has been said that there exists some inconsistency of information between what is taught in the University and what is taught in practice.

My reasons for selecting final year midwifery students is that I am hoping you will have gained more clinical experience and will be more knowledgeable of evidence-based practices and may have witnessed and or participated in different ways of practicing, which are not evidence-based, than those students less senior to yourself.

Important information concerning the questionnaire:

- The purpose of this questionnaire is to **find out what are your OVERALL views** about a number of questions / statements that relate to my research topic.

- It will take you approximately **15 minutes to complete** the questionnaire.

- All completed questionnaires are **Strictly Confidential** and on receipt they will be stored in a safe, secure place to protect your identity, in accordance with the requirements of the Data Protection Act 1998.

- **On completion of this research, your completed questionnaire will not be used for any other research and your completed questionnaires will be effectively destroyed.**

- To protect your identity, it is important that you **do not to write down your name** on the completed questionnaire

- While your participation will be greatly appreciated, **you do not have to participate** in this study and you **will not be penalised for not participating**

- You need to be aware that if this research provides insightful and or significant information it may be beneficial for me to publish, and or share, the findings of this data with relevant professions. However, I need to reassure you that your identity will remain anonymous.

- If you have **any questions** about the questionnaire and or the research topic you may **contact me** via my email address.

University AAA

Definition of tradition: ‘the handing down from generation to generation of customs, beliefs & practices’

Definition of evidence-based practice: ‘involves the application of research findings & using the best available evidence for the purpose of making clinical decisions’

1. **Your Age**: Please place an **X** in the box:

Under 20	20-29	30-39	40-49
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. **Your Allocated Midwifery Site** Please place an **X** in the box

AAA <input type="checkbox"/>				
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3. **Programme Course Duration** Please place an **X** in the box

3 Year Programme <input type="checkbox"/>	18 Months <input type="checkbox"/>
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Below is a list of statements that relate to a particular aspect. Please place a **X in the box which you think best matches your thoughts**

Aspect 1: Relate to your OVERALL thoughts about what you are taught in the University setting in relation to midwifery practices

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
4. In the University, we are taught & encouraged to carry out evidence-based practices within the clinical setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. What we are taught in the University, in relation to midwifery practice, does not always match up to what happens in the workplace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. My mentors suggest alternative ways of practicing that are different to what I have been taught in the University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I am more likely to employ the practice recommendations that I have been taught in the University, than the practice ideas of my clinical mentors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are you overall comments about what you are taught in the University setting in relation to midwifery practices

Aspect 2: Knowledge-based questions: Please place an **X** in the box either box which best applies to you

- | | | |
|--|--------------------------|--------------------------|
| 8. I understand the basic principles of research | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. I understand what is meant by evidence-based practice | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. I know how to apply evidence-based research and research findings to practice | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. I am able to make a distinction between those midwifery practices that are based on research-evidence & those practices are based on tradition | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |

Aspect 3: Relate to your OVERALL thoughts on the use of evidence-based practices within the clinical setting:

Please place an X in the box which best applies to you	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
12. I feel anxious about using research evidence in my clinical setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I find it hard to apply the evidence-based recommendations to my patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I do not feel I have enough authority to change patient care practices to that of evidence-based care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Within my clinical setting, up to date research reports / articles are readily available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. The midwifery staff discusses up to date research findings & new ideas about care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Some of our clinical policies & guidelines are not evidence-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Midwifery management impose their 'own ideas' on how the midwives should practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Medical staff do not always permit midwives to use evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Midwifery practice can be so busy that there is no time for using evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
21. In the clinical setting there are some practices that are based on tradition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I think there are some 'traditional' practices' that are good because they seem to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Rather than changing my practice, I prefer to stick to my mentors 'tried & trusted' methods as they have been using them for years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I perform the practice in the same way my mentor has taught me, even if it is not evidence-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

With reference to Questions 12-24, what are your overall thoughts about the use of evidence-based practices in the clinical setting?

<u>Aspect 4: Relate to your OVERALL thoughts on challenging traditional practices</u>	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
25. I would challenge my mentor if she/he does not employ evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I think my mentor might resent having her clinical practice questioned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I think sometimes it is easier to go with 'the way things have always been done' because it works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I think it is much easier to go along with 'the way things have always been done' because it is so important to 'fit in' with the clinical staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are your overall comments about challenging a practitioner's traditional practices (may or may not be your personal mentor)?

Aspect 5: What do you think your mentors OVERALL attitudes are about the use of evidence-based practices:

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
29. My mentors favour & maintain some traditional practices rather than the evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. My mentors seem unwilling to change/try new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. My mentors do not seem interested in implementing evidence-based findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. My mentors just pay lip-service to the value of research, they aren't really convinced of its worth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. My mentors are unaware of the evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. My mentors are isolated from up to date knowledgeable colleagues with whom to discuss evidence based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. My mentors respect my knowledge of research data & that of evidence-based practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. My mentors encourage me to think critically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. My mentors provide me with sources of up to date research references	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. My mentors are committed to help me get to grips with using research findings in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I have used some of the traditional practices that my mentors have used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Once I have qualified, I foresee myself employing some of the traditional practices that my mentors use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you very much for your time

Appendix XIII.

Ethical Procedures

In terms of the avoidance of malificence, this research was not thought to, and was unlikely, to do harm to the participants in that every effort was made to counteract the danger of asking respondents embarrassing or sensitive questions that might have invaded their personal privacy. It was also thought that the potential benefits of this research would outweigh any risk of harm. It was also made clear that individuals have the right to make an informed decision about their participation and that they may exit from completing the questionnaire at any point.

The participants were also provided with a formal letter that was attached to the front of each questionnaire. This letter was purposed to provide informed consent and to fully inform the sample about all aspects of the research thereby ensuring there was no deception involved.

The letter also emphasised that individuals could choose whether to participate and or that they may withdraw from the study at any time without being penalised. As such the letter fulfilled the subject's right to self-determination. Additionally, the information in the letter was believed to be unambiguous and comprehensible, thereby ensuring an individual was able to make a decision about the issues that might affect them.

To ensure anonymity and confidentiality, the subjects were also asked not to write down their names, and when answering the questionnaire's open-ended questions, they should not include other people's names.

In terms of protecting the identity of the clinical mentors, the students frequently rotated to different clinical areas and were exposed to a varied number of clinical mentors. The geographical data was also transcribed as Site A, B, C and so on. As such, it was thought that

this research was not likely to expose the identity of individual clinical mentors as well as the students.

The subjects were also informed that their answers to the questionnaire would be strictly confidential and that they would be stored in a safe, secure place and on completion of this research, their questionnaires would not be used for any other research and that they would be effectively destroyed. While this information was inclusive in the letter it was also verbally re-emphasised on the day the questionnaires were handed out to the subjects.

While having access to the students was primarily purposed to facilitate a good response rate, it also allowed the author to introduce herself, the research topic and for the students to ask questions after the questionnaires had been collected. The latter suggestion was thought to be necessary, as the author's response to their questions might have influenced the students' answers, and in doing so, it might have biased the research findings. Additionally, once the questionnaires had been distributed, to avoid a coercive approach, the author either left the room or occupied herself with an activity so that the students did not feel they were pressurised to complete the questionnaire. They were also instructed to place their questionnaires, completed or otherwise, in a box. This was purposed to protect their identity, in that it would not be possible for the author to identify who had or had not completed, and or returned their questionnaires.

Appendix XIV.

Communication and Approval from Research Ethics Committees