AN EXPLORATION OF

ACCELERATED PRE-REGISTRATION COURSES

IN PHYSIOTHERAPY:

PERCEPTIONS OF PRACTITIONERS

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ABSTRACT

The aim of this research study was to explore physiotherapy clinicians' perceptions of both traditional and accelerated pre-registration physiotherapy training courses with regard to professional practice. The term 'accelerated courses' refers to shortened study routes that have no significant loss of content. Applicants to pre-registration accelerated courses in physiotherapy require an existing Honours' degree to incorporate their prior learning and abilities.

A mixed methodology approach was used in three phases. Clinical marks of pre-registration physiotherapy students from both courses were compared. Results indicated that those from accelerated courses gained higher marks than their traditional counterparts. Interview data from a purposive sample of fourteen senior clinicians was analysed using Interpretative Phenomenological Analysis. Findings were compared with questionnaire results from a larger purposive sample of fifty-one clinicians having gained a 50% response rate

Analysis indicated that these clinicians valued physiotherapists trained from both routes but for different reasons. Two major superordinate themes arose. Within 'Perceptions of Success' many clinicians noted the accelerated graduates' greater confidence. This was associated with their extended academic background and/or additional life skills. Many accelerated graduates were said to 'hit the ground running' as they quickly acclimatised into the complex working environment. However in the second superordinate theme entitled 'A Note of Caution' over-confidence was noted amongst some accelerated graduates. This caused minor difficulties in team dynamics and/or certain aspects of clinical care. Some needed 'reining in' in the early stages of their career. In direct contrast some traditional graduates appeared less confident, passive and lacking initiative. Nonetheless these same clinicians preferred this as they saw opportunities to 'mould', influence and develop the traditionally trained graduates as they saw fit. Both perceptions are of interest in light of Quality Assurance Agency expectations of Honours and Masters level outcomes and have implications for training and clinical practice alike.

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CHAPTER ONE: INTRODUCTION AS BACKGROUND TO THIS THESIS

Physiotherapy is a health-care profession that helps people to promote their own health and well being. A physiotherapist works with a patient or client to 'restore movement and function to as near normal as possible when someone is affected by injury, illness or by developmental or other disability', (Chartered Society of Physiotherapy, 2010a, no page).

I am a physiotherapist by background. My pre-registration training started in 1983. At that time Honours degree physiotherapy training courses were rare within the United Kingdom (UK). The first was accredited in 1976, the second in 1981, (Barclay, 1994). The Educational Advisory Board of the Chartered Society of Physiotherapy had previously discouraged degree qualification. This was because it was believed that it would over-emphasise the academic approach to training rather than promote the practical nature of the profession, (Thornton, 1994). My physiotherapy education took place in a hospital-based School of Physiotherapy. After three years I graduated as a Chartered Physiotherapist with the Level 5 Diploma in physiotherapy that had been introduced that same year, (Barclay, 1994). The style and format of the theoretical aspects of the training were very different from the university based education of today. Whilst at the time I sensed changes were being made in the teachers' educational approach to us I recall that such Level 5 training still entailed rote learning of vast quantities of information. Lessons were predominantly of a dependent mode upon the teacher. We felt that questioning or debate were discouraged in the classroom. It was only the extensive clinical experience of working with patients in the clinical setting that related theory to practice and encouraged deeper thinking.

My professional background and qualification remains of much interest to me given that I am now a university lecturer educating physiotherapy students of my own. I have witnessed many clinical and educational developments to the physiotherapy profession in three decades. Notably the format of training has developed. All traditional three-year and four-year pre-registration physiotherapy training in England & Wales and Scotland, respectively, became Honours level degree status in the 1990s, (Barclay, 1994). Now they compete with a newer

two year accelerated course that is assessed at Master's level. Applicants for these accelerated courses require an existing science Honours' degree so that they can integrate their prior learning and abilities in order to complete studies in a shorter time and at the higher academic Masters level. Such developments in professional education are inspiring and challenging and, I believe, worthy of research.

The research for this thesis started in 2005. Whilst a few accelerated pre-registration courses already existed in the United Kingdom (UK) two were developed and validated in West Yorkshire in 2004. Being involved in one of these courses I was interested to explore its impact and implications upon my profession. This was the premise of the thesis.

Research Question and Aims

The planning and subsequent validation of our own accelerated pre-registration course in physiotherapy raised several questions that also held interest for me from a research perspective. The aim of this research study was to explore physiotherapy clinicians' perceptions of both traditional and accelerated pre-registration physiotherapy training courses with regard to professional practice. Anecdotal evidence suggested that the courses were successful. Indeed other accelerated courses in physiotherapy have already been presented elsewhere in the United Kingdom (UK), (See Appendix 1 and 2). By its nature of being a shortened course I wanted to know how graduates from the accelerated pre-registration physiotherapy courses would compare to their traditionally trained counterparts when working clinically. I wanted to explore what were the attributes and key skills of the accelerated student and graduate. I also wanted to investigate the perceived clinical outcome of these courses in terms of clinical skill and clinical performance. It was hoped that these issues might offer an insight into the implications of the accelerated pre-registration physiotherapy course to the profession. By doing so I felt that these issues would contribute towards the existing knowledge base of accelerated courses. As importantly I felt that understanding how the accelerated graduate might succeed in their studies may help to further develop the training

and outcome of the traditional three-year course. Specific aims of the research are presented on p68.

Outline of the Thesis

This text is written in the first person as it is important to explain how my own experiences have influenced this study in its entirety. There is a suggestion that it is good practice in qualitative research to describe one's personal experiences as well as one's initial or emerging beliefs about the phenomenon in question. Equally, total reliance upon the third person gives the reader no indication of the researchers' presuppositions, (Elliott et al., 1999).

Much of this thesis follows a chronological account to explain the processes and findings from this research. Chapter Two provides a detailed literature review of accelerated courses. With less research of such courses in health-care and, particularly, within the UK, the literature review examines such courses in other disciplines and inter-nationally. The chapter indicates the rationale for the development of the newer course. As the thesis relied heavily upon physiotherapy as its context the history of the profession is also presented. This importantly highlights the major developments within the profession over recent decades. Significantly this means that clinicians who participated in this research reflect a breadth of academic and clinical backgrounds, not least their own academic experiences, awards and understanding of current physiotherapy education.

Chapter Three further explores the wide variety and impact of accelerated courses by exploring the characteristics of such students and graduates. As successes have been noted from these courses this chapter also explores how such individuals may have achieved what they do. Specifically, this chapter explores the subjects of cognitive processes, confidence and self-efficacy of these students. It reviews the classifications for clinical success using the notion of and transition from 'novice to expert'. Finally, the concept of 'communities of

practice' is explored as a back-drop to examine how students and graduates from both cohorts may adapt to the clinical setting as their new place of work.

Chapters Four and Five presents the methodological background to this thesis and the study methods, respectively. They explain how I have perceived the physiotherapy profession to be and the impact that this has had on my data collection, analyses and proposed dissemination of the research findings. Based upon the breadth and complexity of the profession and the desire for robust research the chapter explains the choice for a mixed methods approach. It explains why interviews were used with a purposive sample and the use of Interpretative Phenomenological Analysis. In this chapter the subsequent use of questionnaires is considered to further explore and investigate the impact of accelerated courses with a larger purposive sample.

Chapters Six, Seven and Eight present the research findings and analysis and offer discussion for further insight. Findings are discussed in light of relevant literature and previous studies, where applicable. Chapter Six explores the clinical performance of accelerated physiotherapy students whilst on placement. The next two chapters present rather diverging views of the accelerated pre-registration courses in physiotherapy. This reflects both the admiration and concerns that each interview participant had for these newer courses as well as the traditional course. Chapter Eight also explores the interview participants' reactions when asked which graduate they would choose to work alongside; the traditionally trained physiotherapist or the accelerated trained physiotherapist.

Chapter Nine presents the overall discussion of the thesis to fulfil the aims of developing the theoretical appreciation of the accelerated pre-registration course in physiotherapy and implications for education and practice. The chapter explores the clinicians' valued contributions to the research process. Interpretations of what they said are discussed as a back-drop for reflecting upon my research process.

CHAPTER TWO: THE ACCELERATED COURSE AND ITS CONTEXT WITHIN PHYSIOTHERAPY

Introduction

This chapter outlines the rationale for, and background to, accelerated courses. A general paucity of literature exists relating to accelerated pre-registration courses in health-care. Hence literature relating to other types of accelerated training is explored both nationally and inter-nationally. The context of this thesis relates to accelerated pre-registration training in physiotherapy. Hence a history of the physiotherapy profession is offered from clinical and academic perspectives. This has relevance because this research study explored physiotherapy clinicians' perceptions of the newer accelerated pre-registration course in comparison to the traditionally presented courses. Importantly developments have already occurred in physiotherapy education in the past three decades. Hence the training routes and academic backgrounds of the research study's participants differed from person to person which may have impact upon their general perceptions.

The origins of accelerated courses

In line with political and consumer demands and changes to educational theory alternatives have arisen to the format of the traditional university or college degree in the United States of America (USA), United Kingdom (UK) and other countries, (Wlodkowski and Kasworm, 2003a). One such development has been the accelerated timescales for training. Whilst alternative terms such as 'intensive', 'intensified' or 'time compressed' occur (Scott, 2003, p29; Husson and Kennedy, 2003, p51; Grounds, 1996, p159) the term 'accelerated' is used to mean those courses that run shorter than traditional routes but without significant loss in content (Grounds, 1996). In particular, and for the benefit of this thesis, the term 'accelerated pre-registration courses' (APRC) shall mean those study routes at undergraduate or postgraduate level that lead to eligibility for membership of the relevant professional healthcare institution(s) in a shortened time than traditional training routes (Chartered Society

of Physiotherapy, 2003a; Higher Education Funding Council for England, 2001; Department of Health, 2000b).

Accelerated courses have not been designed to replace the existing traditional degree but to add to the range of options open to such students, (McCaig et al., 2007). Accelerated courses are primarily offered to 'adult learners' as opposed to traditional school or college leavers. Recognition of students' developed learning style and life experiences and the accreditation and/or recognition of students' prior learning enables some components of their future chosen pathway to be 'fast-tracked', condensed or by-passed. This allows the new studies to be completed in shorter time, (Wlodkowski, 2003). In many cases, and in relation to this thesis, these accelerated students are already graduates from previous studies, (Chartered Society of Physiotherapy, 2003a).

In their literature review, Donaldson and Graham (2002) agreed that many variations exist amongst accelerated routes. This makes direct comparisons difficult. A review within nursing highlights a significant lack of empirical research literature in relation to accelerated pre-registration courses in the United Kingdom (Halkett and McLafferty, 2006). Whilst medical training has become more flexible in its delivery in recent years (Rushforth, 2004; Norman 2002; Jones et al., 2001), Wass et al. (2003) argued that such changes to educational policy seem logical, but have not necessarily been informed by evidence. Jones and Sheppard (2007) believed that there is a lack of research within physiotherapy that relates educational methods to patient outcome. My own literature review involved detailed search strategy of healthcare and educational databases. Details are provided in Appendix 3.

Specifically there have been no studies relating to accelerated pre-registration courses in physiotherapy. Whilst positive anecdotal reports arise from accelerated pre-registration courses within physiotherapy to support their rationale additional research seems advantageous to understand the new curricula delivery and its implications. It would therefore be beneficial to explore perceptions of these new programmes from both clinical and educational perspectives.

This chapter considers the background and implications of such accelerated pre-registration courses. Emphasis will be placed upon the physiotherapy profession, this being my clinical background, however, comparable educational initiatives in other health-care professions shall also be considered. For this reason an overview of physiotherapy will also be offered.

Physiotherapy: past and present

Physiotherapy is:

> a health care profession concerned with human function and movement and maximising potential. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variations in health status. It is science-based, committed to extending, applying, evaluating and reviewing the evidence that underpins and informs its practice and delivery. The exercise of clinical judgement and informed interpretation is at its core, (Chartered Society of Physiotherapy, 2002b).

Physiotherapists are autonomous professionals being able to act as first-contact practitioners and accept referrals from other health care professional to optimise functional ability and potential in their clients, (Chartered Society of Physiotherapy, 2010a). They take a holistic approach to the treatment of illness and disease looking at the 'whole' person taking into account the individual's previous medical history, work and lifestyle before making a diagnosis and devising a treatment programme that is tailored to that person's needs, (Chartered Society of Physiotherapy, 2007b).

Perhaps the most common perception of the profession might be that of the treatment of sports injuries. Yet physiotherapists treat a wide range of physical conditions from the musculo-skeletal (orthopaedic and rheumatological), neurological, cardio-vascular and respiratory systems across the life span (from neonate to old age). They manage physical and mental health issues in a variety of settings from hospitals, health centres, private practice, schools, industry and the patient's own home, (Chartered Society of Physiotherapy, 2007b). Hence physiotherapists are as likely to treat intensive care patients, amputees, those recovering from heart attack or stroke, the older person, or as occupational health in industry.

Physiotherapists work within the multi-disciplinary health and social-care teams in their treatments as well as having a key role in health promotion, health education and self-care to maximise individuals' independence and well-being, (Chartered Society of Physiotherapy, 2002b). With newer interests in complementary therapy some physiotherapists now also undertake acupuncture, reflexology and craniosacral therapies, (Chartered Society of Physiotherapy, 2007b).

History of the physiotherapy profession: professional recognition

The historical contributions of remedial or therapeutic techniques including massage, hydrotherapy or hydrology, medical electricity and remedial exercise from the nineteenth century, and earlier, are acknowledged and well recorded by Barclay in her 1994 publication marking the physiotherapy professions' centenary. In 1894 a scandal was publicised by the British Medical Journal which compared massage parlours to 'hotbeds of vice' and subsequently questioned the name of therapeutic massage, (Barclay, 1994, p20). The Society of Trained Masseuses was created in 1894-1895 by notable nurses and midwives who wished to 'make massage a safe, clean and honourable profession for British women' (Barclay, 1994, p23) and 'to protect their profession from falling into disrepute as a result of unscrupulous people offering massage as a euphemism for other services', (Chartered Society of Physiotherapy, 2007b, no page)

The Society acquired the legal and public status of a professional organisation and became the Incorporated Society of Trained Masseuses in 1900. The major contribution of therapy to aid the rehabilitation and recovery of World War One survivors was further acknowledged and facilitated the recognition of the Society, (Barclay, 1994, p51). The Society amalgamated with other institutions, allowed men to join the membership for the first time and gained its' Royal Charter to become the Chartered Society of Massage and Medical Gymnastics in 1920. It became the Chartered Society of Physiotherapy (CSP), as it is now known, in 1944, (Chartered Society of Physiotherapy, 2007b; Barclay, 1994). Finally, the Society of Remedial Gymnastics and Recreational Therapy, another notable organisation, merged with the CSP in 1985 having many common clinical skills and purpose. Today, the Chartered Society of

Physiotherapy has a membership of 48,697 with 38 separate clinical interest and occupational groups (CI/OGs) reflecting the breadth of skill across the many clinical specialities, (Chartered Society of Physiotherapy, 2008a).

World-wide, similar organisations were created to reflect the developing nature of physiotherapy; the Australasian Massage Association was created in 1906 becoming the Australian Physiotherapy Association (APA) in 1939, (Australian Physiotherapy Association, 2006), the Council on Physical Therapy of the American Medical Association in 1921 becoming the American Association of Physical Therapy (APTA) in the 1930's (American Physiotherapy Association, 2007), the Canadian Physiotherapy Association, and the South African Society of Physiotherapists created in the 1920's and 1930's with similar organisations across Europe, (Barclay, 1994, p107). The World Confederation for Physical Therapy was founded in 1951 with 11 founding member organisations from Australia, Canada, Denmark, Finland, France, Great Britain, New Zealand, Norway, South Africa, Sweden and the United States of America. The Confederation remains a non-profit organisation now comprising 101 members which, together, represent more than 300,000 physical therapists worldwide encouraging high standards of physical therapy research, education and practice, (World Confederation for Physical Therapy, 2010).

Developments in professional independence arose in the 1970's as the Chartered Society of Physiotherapy was certified as an independent trade union. It became fully affiliated to the Trade Union Congress in 1992, (Chartered Society of Physiotherapy, 1994). Most importantly, in 1977, the Department of Health instituted professional autonomy for chartered physiotherapists, (Department of Health and Social Security, 1977). With subsequent bye-law changes in the Society's statutes in 1978 this allowed chartered physiotherapists to hold the status of 'autonomous practitioner' recognising the professionals' training and ability to assess, treat and rehabilitate people with a range of physical health problems without prior medical referral and subsequent prescription of physiotherapy modalities. This revoked the first rule of the inaugural Society which dated back to 1894 which insisted upon medical supervision, (Chartered Society of Physiotherapy, 1994; Barclay, 1994; Thornton, 1994).

History of traditional physiotherapy education

Autonomous status has major professional and educational implications. In order to develop and ensure standards for its membership, from its earliest origins in 1895, the Society was responsible for the training, examination and regulation both of its membership but also its Schools' teachers. Indeed, the Diploma for Teachers of Physiotherapy (DipTP) was created in 1965 until 1977 in lieu of the Certificate of Education, (Thornton, 1994). Pre-registration physiotherapy education has progressed significantly in recent decades. Since its Royal Charter, the original qualification within physiotherapy was that of 'Chartered Physiotherapist'. Graduate training was proposed to the Minister of State for Social Security in 1981. From 1986 onwards the majority of UK training courses offered a three-year long Level 5 Diploma (DipHE) qualification, (Barclay, 1994). The next year the CSP Council approved the separation of qualification from membership with the introduction of the new qualification of the Level 5 Graduate Diploma in Physiotherapy (GradDipPhys). This academic title was, however, never approved by the Privy Council and although widely used within the profession to denote qualification it has no formal currency and was finally withdrawn in 1994 (Chartered Society of Physiotherapy, 2002a). Being Level 5 qualifications of 240 credits the Chartered Physiotherapist and GradDipPhys programme awards were said to place 'greater emphasis upon students' acquisition of knowledge and skills, rather than developing the cognitive and academic skills associated with degree-level study', (Chartered Society of Physiotherapy (2008c, p4). In contrast to current Honours degree programmes they were said to rely more upon 'traditional methods of course delivery' and 'were not so concerned with integrating research awareness and activity into clinical practice', (Chartered Society of Physiotherapy (2008c, p4).

The first ever UK undergraduate physiotherapy training degree was presented in 1976 at Ulster Polytechnic' School of Health Sciences. Being a four-year degree course it faced difficulties as the government would not sanction four-year degree courses for economic reasons. The Council for National Academic Awards (CNAA) would not approve a three-year Honours degree course because of the large clinical components involved which at the time were not given academic credibility, (Brooks, 1994; Barclay, 1994). However, this anomaly

was resolved and more degrees were created from 1983 onwards. The CSP ended its regulatory national examination system that favoured internal systems in 1989. All physiotherapy training programmes progressed to BSc (Hons) level by 1994, (Barclay, 1994, p274; Thornton, 1994). Physiotherapy clinicians of today may therefore have been educated from a wide variety of training programmes each with their different academic award and ethos. This has significance as clinicians involved in this research may have differing backgrounds. Today 33 Higher Education Institutions (HEIs) offer physiotherapy training programmes that carry CSP approval and lead to chartered status. The traditional three-year BSc Honours course remains the most common route accounting for a 45% share in 2007/2008, (Chartered Society of Physiotherapy, 2009a). The following chart (Figure 1) was supplied by the CSP to indicate the various training programmes for the same license to practice: (Chartered Society of Physiotherapy, 2009a). See also Appendix 1.
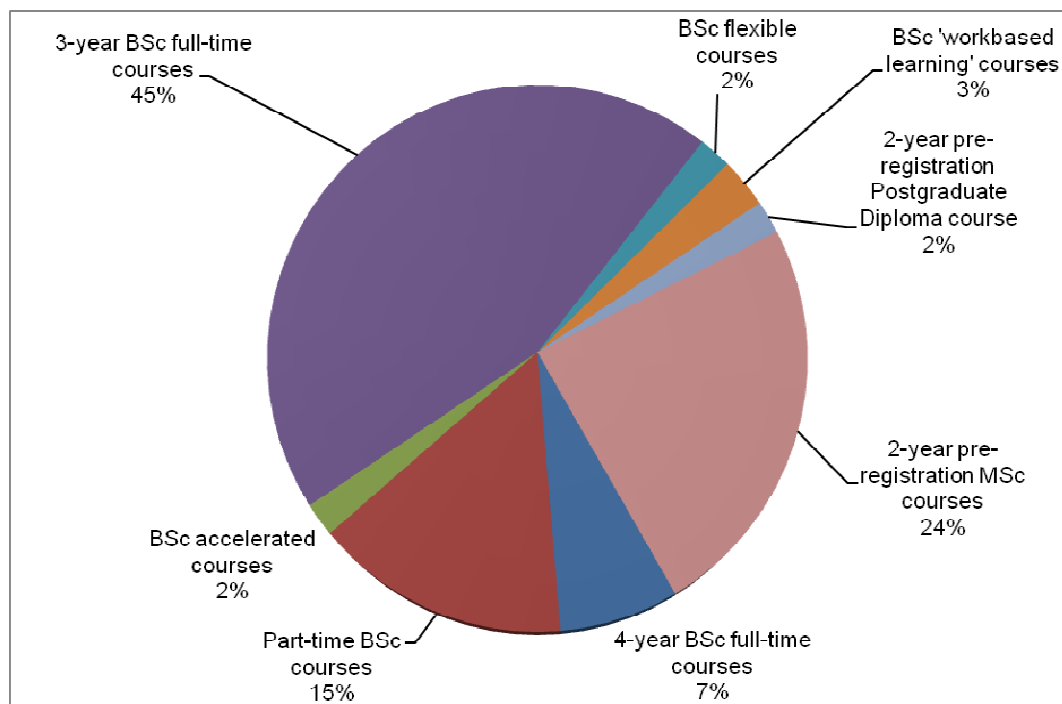
Figure 1: Breakdown of UK physiotherapy pre-registration routes in 2007/2008
Curriculum design within physiotherapy education

Pre-registration physiotherapy education is authorised and validated by the Chartered Society of Physiotherapy and regulated by the Health Professions Council (HPC). The HPC is the governing body that oversees standards of clinical work across many allied health professions in the publicly funded National Health Service. The HPC's 'Standards of Education and Training' and 'Standards of Proficiency: Physiotherapists' are key documents that relate to standards of pre-registration education, (Health Professions Council, 2005; 2007). The 'Rules of Professional Conduct' from the Chartered Society of Physiotherapy relates one's professional liability with the core skills of the trained Chartered Physiotherapist. It states that:

> Chartered Physiotherapists shall only practise to the extent that they have established and maintained their ability to work safely and competently, and shall ensure that they have appropriate professional liability cover for that practice, (Chartered Society of Physiotherapy, 2002c, p6).

When considering traditional physiotherapy education some suggest that it remained too 'concentrated on the acquisition of facts and clinical skills and seldom concentrated on research and related scholarly activities' (Sackley, 1994, p25A). These educational principles were considered didactic and 'dogmatic' (Morris, 1993), students being 'expected to conform to a professional mould', (Sparkes and Mason, 2002, p287). Today the pre-registration degree graduate has 'the ability to generate knowledge and skills in order to deal both proactively and responsively with their own learning needs and with changes in society's health care needs', (Higgs, 1992b, p822). As highlighted by the Curriculum Framework for Qualifying Programmes in Physiotherapy, students will have:

- 'an ability to learn independently, while being aware of relevant and appropriate sources of support, advice and guidance and how to access these;

- an appreciation of the necessarily reciprocal relationship between theory and practice within professional learning;

- a capacity for clinical-reasoning, problem-solving, practice evaluation, and reflection and the critical appraisal of the profession's evolving evidence base and its application to practice;

- recognition of the central importance of deploying a problem-solving, reflective approach to all elements of professional practice;

- recognition of the fundamental importance of developing a genuine commitment to the values encapsulated in the concept of patient partnership;

- a capacity to recognise the scope for, and to engage in, the transfer of knowledge, skills and attributes to different professional settings and situations, while having due regard for the limits of personal scope of practice;

- a strong understanding of the links between different elements of the curriculum they follow and an appreciation of the broad concepts and values that underpin physiotherapy practice in all settings and environments;

- an aptitude and enthusiasm for CPD and an appreciation of the continuum between qualifying education and post-qualifying practice and development',

(Chartered Society of Physiotherapy, 2002b, p26).

Such recent academic advancements in under-graduate training is the result of, and reflects, an evolving base of physiotherapy research and education. These also provide the background to this research.

Recent changes that have affected physiotherapy practice

Healthcare reforms and changes to funding streams have altered physiotherapy service provision in recent years. The concept of 'Fund-Holding' by General Practitioners (GP) was introduced by the Conservative Government in 1981. This concept evolved into 'Primary Care Groups' in 1999 and thence to 'Primary Care Trusts' from 2000 onwards (Department of Health, 1999). By doing so the Labour Government of the time provided GPs with the opportunity to employ a wider range of staff in order to provide a wider range of health services to their local population. Successive Labour governments further separated the notion of the hospital setting (known as 'secondary care') as being the main care giver with greater decentralisation to 'primary care' being local community based health-care. This affected the provision of local physiotherapy services. Hence physiotherapists have had a wider variety of employers in the past twenty years which has directly affected the expectations of the newly graduated physiotherapist. Historically, there has been an expectation that Chartered Physiotherapists should seek graduate employment in relevant

settings in order to consolidate knowledge and skills gained from pre-registration training in hospital settings, (Chartered Society of Physiotherapy 2008b). These are comparable with the better known 'house job' system for qualified medical staff. For physiotherapists such 'rotations' have commonly been three or four month long placements in which the new graduate would experience a breadth of clinical settings and varied caseloads under the supervision of more senior qualified staff in order to consolidate prior knowledge and skills, (Chartered Society of Physiotherapy 2008b).

New clinical posts have also developed significantly over recent years. One such example is that experienced, senior physiotherapists have developed their specialisms from the core role of physiotherapy. These were first noted from 1986 by Byles and Ling (1989). Having completed specialist accredited post-graduate courses these 'Extended Scope Practitioners' worked outside their traditional scope of physiotherapy practice to act as a first-line contact for the opinion and management of patients. As such these staff may order medical investigations (e.g. X- rays, blood tests etc.) and use such results to determine the clinical diagnosis and appropriate management of the patient, including referral onwards, suturing, injection or prescription of medicines, (Chartered Society of Physiotherapy, 1999; Durrell, 1996). This is an important development for the profession. More recently, the role of 'Consultant Therapist' was developed to recognise clinicians' expertise in their specialist clinical field, demonstrating best practice, bringing innovation and influence to enable clinical leadership and strategic direction within allied health professionals, (Department of Health, 2000c). These roles can inspire applicants to choose this career realising that progression is acceptable and possible in clinical, managerial and research fields. As such these roles reflect the strides made by the profession over recent decades.

Background to the accelerated pre-registration course

The development of accelerated pre-registration courses internationally

Accelerated courses became popular in the United States from the late 1970's as mature, adult learners wished to return to college to complete undergraduate and postgraduate qualifications, (Wu and Connelly, 1992). Changes to the format and presentation of these courses enabled a shortened qualifying time-frame. Hence, shorter weekly evening classes of four-hours duration over five-to-eight weeks became conventional. Together with independent, self-directed learning this became an acceptable alternative to, and equivalent to, the traditional semester-long course with multiple class sessions per week, (Husson and Kennedy, 2003). Many variations exist amongst accelerated courses but Donaldson and Graham (2002) identified commonalities: they are more convenient and accessible for the adult learner and provide a credential or award. Because of the nature of the acceleration these courses are delivered differently from traditional courses and may have easier administration for the adult student, (Donaldson and Graham, 2002). Indeed some US programs offered a customised learning environment that made it an attractive alternative to the student:

> There's very few hassles here. That means, I write a check, and they set down all the books I need for the whole semester, right in front of me. That means, I write a second check, and I have registered and paid for the entire semester, that's it. I park right out in front, no parking sticker. I know exactly what my class schedule will be from now until the day I graduate. There's absolutely no question about it, (Kasworm, 2003, p19).

Such comments demonstrate that adult education has developed over time and included competitive business principles. Nonetheless the philosophy of adult education has also developed. Swenson (2003) argued against the traditional tutor/student dependent mode of 'chalk-and-talk' as:

> It seems that as long as a class is scheduled for fifty minutes five times a week, for sixteen weeks, there is an implicit assumption that learning is occurring, (Swenson, 2003, p85).

The concept of actual contact hours can thus be blurred. New technology has enabled different methods of learning. The use of video-streaming, chat-rooms, email, and bulletin boards provide valuable support, (Wlodkowski, 2003).

Much of the American literature relating to accelerated courses described intensive, single semester-long courses in compressed or condensed formats, (Scott, 2003, p29) covering a wide variety of courses across management, health, education, law etc. Many are vocational and designed for the student in employment who can directly relate and focus their academic work to the workplace, (Kasworm, 2003). As noted in health-care, accelerated courses require students to have already successfully completed first degrees to provide students with sufficient knowledge and a skill base for the shortened studies. Hence in the USA they are known as 'second-degrees', (American Association of Colleges of Nursing, 2009). Within the United States of America the first accelerated training course in nursing was offered at Yale University in the 1970s. This Graduate Entry Prespeciality in Nursing course was particularly designed for college graduates who wanted to switch careers, (Kilby, 2004, p4).

Wu and Connelly's 1992 American study of the accelerated pre-registration course believed it to be:

> an efficient use of nursing program resources and an effective strategy for increasing the supply of nurses by successfully recruiting a heretofore untapped pool of candidates for the profession, (Wu and Connelly, 1992, p39).

In the 1980s the continued call for 'talented, motivated, and academically excellent' applicants was recognised together with the need to increase the numbers of potential leaders in nursing, (Shiber, 2003, p135). The accelerated second-degree programme was seen as one method to enhance their student body, (Shiber, 2003). By 1990, 31 accelerated baccalaureate nursing programs and 12 generic master's nursing programs were offered across America, (American Association of Colleges of Nursing, 2009).

By 2008, the American Association of Colleges of Nursing (AACN) identified 218 accelerated programs with a further 26 in the planning stages. The number of generic master's programs has increased to 57 with another 7 planned. Indeed, according to AACN's database these numbers outpace all other types of entry-level nursing programs currently being considered at four-year nursing schools, (American Association of Colleges of Nursing, 2009).

The development of accelerated courses within the UK

The concept of shortened degrees was developed within the UK in 1969 by Sir Brian Pippard of the Cavendish Laboratory, Cambridge. As the former University College Buckingham the University of Buckingham first offered a two-year degree in 1976, (McCaig et al., 2007).

The Leverhulme Report of 1983, on behalf of the Society for Research into Higher Education, suggested three options for accelerated training: i) a new type of non-degree qualification in some institutions; ii) more intensive degrees of a traditional Honours type by lengthening the academic year or iii) a two-year 'pass' degree, (Grounds, 1996, p160). The level of education and subsequent qualification proved contentious. The authors of the Leverhulme Report stated that:

> a degree is an ancient and prestigious qualification… diplomas and certificates below degree level carry no equivalent prestige: some indeed are liable to be interpreted as failure in a degree, (Grounds, 1996, p161)

However perceptions changed. New condensed 'nine-to-five' degrees were introduced, (Blair, 2006) or the introduction of a full third summer semester, known as 'trimesterisation', (Baldwin and McInnis, 2002 cited in McCaig et al., 2007). The new formats have proven popular across subject areas with lawyers, hoteliers and other professionals as applicants viewed them to be an opportunity to get ahead in the job market, (Blair, 2006). McCaig et al. (2007) identified two-year BSc and BSA degrees being piloted in four different HEIs from 2003 onwards.

Most recently, as part of 'Working together. Public services on your side' in March 2009, the then Labour Government proposed an additional accelerated teacher training programme entitled 'Transition to Teaching'. This was presented to attract talented and successful people from business and banking into teaching. With their previous degrees, life skills and successful employment backgrounds applicants were encouraged to apply for a six month teacher training course instead of the more usual one year, (The Cabinet Office, 2009). However, trade unions reacted badly stating that it was 'demeaning' to the profession, (Smith 2009b, no page).

Accelerated courses within health-care in the UK

Within nursing the mode of training has changed since the end of World War II. The 1947 'Majority Report of the Wood Working Party' on p63-66 recommended a 'two plus one' model in which the theoretical period of training for pre-registration nurses was reduced from three years to two, (Scott, 2000). In this model student nurses were supernumerary to qualified staff in their initial two years but had an additional pre-registration clinical year to consolidate knowledge and skill, (Scott, 2000). This approach was supported by the 1964 Platt Report 'A reform of nursing education' with the first experimental course running at St. George's Hospital, London in 1965, (Scott, 2000, Platt, 1964, p21). Whilst this was a re-packaging of nursing training for all, regardless of prior experience, it showed an acceptance for new course delivery.

The House of Commons' 'Third Report, Future NHS Staffing Requirements' (1999) acknowledged the most severe recruitment and retention difficulties in nursing, midwifery, physiotherapy, occupational therapy, anaesthesia, dietetics, psychiatry and pharmacy in the 1980s. It sought to increase training and target health professionals 'to resume their careers, broaden career structures, and improve the working environment'. It did 'not think it acceptable to solve our nursing shortages by... creating shortages in developing countries', (House of Commons, 1999, no page). In 2000 Governmental pressure further supported educational developments in 2000 as the Labour Government's workforce planning in the NHS encouraged a more flexible approach to staff development and training (Department of Health, 2000a). The widely published 'NHS Plan' of 2000 promised quality reform and focused upon investment in staff and facilities. One suggestion was to use more flexible working patterns and roles with additional staff support and numbers across the professions, (Department of Health, 2000b, p10). One method to do this was the accelerated pre-registration course, (Higher Education Funding Council for England, 2001; Department of Health, 2000b; Chartered Society of Physiotherapy, 2003a).

Within medicine there was a recommendation to increase the number of medical students by a minimum of 1,000 per year in order to develop the necessary career opportunities and

supervisory roles, (The House of Commons, 1999). Accelerated medical training programmes were developed in the UK to last four years compared with the traditional courses of five or six years, (Rushforth, 2004). They were seen to ensure a 'faster production of doctors than traditional courses… [that would] broaden the field from which doctors are recruited', (Medical Workforce Standing Advisory Committee, 1997, p39). The new four year accelerated training courses for graduates were introduced at four medical schools in the UK (namely, Cambridge, Oxford, St George's London, and Leicester Warwick) in the autumn of 2001, (Blythe, 2001).

Within the Allied Health Professions (AHPs) the first accelerated two year Diploma for graduates in occupational therapy was presented at The Essex School in Colchester also becoming the first accelerated programme to offer degree status by 1996, (Wilcock, 2002). Within physiotherapy accelerated pre-registration pathways were created in the mid 1990's to cater for the a 'significant' number of graduates in related disciplines who wished to become physiotherapists, to enable widening participation, diversity and access, and to assist in responding to the shortfall in physiotherapists and workforce needs, (Chartered Society of Physiotherapy, 2003a; NHS Executive, 1999). The first two-year accelerated pre-registration physiotherapy course was validated in 1995 at Queen's College, Glasgow, having been one of the first institutions to present a three-year degree course in 1982, (Glasgow Caledonian University, 2004; Barclay, 1994). Others soon recognised the sociological, economic and political influences upon physiotherapy education and clinical practice, (Queen Margaret University College, 2004). Today accelerated courses in physiotherapy account for 28% of all such pre-registration courses, (Chartered Society of Physiotherapy, 2009a).

Thus pre-registration physiotherapy education has developed significantly in the past thirty years in line with other professions. They provide successful students with recognised qualifications and have had a huge impact upon the profession. Of note for this thesis, many of today's senior clinicians and managers may well have been trained as Level 5 Diplomates in the mid-1980s. Whether or not they have gained subsequent academic qualifications their experience and perception of physiotherapy training might be different from that of the new

graduates with their traditional three-year Honours degree route or newer accelerated two-year qualification.

Potential advantages and disadvantages of accelerated courses

Advantages of accelerated courses

According to the literature there are many benefits to accelerated courses. They create greater numbers of clinical staff in shorter time-frames in line with the government initiatives and hence address the shortfall in the healthcare workforce (Department of Health, 2000a; Department of Health, 2000b). Accelerated courses are said to widen participation, diversity and access (Chartered Society of Physiotherapy, 2003). It can also be suggested that considering the huge demand upon undergraduate physiotherapy programmes, accelerated pre-registration courses provide the graduate applicant with another avenue for successful application and entry to their chosen profession. They provide greater diversity to the student body than more traditional routes (Hutchinson et al., 2002). They reduce attrition rates with more mature and considered applicants (Halpenny, 2004) who already have proven study skills, (Rushforth, 2004); and are more focused and are less influenced by outside distractions (Hutchinson, 2002).

Accelerated courses are said to make a contribution to the workforce as Peter McCrorie, Director of Graduate Entry at St. George's Hospital Medical School, believed that patients could be better served by mature [medical] students than school-leavers, because of their additional life-skills (McCrorie, 2002). This has been supported by the American Association of Colleges of Nursing who believed that second-degree students bring a wealth of knowledge, experience, and energy to the workforce and are highly skilled clinicians (American Association of Colleges of Nursing, 2005).

From the applicants' perspective reducing time-spans in pre-registration training could offer a cost saving as the extent of additional student debt for this second degree could be considerable, (Donaldson and Graham, 2002). Within the UK, in 1998-99, personal circumstances including financial pressures were rated as the greatest reason for nursing and midwifery students' attrition, and the second most rated reason in the Allied Health Professions, second to academic failure, (National Audit Office, 2001). A more up-to-date report does not exist. However, an international review of attrition rates in Higher Education was commissioned by the National Audit Office in 2007. Causes given by and for students leaving Higher Education were: age at commencement of studies, the wrong choice of study course, transition from secondary school to Higher Education and financial burden, (van Stolk et al. (2007). Financial burden has become increasingly significant with the introduction of tuition fees. It was anticipated that accelerated courses might enable cost-savings to occur for central funding from the government, (National Audit Office, 2001; NHS Executive, 1999; Medical Workforce Standing Advisory Committee, 1997). Yet the bench mark prices for pre-registration physiotherapy training offer an interesting slant. 2009/2010 figures for the traditional three-year physiotherapy course were £8138 making a total training cost of £24,414. In contrast the two-year accelerated courses within Yorkshire were significantly higher at between £12,206 and £12,573 per annum because of the intensity of the course design and additional support required. For these courses this creates a total training cost over two years of £25,146 which has parity to the traditional course, (Education Commissioning Manager of the NHS Yorkshire and Humber; personal communication, 24 February 2010; JM Consulting, 2003). Hence no financial benefit is gained by the commissioning educational authority. However, the faster turn-over and subsequent graduation is significant for both students and employers.

From an educational perspective accelerated courses further develop study skills because they require independent study, (Brookfield, 2003). According to Brookfield (2003) this is advantageous as students may be more likely to explore differing perspectives. There is concern that traditional didactic teaching encourages the class-led student to 'mimic unthinkingly the views and preferences of the majority' and 'pseudo-thinking whereby the

learner simply paraphrases what she feels others are thinking or want to think', (Brookfield, 2003, p81). This does not seem to be an issue that relates solely to accelerated courses but to wider educational theory. One could argue that critical thinking develops out of open debate and the opportunity to engage with others who have different life experiences and may think differently. According to Scott's 2003 literature review accelerated courses have been viewed positively, particularly in the US, as it is reported that these courses promote more classroom interactions and in-depth discussions in their three-hour long classes than the typical shorter duration semester-length classes. As such, apparently, one is less likely to say 'We can't go into this today because we don't have enough time', (Scott, 2003, p35). Scott's (2003) qualitative doctoral research compared accelerated courses with traditional courses taught by the same instructor and covering the same material. She suggested that it was the uninterrupted learning of the 'intensive' structure of the accelerated course that stimulated both focus and immersion enabling a better 'synthesis' of the subject, (Scott, 2003, p35). Interestingly, this also meant fewer interruptions by other 'less important' subjects. From this personal perspective, mature applicants apparently appreciate the efficiency of accelerated learning formats, (Wlodkowski, 2003) and have a different range of issues compared to the traditional school-leaver. It transpires that the mature, adult student can demand more accessible, relevant and pre-planned, detailed and structured courses than perceived traditional 'impersonal, bureaucratic, and time-consuming young adult-orientated collegiate experiences', (Kasworm, 2003, p19).

However, it is not only structure and format that differentiate accelerated courses from traditional routes. Much is written in the literature between semantic memory and the concepts of 'active learning'. According to Scott:

> students do not come into the classroom as blank slates. They arrive with a plethora of knowledge and experiences that support their personal understandings of life and the world around them... The more connections students generate, the more meaningful the connections are to them. And the more active the learner is in building the connections, the greater is the likelihood that students will remember and be able to access new information, (Scott, 2003, p31).

The debate as to whether students need such structured learning was developed by Cangelosi (2007) who argued that the more experienced learners benefit from less structured

and more context-orientated learning. Whilst learning the new skills of being a nurse, they can use their previous graduate knowledge, life experiences and expertise with self-directed learning to promote their current learning reflecting many of the aforementioned advantages of the accelerated courses.

Disadvantages of accelerated courses

The perceived disadvantages to accelerated courses are often related to the very fact that the students are adult learners, many with alternative domestic pressures than the traditional school leaver, often with greater financial implications for the mature student with previous student loans (Rushforth, 2004). Youssef and Goodrich (1996) studied stress levels using the State-Trait Anxiety Inventory and the Scale of Judgmental Abilities as two independent variables in a convenience sample of accelerated (n=48) and traditional (n=46) pre-registration nursing students with wide demographics at one private university in the Washington Metropolitan Area, USA. Results indicated that accelerated pre-registration nursing students showed 'consistently higher stress levels than those of traditional students', (Youssef and Goodrich, 1996, p76). They suggested that the stress levels could result from financial or domestic factors, such as child-care whilst being full-time students. However, Duke (2001) disagreed. Findings from focus groups of accelerated pre-registration nursing students in Victoria, Australia, indicated that although accelerated pre-registration student nurses were highly motivated they experienced significant stress levels that were actually course-related, (Duke, 2001). In his editorial Rushforth (2004) supported this stating that APRCs are highly demanding with intense studies. Nonetheless, the speed and mode of training can affect the confidence of some students in other ways. Cangelosi (2007) interviewed nineteen second-degree graduates from six nursing programs in the American mid-Atlantic region. She reported that despite their academic confidence, some needed additional care and support to overcome feelings of inadequacy in the clinical arena. This was because students with no prior clinical experience were expected to progress quickly to reach and demonstrate the skills of a safe novice practitioner within one calendar year. Such pressures made some consider leaving the course early. Cangelosi (2007) cited Domrose (2001) who reported that registered nurses, hospital administrators and nursing faculty

questioned the competence of graduates from those accelerated pre-registration courses which last one calendar year.

Hence accelerated training may not suit all. From a questionnaire administered to 64 occupational therapy students at Brunel University in 2000, 30% indicated that they were eligible to study the accelerated route but had specifically chosen the traditional route as being a less intensive route and allowing time for part-time employment, (Craik and Nappthine, 2001).

This intensity therefore has repercussions and requires careful planning as some students in accelerated teacher-training courses:

> felt that they were being hustled from one thing to another without sufficient time for reflection. Several indicated that whilst, as mature students, often with family commitments, they were used to pressure, they were surprised at the demands made on them, (Grounds, 1996, p169).

However, this view was rejected by Swenson (2003) who believed that sufficient time is made available for reflection; e.g. when preparing for assignments, use of critical incidents and small group breakouts.

Summary

The accelerated course has developed nationally and internationally in many disciplines including the business world, education, law and health. The commonality for all such courses is that they should provide a comparable level of knowledge and skill to their respective traditional, longer, courses. The rationale for the development of these accelerated courses are varied. They may be related to consumer demand for relevant qualifications to enable relevant employment in a shorter timeframe, a political drive to ensure suitable numbers of graduates from the relevant workplace or personal fulfilment. Hence the two routes reflect different student needs, different student expectations and have different modes of delivery.

The literature indicates several strengths and limitations of the accelerated course for the individual. One purpose of this thesis is to explore the implications of the accelerated pre-registration course for clinical practice within the clinical field of physiotherapy.

CHAPTER THREE: CHARACTERISTICS AND EXPECTATIONS OF THE ACCELERATED STUDENT AND GRADUATE

Introduction

The previous chapter considered the origins and background of the accelerated pre-registration course. A history of the physiotherapy profession was also discussed to highlight the educational and clinical developments that have taken place since its inception and, in particular, in the past thirty years. This chapter considers the characteristics of the accelerated student and graduate. It debates the educational perspectives of accelerated courses as well as considering the possible pre-requisites that are needed for successful development and completion of these courses. Lastly the implications of accelerated courses are debated in terms of the methods by which students and graduates develop from novice to expert in their practice. These all provide a backdrop to explain the methodological rationale for this study.

Characteristics of the accelerated student and graduate

In many cases, applicants to accelerated courses are graduates of a first degree and hence as already stated American studies refer to these accelerated routes as 'second-degrees', (American Association of Colleges of Nursing, 2009). The assumption is that being adult learners these accelerated students would be older, more ethnically diverse and have had considerably more work and life experiences than traditional school leavers. However, Seldomridge and DiBartolo (2005) disagreed. Their review of their own nursing cohorts at Salisbury University, USA, found that their students were younger than 30 years of age, tended to be European-American women and were returning to studies within 5 years of their first degree. Boylston et al. (2004) cited papers describing such adult learners in nursing as

self-supporting and mature with multiple responsibilities such as families and mortgages. This requires a strict balance between work and family-life with effective time-management.

In her qualitative study of twenty accelerated applied management students Kasworm (2003) described them as skilful workers and knowledgeable contributors to society. It was said that it was these abilities and aptitudes that attracted them to the adult accelerated degree program. Reporting on 25 years of accelerated training within nursing Shiber (2003, p136) described each of these students as a 'capable person who knows why learning is required [and] will find a way to acquire that learning independently in a personally meaningful way'.

Wilkinson et al. (2004) studied the questionnaires of 587 New Zealand medical students of whom 143 had a prior degree. They found the attributes of those with prior degrees to be assertive, co-operative, goal orientated, motivated and achiever, (Wilkinson et al., 2004). Boylston et al's (2004) review of accelerated courses in nursing suggested that as well as vocational aspirations and the desire for a better quality of life these adult learners have intrinsic goals such as the development of self-esteem and personal recognition.

From the applicants' perspective, explanations for the interest in accelerated nursing studies by mature applicants in America was associated with employment opportunities, length of the program and upward mobility, (Wu and Connelly, 1992). Pepa et al. (1997) suggested that being mature applicants they sought a shortened route to complete their education and enter the nursing profession as quickly as possible. This would avoid suffering significant financial hardship whilst re-training. More recently, reasons were sought amongst the 170 graduates over a 12 year period at Auburn University. Reasons included a desire for more stable incomes in response to an unpredictable economy, (Hamner and Bentley, 2007). This was also noted by Miklancie and Davis (2005). Some described altruistic reasons for those individuals who wanted to join a 'people profession' but had made a wrong choice in their first degree, (Hamner and Bentley, 2007) and sought 'greater meaning in their work and to help others', (Miklancie and Davis, 2005, p291). One such example was that in a reaction to terrorist atrocities in 2001 some applicants had a desire to make a 'post-September 11 difference in their [daily] work', (American Association of Colleges of Nursing, 2005). Taken

as a whole, such decisions to undertake accelerated courses reflect personal and professional life experiences and personal and professional development.

Educational perspectives of accelerated courses

Process versus end-product: a debate

There is an interesting debate between education and training for practice. Interestingly, the pre-planned and efficient structure and format of accelerated courses considered by some to be helpful and attractive in the first instance proved to be a hindrance to others. Donaldson et al. (2000) stated that some tutors did not consider or appreciate that accelerated students' may have broader backgrounds and different learning needs and styles than traditional cohorts. These students differentiated between 'success in college' meaning gaining the necessary grades and qualifications and 'success in learning' meaning 'ownership of knowledge' to 'learn what was applicable to me, ' and to 'learn what I wanted to learn', (Donaldson et al., 2000, p6). This was supported by Kasworm (2003, p22) in her qualitative study of twenty accelerated applied management students. These students wished to develop their adult learning and explore alternative perspectives but commented that the course structure constrained their growth and limited a broader understanding of the issues. These students suggested that a compromise was needed. The desire for a full and in-depth coverage of the subject was balanced with being selective in their learning to keep up with the classes, assessments and the time-compressed demands of the program. To resolve this, many reported reliance upon their instructors to select, organise and present information effectively. They felt that the instructors *should* guide them in what to learn and provide an indication of depth, (Kasworm, 2003, p22). Scott (2003) argued further that whilst perhaps understandable, this brought into question the adult students' beliefs that they are true thinkers and questioning academics yet they appeared to be so dependent upon their tutors. Of note, students considered that it was important and useful for instructors 'to eliminate what students considered 'extraneous material' and stress the most important concepts. These modifications helped students concentrate on the most important material', (Scott, 2003, p35).

This was supported by Cangelosi (2007). In her qualitative interviews with nineteen second-degree nursing students from six nursing programs across the mid-Atlantic region of the United States she found them to have 'little patience' for learning information that they did not view as important to become a nurse. Indeed there was a real sense and need to 'clear the way for them' to learn what they 'really need to know to be a nurse', (Cangelosi, 2007, p95).

Method and rationale for assessment has also become an issue. Given the condensed nature of accelerated courses, one 12 year review of an accelerated nursing programme identified that some elements of course assessment had needed to be reduced to reflect the shortened timeframes, (Hamner and Bentley, 2007). However, the authors do not comment upon the implications of this. Students, themselves, also criticised the methods of assessment. Cangelosi (2007) reported one student as stating:

> We had to do a lot of tedious assignments that the traditional students do, which cut down our clinical time. I think already having a bachelor's degree, we had proven that we had those sort of skills. More clinicals, especially like this one, would have prepared me better, (Cangelosi, 2007, p94).

Whilst appreciating their motivation, such comments again question whether the qualification outweighs and undermines the education, per se, and questions how a novice student might know what is relevant to their future career, and what is not. This is key as it underpins how some students' expectations of the educational process are shaped as they want 'stripped down' classes, (Traub, 1997, p116). In viewing education as a product, the President of the University of Phoenix proudly stated that in a consumer-driven market:

> the people who are our students don't really want the education. They want what the education provides for them- better jobs, moving up in the career, that kind of stuff. They want it to *do* something for them, (Traub, 1997, p114).

It was this approach that has labelled certain American universities the 'McDonalds of higher education' although one Professor of Management at St. Louis University did not view this to be derogatory stating that they 'produce a uniform product in a consistent way which is convenient to the consumer at an affordable price', (Traub, 1997, p121). Swenson (2003, p83) considered the term 'accelerated learning' unfortunate as it suggests that traditional methods, format and pace to be 'normal' and any deviation 'is likely to be treated with

suspicion and may invite summary dismissal of what might otherwise be an effective, innovative approach to designing instruction'. There was concern expressed by some that convenience wins over 'substance and rigour' as increased, rather than less, contact time is necessary for reflection and analysis of what is being learned, (Wolfe, 1998 cited in Wlodkowski, 2003). Hence it has been argued that such courses are too compressed to produce consistent educational value; they sacrifice breadth and depth, resulting in learning that is crammed and poorly developed (Shafer, 1995 cited in Wlodkowski, 2003). Hence, the terms 'accelerated' or 'fast-track' academic courses could be used disparagingly to suggest 'hurried' and 'rushed'. Traub's (1997) article entitled 'Drive-thru U' could offer the cynic the comparison with the concept of fast-food restaurants; the suggestion being that the outcome of the course is less worthy (Wlodkowski, 2003) because it is product orientated rather than a journey of discovery. Given that some academics advocate traditional methods and view the teacher as the repository and transmitter of knowledge they might view reduced contact time as:

> an unpardonable sin, robbing learners of the chance to develop analytical skills of a high order or preventing them from gaining a full appreciation of the complexities of a subject, (Brookfield, 2003, p74)

Hence, the educational philosophy remains important in this argument and will be considered in light of the views from this study's participants.

Significantly, resentment and misunderstanding towards some accelerated course students appear key issues in the literature. Kasworm (2003, p22) reported judgments made by the families, friends, or colleagues of accelerated students who saw their accelerated degree program as a 'diploma mill' and questioned the substance of the award; some colleagues referred to it as a 'fluff degree'. The accelerated students were angered by these comments believing that they were gaining a more focused, relevant degree experience. Despite wishing to prove their worth to family, friends, and colleagues that these negative judgements were unfounded and demeaning, they lacked the documented evidence to demonstrate the equivalency, if not the superiority, of the degree and their learning. Kasworm (2003) concluded that these tensions, self-doubts and concerns hindered the students' learning. This was supported by Halkett and McLafferty (2006) who used three different small focus groups

of non-nurse graduates who were undertaking the first accelerated nursing programme at the University of Dundee. Halkett and McLafferty (2006) highlighted antagonism between nursing students from traditional pre-registration nursing courses towards the accelerated pre-registration course. The accelerated students were made to feel inferior for doing the shortened course, treated in a derogatory manner and with animosity. One student therefore concealed the fact that she was undertaking the accelerated course when in the clinical environment. It was said that traditionally trained nurses believed that it was not possible to complete the nursing training in less than three years. As such, accelerated students were perceived as 'cheating' or 'getting an easy ride'; and questioned 'who do you think you are?' by traditional students, (Halkett and McLafferty, 2006, p164). The discourse has significance. Any success of the accelerated pre-registration courses will be tempered by such perceptions and is worthy of exploration.

There is a suggestion that academic success is not dependent upon timescales but the organisation and methods of delivery, and personality type and academic characteristics of the student. When reporting their two-year accelerated course in occupational therapy, Elliott and Francis (1998) argued that the three-year duration of a full-time degree is:

> 'an arbitrary, abstract concept which does not fully acknowledge the individual's pace of learning…Perhaps it is not the time-frame that is the primary focus, but the experiences and opportunities and the individual's ability to internalise and translate these that are of greater relevance within the accelerated programme' (Elliott and Francis, 1998, p253).

As noted accelerated courses are graduate entry. In medicine, entry requirements for all North American and four of the Australian medical schools are university graduates with success at the Medical College Admission Test (MCAT) or Australian Medical School Admission Test (GAMSAT exam) respectively, (Halpenny, 2004; Hutchinson et al., 2002). Although change has also occurred in UK medical schools, the entry requirements are very different from American counterparts. Pre-existing degrees are not essential pre-requisites. Of those applying to the five- and six- year Bachelor of Medicine and Bachelor of Surgery (MBBS) courses in Britain only 10-15% had pre-existing science degrees, (Hutchinson et al., 2002). In 2003 45% of the 90 medical students at the University of Nottingham were non-science graduates, (Rushforth, 2004). Of the four newest medical schools in the UK, 20-60%

of their first cohorts had not come directly from secondary education but were still required to study the full five year undergraduate course, (Howe et al., 2004).

Accelerated pre-registration courses in physiotherapy within the UK have also been created to recognise the graduate student's abilities by integrating their prior Honour's level learning and experience into their new studies. Within the UK, The Quality Assurance Agency for Higher Education (QAA) describes the Honours level graduate as having:

> an understanding of a complex body of knowledge… developed analytical techniques and problem solving skills that can be applied in many types of employment, (Quality Assurance Agency for Higher Education, 2008, p19).

and will be able to:

> critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete); to formulate judgements, and to frame appropriate questions to achieve a solution- or range of solutions, (Quality Assurance Agency for Higher Education, 2008, p19)

It is not the intention of this thesis to compare educational qualifications across countries. Hence there is no suggestion that all accelerated students possess these exact qualities. However, in the UK an assumption has been made that such students are able to evaluate and interpret data to 'develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study', (Quality Assurance Agency for Higher Education, 2008, p15), this being the descriptor of the lowest Certificate of Higher Education within England, Wales and Northern Ireland.

Building upon this knowledge and skill accelerated courses are offered at the higher academic Masters level. At present, seventeen HEI's in the United Kingdom offer accelerated pre-registration courses in physiotherapy, fifteen of them offering the full award of Master of Science and two at Postgraduate Diploma (Chartered Society of Physiotherapy, 2009b). The rigours of accelerated pre-registration courses have been demonstrated to be attainable for the high calibre student. Admissions Tutors for such courses report academic requirements on entry as 1st Class Honours or Upper Second Honours classifications as seen from a review of UK qualifying programmes within physiotherapy (Chartered Society of Physiotherapy, 2009b).

The Quality Assurance Agency for Higher Education states that students achieving Master's level awards will have demonstrated 'a systematic understanding of knowledge', 'deal with complex issues, make informed judgements in the absence of complete data', shown 'originality in the application of knowledge', and 'understand how the boundaries of knowledge are advanced through research', (Quality Assurance Agency for Higher Education, 2008, p20, p21). Such M-level work requires:

> a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study, or area of professional practice, (Quality Assurance Agency for Higher Education, 2008, p18).

and to be able to 'deal with complex issues both systematically and creatively' and show 'originality in tackling and solving problems', (Quality Assurance Agency for Higher Education, 2008, p21).

The Chartered Society of Physiotherapy (CSP) believe that for the accelerated pre-registration student 'the process of becoming a physiotherapist lends itself to post-graduate level learning', (Chartered Society of Physiotherapy, 2003a) and that such students should be capable to 'respond well to the full demands of a post-graduate level qualification within the programme's duration', (Chartered Society of Physiotherapy, 2003a). The CSP views the attributes of the Masters' graduate as being synthesis and integration of the evidence base; critical reasoning and problem-solving skills; and innovation within autonomous practice, (Chartered Society of Physiotherapy, 2003a; Chartered Society of Physiotherapy, 2003b). This was supported by Kasworm's qualitative study in 2003 of twenty accelerated students in applied management who suggested their characteristics to be 'specific motivation, dedication and responsibility to the intensive demands of the accelerated courses and programs' and that unsuccessful students could not accept such pressures, (Kasworm, 2003, p21). Hence both are suggestive that the attributes of the Master's level accelerated student and graduate reflect those required by the Quality Assurance Agency for Higher Education, namely demonstrating a systematic understanding of knowledge with criticality and originality to make informed judgements, (Quality Assurance Agency for Higher Education, 2008). Yet this was in contrast to Cangelosi's nursing study of 2007 that suggested a focus upon end product rather

than process or professional development. The process/ product debate is worthy of further exploration given the lack of research in pre-registration physiotherapy education. These issues informed the decision-making for my study design to be exploratory. It was important to consult with physiotherapy clinicians to determine how they viewed the end-result of both accelerated pre-registration courses and the more traditional style of education.

Academic skills

Health-care accelerated students have been commended for their academic and personal skills. The American Association of Colleges of Nursing (2005) cited Harriet Feldman, Dean of the Lienhard School of Nursing at Pace University, USA, who suggested:

> the most successful accelerated students are bright, inquisitive, and sophisticated consumers of higher education who actively pursue learning opportunities. As adults, these students tend to know what they need and aggressively pursue programs that best meet their needs: fast-tracked, competitive, and well respected, (American Association of Colleges of Nursing, 2005)

From their cohort study, Pepa et al. (1997, p48) suggested that accelerated students' prior learning enabled them to 'grasp the concepts relating to nursing more quickly and to matriculate through the program at a faster rate' than traditional students. Critical thinking of accelerated students has been studied by several authors, (Suliman, 2006; Brown et al., 2001; Pepa et al., 1997). Pepa et al. (1997) assessed the critical thinking of accelerated US nursing students using the Watson-Glaser Critical Thinking Appraisal (WGCTA) tool amongst 45 traditional Baccalaureate nursing students and 43 accelerated students within a private liberal arts university in mid-west America. Findings revealed a notable difference with accelerated students having a higher mean score at the start of studies than traditional students suggesting that they were able to grasp and appreciate significant issues more clearly and easily. However, whilst traditional students demonstrated a difference in pre-test/ post-test score throughout their studies no such notable difference was demonstrated amongst the accelerated students. Similar findings were gained from Brown et al. (2001) using a convenience sample of 123 from three groups of traditionally trained or accelerated trained nursing students.

Pepa et al. (1997) suggested that the lack of a continued rate of critical thinking in accelerated students might be that the skill might take longer than 22 months to develop as the pace may not enable a deep analysis of thinking. Brown et al. (2001) agreed:

> by its nature, the accelerated program is fast-paced, and these students may not be afforded the opportunity to question and reflect on the information presented. Because critical thinking is an ability that develops over time, the length of the program may be influential in its development, (Brown et al., 2001, p8).

Pepa et al. (1997, p48) also suggested that accelerated students are focused on the 'product' of the nursing program being the Bachelor of Science in Nursing (BSN). However one may argue that traditional students may focus on the end product as well. Citing Jones and Brown (1993), Pepa et al. (1997) suggested that critical thinking is process-orientated rather than product-orientated. They argued that focus on the end-product, namely qualification for employment, may itself hinder further development of critical thinking skills in accelerated students, (Pepa et al., 1997). Suliman (2006) also investigated critical thinking styles as well as learning styles in nursing cohorts. She used a quantitative self-administered questionnaire to a convenience sample of 130 nursing students undertaking the conventional (n=80) or accelerated baccalaureate (n=50) nursing education in Saudi Arabia. The predominant learning styles of the accelerated baccalaureate students were abstract conceptualisation and active experimentation; namely they learnt by thinking and doing, were inquisitive and self-confident. The traditional route students learnt by concrete experiencing and reflective observation; namely they learnt by feeling and watching. It appears that to do this, many adult learners or accelerated students have to undergo a period of adjustment in which they develop a set of different learning strategies and attitudes to handle the specific demands of the program. These students soon realise that they could not rely on past strategies that dealt with, what they perceived to be, 'a slower pace', (Kasworm, 2003, p21).

Debate regarding the title of the academic award within physiotherapy

Within physiotherapy debate has centred on the nature and title of M-level studies. The accelerated pre-registration student studies at Masters level. The experienced, specialist clinician undertaking higher research studies at Masters level. Both graduate with a Masters degree. Yet one uses the Masters qualification to gain entry to the register of their chosen

profession whilst the other uses it to recognise their life-long learning and expertise through postgraduate study and clinical specialism. According to the Queen Margaret University College (2004) the M-level student is required to demonstrate critical reflection on practice and learning and independence and the control of own learning in the preparation and review of placements. This caused some consternation amongst post-registration Masters graduates who viewed the new developments for novices with some concern, (Elliott and Philips, 2003a). Two members of the Chartered Society of Physiotherapy aired their concerns publicly. Whilst acknowledging the academic skills of the accelerated pre-registration student, Elliott and Philips (2003a) speculated whether the higher academic award might be misplaced as the:

> level of physiotherapy knowledge, clinical reasoning and reflective skills [of the accelerated pre-registration student] must be [equal to] that of other students who graduate with a BSc (Hons), (Elliott and Philips, 2003a, p20).

Comparing differing M-level pathways, they argued that the accelerated pre-registration course 'belittles the enormous amount of work, knowledge and skills gained by experienced clinicians who achieve a Masters', (Elliott and Philips, 2003a, p20). Margaret Grant of the Glasgow Caledonian University defended the accelerated pre-registration courses, stating that:

> there are differences in the teaching and learning strategies employed in the delivery of the course and also in the assessment of students. No accelerated course is claiming that the end product has the same clinical knowledge and skills as an experienced chartered physiotherapist studying on a specialist Masters programme, (Grant, 2003, p24).

Hence, when comparing the accelerated pre-registration student with the post-registration M-level student the levels of motivation may be similar but the levels of knowledge, skills and experience differ. The former has the broad academic and personal attributes of an Honours graduate whilst the latter has consolidated a high level of knowledge and experience over prolonged time, (Chartered Society of Physiotherapy, 2003b). Jenny Carey, Education Advisor of the Chartered Society of Physiotherapy, added that graduates of both programmes should have the same capacity for evidence-based practice, critical enquiry and autonomy, but admitted that 'how these attributes are demonstrated will vary', (Carey, 2003). The Chartered Society of Physiotherapy itself notes that the extent to which these key M-level

attributes are fulfilled will vary depending on type, design and focus of M-level course, (Chartered Society of Physiotherapy, 2003b, p3). Hence the title of the relevant post-graduate qualifications has became an issue. Gosling (1997) suggested that the purpose of M-level learning by experienced physiotherapists is to strengthen their continuing professional development, enhance patient care, further develop awareness of research, and enhance personal development by promoting one's own confidence and communication skills. Hence the academic award of 'MSc in Advanced Physiotherapy' has been given 'due recognition to the in-depth study undertaken by the [experienced] graduates', (Thompson, 2003). However, 13 awards were named 'MSc Physiotherapy (Pre-Registration)' across the UK, (Chartered Society of Physiotherapy, 2007a) and many post-graduate M-level continuous professional development awards bear the similar title of 'MSc Physiotherapy' (Chartered Society of Physiotherapy 2009b). Hence, the confusion and misinterpretation to the uninitiated professional and the lay-public can be understood as such titles seem to do little in way of differentiation between academic level and professional expertise.

Novice to Expert

Pre-registration physiotherapy training incorporates delivery of theory, tuition and development of practical skills under close supervision within university settings before consolidation within practice-based experience in clinical settings. There is a pre-requisite 1000 clinical hours to enable graduation and be eligible to apply for membership of the Chartered Society of Physiotherapy, (Chartered Society of Physiotherapy, 2002b). Recognising the novice attributes of the student, these student clinical placements are usually assessed in line with the respective undergraduate academic level, namely Intermediate level (Level 5) or Honours level (Level 6). As students are also novices many accelerated courses also assess their students' clinical performance at the respective undergraduate academic level. Interestingly, three accelerated physiotherapy courses within the UK also assess their pre-registration clinical performance at M-level stating that:

> the intellectual demand for practice-based learning [work-based clinical placement] arises from the accelerated nature of the learning, the staged learning outcomes, and from the nature of the assessment, (Queen Margaret University College, 2004, p25)

This provides further discrepancies amongst the various accelerated pre-registration courses in physiotherapy. If critical appraisal at this higher level requires understanding and relevance to clinical practice some clinicians argued that accelerated pre-registration students have limited clinical experience which thus limits their ability to recognise significant clinical details (Elliott and Philips, 2003b). This relates to the progression from 'novice-to-expert' and has educational and clinical relevance, (Atherton, 2008a; Miller 1999; Benner, 1984) as the notion that a student novice can develop clinical and academic mastery of a vocational subject in a short timeframe is of interest (Gerrish et al., 2000).

It is appropriate to compare accelerated pre-registration students with their traditional counterparts in terms of clinical ability, whether cognitive or practical. This is a fair comparison as expertise should be considered as 'developing' rather than 'developed'. It is not typically an end state, but a process of continuing development, (Sternberg, 1998). Equally, expertise and experience do not necessarily relate to 'passage-of-time' or longevity, but the refinement of theory and practice, (Benner, 1984, p36). Whilst it is possible to observe and describe expert practice, Benner (1984, p42) believed that it is not possible to encapture the skill into explicit and formal steps as the mental processes are rapid and intuitive. However, the characteristics of expertise are eloquently and succinctly identified by Sternberg (1998) from the Department of Psychology at Yale University:

- 'large, rich schemas containing a great deal of declarative knowledge about a given domain,
- having well-organised, highly interconnected units of knowledge stored in schemas
- working forward from given information to implement strategies for finding unknowns
- generally choosing a strategy based on elaborate schemas for problem strategies
- having schemas containing a great deal of procedural knowledge about problem strategies
- having automatised many sequences of steps within problem strategies
- showing highly efficient problem solving; when time limits are imposed, they solve problems more quickly than novices
- accurately predicting the difficulty in solving particular problems

- carefully monitoring their own problem-solving strategies and processes

- showing high accuracy in reaching appropriate solutions to problems',

(Sternberg, 1998, p133). Significantly these individuals have created their personal schemas (being cognitive frameworks or models) to enable them to process and problem-solve at higher levels.

Whilst it is recognised that these particular attributes might extend along a continuum it could be said that there are similarities with the expectations of Master's level by the Quality Assurance Agency (2008) as presented on p44 and hence are considered to be within the grasp of the accelerated graduate.

In addition the skills of the expert have cohesion with Schon's views (1987) on how knowledge and reflection influences behaviour. Schon's key concepts of 'knowing-in-action' and 'reflection-in-action' contribute towards accepted explanations of how the experienced, independent, practitioner operates, (Schon, 1987).

- 'knowing-in-action' relates to spontaneous skill enabling one to perform a complex task without knowing the individual steps of how the task was executed. This suggests a high level of competence but may relate only to technical status.

- 'reflection-in-action' is a skill utilised by the advanced individual, the term meaning an ability to vary technique (because of unexpected changes), whilst undertaking the activity itself. In this context, the need not to 'stop- and- think' or use 'trial- and- error' is itself a skilful art that separates the novice from the expert, (Schon, 1987).

Lastly one must consider expertise in health-care. Patricia Benner's seminal work in expertise within nursing was based upon, and adapted from, Herbert Dreyfus's model of skill acquisition (Benner, 1984). Others have made noteworthy contributions to this subject, (Dunphy and Williamson, 2004; Atherton, 2008a; Miller et al., 1999; Daley, 1999). Benner (1982) considered the graduates' clinical progression and expertise given experience over many years by highlighting five levels of proficiency, namely i) novice, ii) advanced beginner, iii) competent, iv) proficient, and v) expert.

- Beginners have no experience of the situations in which they are expected to perform and so are taught to develop skills such as measurable parameters of a patient's condition. The novice finds it difficult to use discretionary judgement as they have no experience upon which to make comparable judgements. Instead, they must follow rules to guide their performance. However, rules are limiting and inflexible; no rule can tell a novice which tasks are most relevant in a real situation or when to make an exception to the rule, (Benner, 1982, p403)

- The 'advanced beginners' can demonstrate marginally acceptable performance having coped with enough real situations to note (or to have pointed out to them by a mentor) the recurring meaningful situations that are termed 'aspects of the situation' in the Dreyfus model', (Benner, 1984, p22). Hence, experience enables pattern recognition. However, these advanced beginners lack objectivity and still require assistance in prioritisation as 'no one cue is definitive in all situations. Experience is needed before the nurse can apply guidelines to individual patients, (Benner, 1984, p23).

- Competence may be 'typified by the nurse who has been in the job in the same or similar situations two to three years', according to Benner (1984, p25), although Daley (1999) believed it to be longer at three to five years. Either way, according to these authors, these clinicians can develop long-term goals or plan of action and cope with unpredictable situations. The competent nurse is said to lack the speed and flexibility of the proficient nurse but does have a feeling of mastery and the ability to cope and manage. There is a conscious and deliberate planning to achieve efficiency and organisation, (Benner, 1984, p27).

The term 'competent' is in common use and is used to describe the minimum expectation of the UK pre-registration graduate physiotherapist in the QAA Subject Benchmark Statements, (Quality Assurance Agency for Higher Education, no date).

- Proficiency begins when the clinician 'perceives situations as wholes rather than in terms of aspects, and performance is guided by maxims', (Benner, 1984, p27) and can recognise when the expected norm does not materialise. With this additional experience, the proficient performer is more capable in those complex or ambiguous situations that

reflect real-life and can 'hone in on an accurate region of the problem', (Benner, 1984, p28).

The expert clinician

In contrast to the competent and proficient practitioner the expert has 'an intuitive grasp of each situation' having a wide ranging background of experience. These clinicians do not waste time on considering unfruitful alternatives and when asked why he or she made a particularly masterful move, will just say 'because it felt right', (Benner, 1984, p32). They are able to recognise similarities in presentations even though the situation may be dissimilar, they have 'learned to expect certain events and even selectively to attend to certain aspects of the situation', (Daley, 1999, p135). Perhaps one outstanding characteristic of the expert clinician that sets them aside is that they can consider and foresee the future course of the patient, anticipating what problems may arise and what they would do about them as a specific patient despite having seen many scenarios of other patients, (Benner, 1984, p102). Dunphy and Williamson (2004, p109) present such characteristics of expertise:

- pattern recognition: recognition of complex patterns

- high levels of declarative and procedural knowledge

- automatic performance of skills

- automated knowledge automated with additional cognitive space available for deliberation

- metacognitive monitoring: skilful/ automatic monitoring of whole situation

- teaching ability: although not necessarily good teachers

- high levels of contextual flexibility more than average practitioner but with varying levels of flexibility in approaches to new situations

Daley's (1999) qualitative study interviewing 10 novice nurses and 10 expert nurses found that the novice considered themselves to be sponge-like 'just soaking up information' and wanting to be 'spoon-fed the information'. They strive to 'sort it all out' to link to 'something I have seen before', to 'find the best fit and go with it, even if the fit is not very good, (Daley, 1999, p138 citing Bereiter and Scardamalia, 1993, p169). Novices in this study did not seem

to understand the process in which they learn and would not rely on trial and error being too afraid to make a mistake, (Daley, 1999, p145). Experts, however, drew on personal experiences but were more self-directed to seek pertinent information in a selective manner, have detailed discussions with peers and improvise strategies 'because I know they will work', (Daley, 1999, p138).

When clinically reasoning, experts appear to recognise patterns of both the problem and the solution (Rivett and Higgs, 1995). They also use pattern recognition as a screening method to ignore irrelevant data, (Rivett and Higgs, 1995). Thus experience aids expertise and practice informs new knowledge.

Miller et al. (1999) also updated the model on multi-professional development and expertise in a chronological progression that included 'clinical novice' who develops competencies within the early stages of training; to 'probationer' status, being senior students who are comfortable in their roles but have limited responsibilities and accountability; to qualified 'practitioner' and 'professional leader'. This is a more contemporary classification with a far greater emphasis upon the multi-professional context of healthcare and covers an earlier period for the student compared to Benner:

- The pre-clinical educational period is that when the individual makes contact with other professions with different educational backgrounds and, during their pre-clinical education, undertake different learning. This is done in an attempt to explore their own pre-set attitudes with which they made the choice to come into their chosen profession, (Miller et al., 1999, p164).

- For Miller et al. (1999) the role of clinical novice can remain from the first few weeks of the nursing programme, or into the third year of medical training as 'students at this stage judge the relevance of learning within a narrow frame of reference defined by their own expectations and those of others in relation to their role', (Miller et al., 1999, p164).

- The 'probationer' is defined as 'senior students' who have 'sufficient clinical experience to have developed a degree of comfort with their professional role, but are still required to undertake set clinical learning in a number of areas', (Miller et al., 1999, p166). These individuals have limited responsibility and accountability. The transient nature of their

role gives them only limited commitment to a particular area and to the fact that experiences are allocated rather than selected, (Miller et al., 1999, p166).

- The 'practitioner' relates to the 'new professional' being the newly qualified member of staff who has left 'the relative protection of the student or probationer status'. Being accountable, 'newly-qualified professionals may, therefore, feel a reduction in confidence and competence', (Miller et al., 1999, p168).

As such, Miller et al's 1999 classifications appear to reflect the pressures of current clinical experience. These newly-qualified professionals are said to need to reapply assertiveness skills, and refine and reapply skills developed as students and develop new ones to reflect their membership of mono-professional and multi-professional teams, (Miller et al., 1999, p168).

- Finally, the 'professional leader' is a senior member of staff with a responsibility for the development of team processes and are:

> key change agents with considerable influence over junior staff in terms of the role model they present, the professional opinions they offer, and their organisational position and decisions. Successful multiprofessional teams often rely on a high-level sponsor to lead the process…, (Miller et al., 1999, p170).

Most recently, Atherton (2008a) developed Dreyfus' model to describe 'components of expertise' as a pyramid in that each successive level requires the previous as a foundation. The four levels of skill are: i) competence, being 'the simple ability to perform the prerequisite range of skills for practice'; ii) contextualisation, being 'knowing *when* to do *what*...' requiring additional skills of flexibility, discrimination and discretion to enable the practitioner to select the appropriate method for the situation; iii) contingency, being the greater flexibility to be able to cope when things go wrong and implies a great depth of understanding of the situation without reliance upon predetermined recipes; and iv) creativity, being 'the capacity to use all the 'lower' level skills in new ways to solve new problems', (Atherton, 2008a, no page).

Regardless of classification, one remains interested in whether either the accelerated pre-registration student or graduate learner achieves any of the attributes before their traditional counterparts. According to Benner (1984) expertise develops when the clinician tests and refines hypotheses and principle-based expectations in actual practice situations, whilst

encountering new situations the competent or proficient nurse 'must rely on conscious, deliberate, analytic problem solving of an elemental nature, (Benner, 1984, p3). These are naturally high-level skills but seem comparable to the critical thinking abilities of the adult, accelerated learner and hence offer a sense of confusion on the one hand or question whether the classifications are truly chronological.

Without diminishing the transferability of knowledge and skills of the Honours graduate, the traditionalist might wonder how the accelerated pre-registration student, with or without sufficient background in a related discipline, could therefore manage to 'fit' the content of the traditional curriculum into the APRC. Perhaps the need does not arise if such high calibre individuals with relevant academic backgrounds are capable of clinical and academic judgement to problem-solve in order to address the[ir] shortfalls. It can be argued that the previous educational and life-skills of the APRC student mean that they are not dependent upon inflexible rules as governed for Benner's 'novice' and are able to demonstrate more than 'marginally acceptable performance' as characterised her 'advanced beginner', (Benner, 1984, p21-22). In Atherton's terms, the same student has more than 'competence' and has abilities of flexibility and sound judgment and so is at least 'contextualising' practice, (Atherton, 2008a). In Miller's terms, the APRC student is likely to be a 'probationer', (Miller, 1999).

On the one hand, the very essence of studying in a new vocation is suggestive that the accelerated student lies low in the clinical hierarchy of skill. However, using the aforementioned descriptors, one may rate such a student as having higher level skills than the traditionally trained undergraduate. Gerrish et al. (2000, p836) debated whether M-level study is related to 'deepening' of existing knowledge and/or broadening of the knowledge base. Using qualitative interview findings from eighteen nurse educators in England, Gerrish et al. (2000) concluded that totally new material should not be introduced because students would not have time to understand the detail to the academic standard required at M-level, however such students should be capable of analysing the material. This was supported by Waters (2000), Senior Lecturer in Occupational Therapy, who worries that omissions from the

curricula are significant and expressed concern with the fundamental premise of the accelerated course for Occupational Therapy;

> It would require a special student with enormous capacity for hard work, intellectual rigour and speed of ingestion. This is particularly the case if the pace of the programme is an accelerated one, (Waters, 2000, p501).

She offered anecdotal evidence from managers that the existing students of the ARPCs do not 'hit the ground running', (Waters, 2000, p501). This would be worthy of further investigation if this view is shared by others and hence becomes an issue of this exploratory study.

Learning styles within accelerated courses

Several studies have compared accelerated pre-registration courses with their traditional counterparts. Small studies in the United Kingdom and Australia suggested that accelerated pre-registration nursing students scored 'at least as well as traditional students' in comparisons of clinical and academic marks (Halkett and McLafferty, 2006; Duke, 2001). Shiber (2003) found that of a total sample of 226 students those second-degree students scored higher on standardised nursing achievement tests than traditional students. Youssef and Goodrich (1996) studied a convenience sample of accelerated (n=48) and traditional (n=46) pre-registration nursing students with wide demographics at one private university in the Washington Metropolitan Area and found that the accelerated group had significantly higher grade averages than the traditional cohort.

In particular, McDonald (1995) used the 'Six-Dimension Scale of Nursing Performance' to compare 29 traditional nursing students with 27 accelerated baccalaureate nursing students in a pre-test/post-test study that had no significant differences between group demographics. The Six-Dimension Scale of Nursing Performance categorises nursing performance within 52 observed behaviours into six subscales: leadership; critical care; teaching/ collaboration; planning/ evaluation; interpersonal relations/ communications; and professional development. At post-test, the traditional route students rated their nursing performance at a significantly higher level than pre-test whilst the scores in the accelerated group did not change at post-test. It was unclear from the study report whether the accelerated cohort scored ahead of the

control group at either the pre-test or post-test measurement. Such information would have been of much interest. However, it should be noted that the accelerated students gained higher passing rates than their traditional counter-parts; they also expressed more satisfaction and less difficulty with the program.

The accelerated students also indicated that the nursing program had prepared them effectively for nursing practice, although it should be noted that they were offered more specific and additional support than the traditional students and additional discrepancies should be noted as accelerated students gained more condensed but continuous time in clinical practice at 3- 4 days per week than the traditional students with 1- 2 days per week, (McDonald, 1995). Whilst the sample size remains small for generalisability and noting that variables exist, similar studies support the premise that accelerated courses provide good results.

It appears that the characteristics of the adult learner do much to assist them. In his critical literature review, Swenson (2003) showed that learning can occur in spite of, rather than because of, teaching and cited Boyatzis et al (1995) who state that:

> it is a mistake to assume teaching and learning are the same thing; what you teach is not necessarily what I learn, and what I learn may be other than what you teach…. Education has tended to focus on teaching; often assuming rather than promoting it, (Boyatzis et al., 1995, p234-235).

Swenson (2003) was disparaging about the lecture as the traditional, mainstay of education 'this practice implies that learning is primarily an act of transmitting information from the expert to passive, empty vessels', (Swenson, 2003, p84). This suggests a passive transmission. It could be argued that a lecture delivered by an expert enriches the subject matter in a meaningful way with clarity and insight. Nonetheless, it is of interest to consider how the accelerated graduate might learn as they do and so achieve their goal.

Metacognition

The adult learner can become successful if they learn to develop and manipulate their learning. Metacognition is broadly defined as awareness and control of one's learning and is

considered to be 'essential to intelligent functioning', (Gourgey, 1998, p82). Metacognition is said to be 'second-order cognitions: thoughts about thoughts, knowledge about knowledge, or reflections about actions', (Weinert and Kluwe, 1987, p8). It is 'the ability to monitor, evaluate, and make plans for one's learning, (Everson and Tobias, 1998, p65) and is said to affect the acquisition, comprehension, retention and application of what is learned as well as affecting the efficiency of learning, critical thinking, and problem-solving, (Hartman, 1998). According to Rønning (2009) awareness of one's own study behaviour (meta-cognition) is inter-related with good time-management because such awareness is important for adult learners to create realistic study timetables in and around their other obligations.

According to Schraw (1998, p114) cognitive knowledge includes 'declarative knowledge' relating to knowledge about oneself as a learner and how factors influence one's performance such as limitations to one's memory capacity, rehearsal to aid memory; 'procedural learning' which enables individuals to perform tasks automatically; and 'conditional knowledge' which relates to them knowing when and why to use declarative and procedural knowledge, e.g. when and what information to rehearse.

Self-regulated learning refers to 'the self-directive process through which learners transform their mental abilities into task related academic skills' and is seen to be proactive rather than covert as a result of teaching, (Zimmerman, 2001, p1). Hence, self-regulated students are said to be 'metacognitively, motivationally, and behaviourally active participants in their own learning process' (Zimmerman, 2001, p5). For students self-regulated learning follows a cyclical model:

- Self-evaluation and monitoring to judge how effective they are being,

- Goal setting and strategic planning to analyse what is needed and set a plan to achieve it,

- Strategy-implementation monitoring to execute the plan or monitor its accuracy,

- Strategic-outcome monitoring to study performance outcomes to determine the actual effectiveness of the plan,

(Zimmerman, Bonner and Kovach, 1996, p11)

Higher performing students can then regulate their cognition. This means that they can control their learning and improve their performance using a set of activities. These are usually learning strategies and awareness of potential breakdowns in comprehension. Overall, three essential skills exist: planning, monitoring and evaluation, (Schraw, 1998). Firstly, planning involves selection of appropriate strategies and allocation of resources that affect performance; then monitoring refers to periodic self-testing while learning to enable awareness of comprehension and task performance. Thirdly, evaluation relates to the appraisal of the efficiency and outcome of one's learning including re-evaluating one's goals and conclusions, (Schraw, 1998).

Mayer (1998, p49) also differentiated between 'retention tests', meaning the use of cognitive skills in similar situations, and 'transfer tests', meaning the use of cognitive skills in differing situations. Students may solve routine problems in which they have already learnt how to solve the problem, but find greater difficulties with non-routine problems which are unlike anything they have solved in the past. Equally, the poorer student/ problem-solver may simply believe that they have not confronted this problem or situation before. This classification relates well to vocational pre-registration learning of skills and problem-solving.

Importantly, it is thought that metacognitive knowledge and regulation improves as expertise improves within a particular domain. As students acquire more metacognitive knowledge in a number of domains, they may construct general metacognitive knowledge (e.g. understanding limitations or memory) and regulatory skills (e.g. selecting appropriate learning strategies) that cut across all academic domains. However, Schraw admitted substantial debate on this point amongst researchers, (Schraw, 1998, p117).

Problem-solving

Mayer (1998) explained the abilities of problem-solving as having domain-specific knowledge as well as the knowledge of what to do, when to do it. He explained 'metaskills' as knowing when to use various skills, how to coordinate them and how to monitor them in problem solving. According to Mayer, these should be learned within the context of realistic problem-

solving situations which seem ideal for the pre-registration health-care student and one assumes to be a method by which the accelerated student organises their learning. Mayer (1998, p57-58) also cited several studies relating to 'interest theory' suggesting that students 'think harder and process the material more deeply when they are interested rather than uninterested', although to assume that adult learners are any more motivated than traditional school-leaver students when studying vocational courses is worthy of further debate. The assumption is that content itself will drive the students' desire to become effective learners. Gourgey (1998, p81) cited several authors who argued that it is the relation of subject material to real-world behaviours that enable a deeper learning and understanding and the transfer of knowledge. However, as noted previously studies of accelerated courses within nursing have suggested that some accelerated students view their education as focussed upon end product rather than process or professional development, (Cangelosi, 2007; Pepa et al., 1997)

It seems likely that metacognition is an advanced skill and more likely to be found in motivated adult learners as it is argued that it, itself, appears to be a learnt skill that requires development:

> When students have become used to and have been rewarded over the years for passive and rather mindless learning, they will not jump at the chance to take a more thoughtful or mindful approach to what they are doing, (Sternberg, 1998, p129).

The concept of metacognition is important when understanding how accelerated courses might work. If questioning is an advanced principle directed towards higher-order thinking, as confirmed by the Quality Assurance Agency for Higher Education (2000), questions generated by the students themselves promote active thinking and learning than if generated by the teachers themselves, (Gourgey, 1998, p84).

Self-efficacy and self-regulation

Self-efficacy theory equates to self-confidence and refers to a person's judgement about her capabilities to accomplish a task, (Mayer, 1998). It is based upon their self-worth from previous achievements being 'beliefs in one's capabilities to organise and execute the

courses of action required to produce given achievements' (Bandura, 1997, p3). Self-efficacious students are more likely to be self-regulating, strategic and metacognitive, (Seifert, 2004; Bandura, 1997). Of note, students who are not self-efficacious are not confident and view tasks as being more challenging or difficult and are more likely to view themselves as incapable, (Seifert, 2004; Bandura, 1997). As such the self-efficacy theory suggests that:

> students who believe themselves to be capable are more likely to be motivated; those who believe themselves incapable will not be motivated, (Seifert, 2004, p144).

To do this, they undertake four actions: interpret their own performance; compare theirs with the performance of others; consider other's assessment of one's abilities; and one's own physiological state, Mayer (1998). Self-efficacy theory suggests that students will work harder when they judge themselves as capable rather than when they lack confidence; and be more able to problem-solve.

Successful students are said to have a mastery pattern in the sense that they are masters of their own fate, (Seifert, 2004). A mastery pattern relies upon a strong sense of self and is based upon a sense of self-regulation, self-determination, competence and control, (Seifert, 2004). Should they fail in their goals, mastery-orientated students remain focused in succeeding despite their present difficulties, (Dweck, 1999). In contrast there is a group of students who wish to learn and understand as much as the self-efficacious students but lack the necessary study skills to do so. Such students are known as 'helpless students' because if they fail they believe that the situation is out of their control and nothing can be done other than blaming their intelligence, (Ferla et al., 2009, p195; Seifert, 2004, p146). These students lack direction in how they learn, (Dweck, 1999) and believe that their teachers are as responsible for their understanding as they themselves, (Ferla et al., 2009). Lastly, it appears that self-efficacy is influenced by peer support according to Bandura (1997). Success breeds success when students consider themselves to be alike. One successful student's 'vicarious experiences' influences the performance of another, (Wlodkowski, 2008, p188-189).

Communities of Practice

An alternative explanation that supports the success of accelerated training is the method by which newcomers ingratiate themselves to a new working environment. It is accepted that much learning takes place in social groups, whether that be family-orientated, social- or work-orientated. Lave and Wenger (1991) introduced the concept of 'Communities of Practice' as a learning model or theory arguing that newcomers to a chosen profession, occupation and/ or workplace need to learn the beliefs, values and practices of that group. Etienne Wenger (a social learning theorist) and Jean Lave (a social anthropologist) coined the term when studying the complexity of apprenticeship, (Wenger, 2006, no page). Whilst the concept arose from study within the business world a community of practice can occur amongst any cohort of like minded people. A community of practice is not simply a team because it is 'the shared learning and interest of its members are what keep it together. It is defined by knowledge rather than the task, and exists because participation has value to its members', (Wenger, 1998b, no page). Smith (2003, 2009) and Wenger (1998a) argued that newcomers need to be able to not only understand the structure of the group or setting but need to engage in it as a matter of social engagement. This depends on an active contribution and participation, (Fuller, 2007). People learn through participation to become full members of, or 'knowledgeable practitioners' in, the relevant community(s) of practice. As such in the context of this thesis a community of practice setting within health-care would be the multidisciplinary team working in a hospital ward or a uni-disciplinary team such as an out-patient physiotherapy department. The concept involves several elements that require further explanation in the next section.

Terminology with Communities of Practice

A community of practice can be physical and geographical such as an office environment for office workers or it can be an abstract entity. The term 'reification' refers to abstractions such as tools, symbols, terms and concepts produced by the community, (Abrandt Dahlgren et al., 2006). To reify something is 'to treat (an abstraction) as substantially existing, or as a concrete material object; such as Democracy or the Economy, (Wenger, 1998a, p58). It is an

important concept as elements of a profession are reifications. Boundaries to a community of practice can be reified with relevant symbols that reflect its membership. These may be titles, dress codes, or initiation rites. The status of the outsider can be reified in subtle ways to indicate their position (Wenger, 1998a). Health-care retains its sense of hierarchy within Agenda for Change, (Department of Health, 2004). The hierarchical nursing Sister and Staff Nurse and the Senior Physiotherapist and Junior Physiotherapist are now identified with hierarchical Band numbers. This means that newcomers have to learn how to integrate themselves to join the ranks of that profession or join those experts ahead of them and, as such, sees the expert as a reification.

The community is defined by its membership each of whom has mutual recognition and engagement, (Wenger, 1998a). There is a shared understanding as each member recognises something of themselves in the other giving the relationship context and meaning. Members know what is relevant to communicate and how to present such information, (Wenger, 1998b). This all provides a source of identity to the group. As such, mutual engagement involves the sharing and contribution of knowledge, skills and competencies to help or develop one another, (Wenger, 1998a).

Participation is an important element of this process and has a specific connotation. Naturally it refers to a process of taking part but involves both action and connection and is both personal and social. In this sense participation is more than collaboration as it requires the whole focus of the person to the whole social community rather than specific activities. It requires the learning of new activities and skills and their full understanding. Hence, in this context participation is 'a complex process that combines doing, talking, thinking, feeling, and belonging. It involves the whole person, including our bodies, minds, emotions, and social relations', (Wenger, 1998a, p55-56). It implies action rather than passivity.

As within any group some individuals are core members whilst others stand at the margins, (Smith, 2003, 2009). 'Legitimate peripheral participation' characterises the process by which newcomers develop the required skills and attributes to become fully included in that

community of practice. It is important that the newcomers be granted enough legitimacy to be treated as potential members and gain a sense of how the community operates in order to learn the necessary rules and processes and so learn how to engage with it and within it, (Wenger, 1998a). The aim for newcomers is to move from the periphery to the centre in order to become fully engaged and active alongside those others who provide the intellectual and social leadership, (Merriam et al., 2003). The emphasis is not upon learning '*from* talk but to learn *to* talk', (Lave and Wenger, 1991, p109). Merriam et al. (2003, p172) argued that learning is 'a meaning-making activity inherent in the activity of the community'. This is because such members share 'routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice' (Wenger, 1998a, p83). There is an essence of 'apprenticeship', in the broadest sense of the word, in that the newcomer learns the cultural traditions, as well as learning the knowledge and skills, of that group (Lave and Wenger, 1991) and, thus, an element of community-building conversations, (Wenger, 1998a).

Vocational learning is not static but requires engagement, participation and on-going, developing practice. This includes:

> Evolving forms of mutual engagement: discovering how to engage, what helps and what hinders; developing mutual relationships; defining identities, establishing who is who, who is good at what, who knows what, who is easy or hard to get along with.
> Understanding and tuning their enterprise: aligning their engagement with it, and learning to become and hold each other accountable for it; struggling to define the enterprise and reconciling conflicting interpretations of what the enterprise is about.
> Developing their repertoire, styles, and discourses: renegotiating the meaning of various elements; producing or adopting tools, artifacts, representations; recording and recalling events; inventing new terms and redefining or abandoning old ones; telling and retelling stories; creating and breaking routines, (Wenger, 1998a, p95)

As individuals embark upon their life journey a 'transition' occurs in themselves. Patterns of behaviour change as the person's abilities, identity, role and relationships change. This is the concept of transition. According to Brennan and McSherry (2007) it is never a singular event but occurs over an undetermined period of time and is an individualised process.

The notion of 'brokering' is an important element of communities of practice as some individuals learn the rules and procedures of that community more quickly than others. Some use prior knowledge, experience or intuition. These individuals excel at transferring skills and knowledge from one practice to another to make new connections and 'open new possibilities for meaning' and helps to highlight the significance of the concept in vocational learning, (Wenger, 1998a, p109). As such, once again, these are the attributes of accelerated graduates as described by the American Association of Colleges of Nursing (2009), the Quality Assurance Agency for Higher Education (2008), Shiber (2003) and Sternberg (1998) in the previous sections.

Professional Socialisation versus Communities of Practice

Various terms exist that describe the nature of what it is to be professional. One can have professional status or a professional identity that reflects the character and responsibilities of those professionals, (Richardson, 1999a). According to the Oxford English Dictionary professionalism refers to 'the practice or status of a professional, as distinguished from an amateur; professional quality, character or conduct', (Oxford University Press, 2009, no page). It is 'the manner adopted by professionals in the conduct and organisation of their work'. Such professional behaviour can uphold the status of that profession, (Richardson, 1999a).

According to Fincher Corb et al. (1987, p226) professional socialisation is a process by which an individual 'acquires the characteristics necessary to function successfully in his chosen profession'. It requires an appreciation of the role of that profession and of the individual within that profession, (Fincher Corb et al., 1987). Hence newcomers acquire and adopt their chosen profession's systems and procedures in order to become successful competent professional practitioners, (Fitzpatrick et al., 1996; du Toit, 1995). In this sense professional socialisation appears to be a formal recognition and acceptance of a framework that is imposed upon the individual. To do so these newcomers need to learn and understand the values, behaviours and attitudes necessary to assume their professional role, (Howkins and Ewens, 1999). As such, professional socialisation requires 'internalisation' meaning that the

individual reflects upon her own identity and accepts values and norms of the group as their own, (Howkins and Ewens, 1999, p42; du Toit, 1995, p164-165).

At first inspection professional socialisation appears the same as a community of practice; both involve the aspirational development of the individual. With professional socialisation the individual is 'apparently moulded into the profession', (Howkins and Ewens, 1999, p42). One has to 'learn the ropes', 'fit in' and 'have to meet the expectations of others', (Melia, 1987, p127 cited in Clouder, 2003, p215). However, others suggested that the essence of professional socialisation is, in some way, imbibed as it occurs 'through a network of situational social exchange from which students imperceptibly assimilate a web of taken-for-granted values based on a social consensus of professional behaviour', (Richardson, 1999a, p463). Conversely, Howkins and Ewens's 1999 review of the literature found a proactive approach in which 'students brought to the educational experience their own personal constructions based on their unique past experiences', (Howkins and Ewens, 1999, p42).

Considering the two concepts communities of practice represent the structures, habits and norms (Royal College of Nursing, 2009) but are received in context: the learning is 'situated' (Lave and Wenger, 1991, p29) and is engaged in that specific environment giving the learning relevance and meaning. Such learning is not simply the acquisition of knowledge but occurs as a direct result of social participation; the greater the participation, the greater the contextual learning, (Smith, 2003, 2009). Conversely, professional socialisation, appears to have a broader pre-requisite; by agreeing the rules and regulations one becomes professionally socialised to a sufficient degree to enable the journey of legitimate peripheral participation and so become a core member of the community of practice.

Summary

Chapters Two and Three have demonstrated the concept of accelerated courses across the USA and UK. Accelerated pre-registration courses have become an accepted phenomenon in educational practice spurred by educational creativity and political drive. The concept of

assimilating relevant information and becoming sufficiently skilled in a specific field is of interest. The literature highlights several advantages and disadvantages regarding these courses. Whilst studies exist to review the evolution of accelerated courses it proves difficult to measure their exact success as many relate to American studies and to a very different educational system. Several studies consider non-health related courses such as business or education. There are few UK based health-related studies but none relate to physiotherapy. It is possible to offer various rationale to explain how such courses might succeed relating to the specific skills of a specific type of student; from motivation and self-resilience to advanced cognitive behaviours that enable them to assimilate vast quantities of information in a shortened time. Support mechanisms are also important. These may reflect the wealth of previous personal experiences that enable transferable skills and/or such support may arise from the very environment to which the individual aspires. A community of practice is one such example.

It is reasonable to recognise that misunderstanding exists regarding these accelerated courses given that the title of award may be misinterpreted or the nature of the course misunderstood by its very phraseology. As noted the term 'accelerated' has differing connotations and has raised concerns amongst both traditional students and the qualified membership of the chosen professions. As today's clinical supervisors, educators and managers may have arisen from a range of clinical and academic backgrounds with possible varied perceptions of these current developments, it is advantageous to explore perceptions of these new programmes from both clinical and educational perspectives to gain greater insight into their implications and future status.

As such the specific aims of the research are:

1. To understand the rationale for, and identify the breadth of, accelerated pre-registration courses in physiotherapy across the United Kingdom.
2. To explore clinician's perceptions of the clinical performance of the accelerated pre-registration M-level physiotherapy graduate in England.
3. To compare these perceptions with clinician's perceptions of the clinical performance of the traditionally trained BSc (Hons) graduate in England.

4. To understand the impact of the accelerated pre-registration course in physiotherapy by determining student performance and exploring clinician's perceptions.

5. To develop a theoretical appreciation of the accelerated pre-registration course in physiotherapy and its implications for physiotherapy education and practice.

The decision-making for the research process and manner in which these aims will be explored will be discussed in Chapters Four and Five.

CHAPTER FOUR: METHODOLOGICAL ISSUES

Introduction

The previous chapters outlined the rationale for, and introduction of, the accelerated pre-registration course (APRC) from the perspective of health-care courses both internationally and nationally. The historical development of the physiotherapy profession was also explored as this is another focal point to this thesis. This chapter discusses the theoretical underpinnings of the chosen methods in light of the professional background of the researcher, respondents and target audience. It then presents my ontological and epistemological position as the researcher considering my various backgrounds..

Theoretical underpinnings of the physiotherapy profession as a background to my methodology

As seen in the first chapter the historical and central tenet of the profession has been a pragmatic approach in its literal sense as the physiotherapist is seen as the problem-solver and 'enabler' for patients and clients, (Barclay, 1994). As the physiotherapy profession has evolved, its clinical, educational and research approaches have developed from a range of philosophical attitudes and approaches. Albeit reflecting a viewpoint from a decade ago, Parry (1997, p424) remains correct in stating that 'the intellectual status of physiotherapy is not settled: is it a health science, or a pseudoscience, or a multiparadigm science, or not a science at all?'. Similarly Richardson (1999b) believed that an epistemology for physiotherapy research had yet to be fully explored or defined. On the one hand physiotherapists have often been typified as 'doers', (Noronen and Wilkström-Grotell, 1999, p177). They are generally considered to be clinical scientists, problem solvers and reflective practitioners, demonstrating accountability and responsibility. The essence of their approach is to determine a clinical diagnosis and apply a clinically reasoned intervention strategy, (World Confederation for Physical Therapy, no date; Higgs et al., 1999). Noronen and Wilkström-Grotell (1999) argued that physiotherapy is an applied science having its own knowledge base, practice and

educational methods. From an historical perspective, the body of physiotherapy professional knowledge has been based on both empirical and clinical evidence related to anatomy, pathology, biomechanics, medical sciences and psychology. The randomised controlled clinical trial arose in the latter half of the 20th century and became a gold standard for evidence-based practice (EBP), (Goodman, 2007). Today such evidence is often judged by its ranking in the hierarchies of evidence such as that from the Centre for Reviews and Dissemination, University of York (2008). Essentially it has a positivist stance. Within physiotherapy the Physiotherapy Evidence Database (PEDro) was developed in 1999 being an evidence database of randomised trials, systematic reviews and clinical practice guidelines in physiotherapy, (Herbert, et al,. 2005).

An alternative approach to the positivist approach also exists within physiotherapy as Parry (1997) argued:

> 'People are not reducible, measurable and inanimate objects that exist independently of their historical, cultural and social contexts norm as subjects of research', (Parry, 1997, p427)

Hence the focus of health-care has become client-centred rather than disease-orientated. It requires a holistic approach that 'balances both biological and behavioural aspects of human functioning' and advocates an interpretive paradigm within physiotherapy, (Higgs and Titchen, 1995, p523; Richardson, 1995). The medical model has been re-evaluated as patients have become more empowered to manage their own health and there is a greater integration of multi-disciplinary roles rather than uni-disciplinary input, (Richardson, 1999a). For these reasons many believe that, increasingly, the medical model is regarded as inappropriate for the study of people (Clark, 1998) by professions such as nursing, physiotherapy, occupational therapy who promote an holistic approach that considers both the biological and behavioural aspects of human function, (Higgs and Titchen, 1995). Noronen and Wilkström-Grotell (1999, p178) argued that 'since the profession views humans holistically, we must also consider physiotherapy [to be] a humanistic science'. There is now a greater emphasis with the interpretive and critical paradigms.

> In this approach, knowledge is not perceived as 'objective facts' as to the empirico-analytical paradigm, but as the constructions arising from the minds of knowing, conscious and feeling beings. It is generated through the search for

meaning, beliefs and values, and through looking for wholes and relationships with other wholes', (Higgs and Titchen, 1995, p523).

From my perspective rather than believing in one empirical truth, one assumes multiple positions. Different people have different perceptions and experiences and there are various ways in which to explore and examine them. The post-positivists argue that reality can never be fully apprehended, only approximated, (Denzin and Lincoln, 2005, p11). This, to me, must be recognised when considering the methodological approach, type of analysis and style of dissemination of the findings for this thesis as explored in the next section. I felt that I wanted to explore the views of a sample of the profession but to be able to inform the broad profession who, as individuals, might have their own positivist and post-positivist beliefs.

Ontological and epistemological issues

It seems appropriate to present the decision making of my research approach in a hierarchical framework of ontology, epistemology, methodology and methods as an expression of my understanding based upon the work for this thesis. My assertion of the knowledge and research base of the physiotherapy profession is that it has both humanistic and positivist qualities. My own nature is reflexive meaning a conscious reflection about my actions and values, (Langdridge, 2007; Willig, 2001). The following section explains the rationale for my research design.

The ontology of my research:

Ontology is the study of being, (Crotty, 1998). It is the branch of philosophy that deals with the question of existence itself and is often posed as 'what does it mean to 'be' at all?', (VandenBos, 2007, p645). My rationale is that:

- The world exists beyond my knowledge and experience

- Others can experience the same things differently from me

- Our experiences change the way we view our world

- There is more than one answer and explanation to a research question

Appreciating that individuals view and react to the world differently gives me a subjective perspective in my ontological outlook.

The epistemology of my research:

Epistemology is 'the branch of philosophy concerned with the nature, origin, and limitations of knowledge', (VandenBos, 2007, p337) and 'what we can say we know about the world, the relationship between the knower and the known', (Langdridge, 2007, p3). According to Carter and Little (2007) the epistemology modifies methodology and justifies the knowledge produced. For me:

- My research should be exploratory and interactive

- I have insider knowledge in this subject area that cannot be avoided

- My background and insider knowledge should be embraced as a positive contribution to the research process

- I hope to gain insight into the participants' worlds but I cannot hope to fully understand their whole outlook on life: they are different from me with different experiences and different outlooks

Epistemologically, I believe that there cannot be an absolute truth:

> 'what is considered true will depend on individual judgements and local conditions of culture, reflecting individual and collective experience', (VandenBos, 2007, p785).

My approach is that of critical realist:

> the post-positivist critical realist recognizes that all observation is fallible and has error and that all theory is revisable. In other words, the critical realist is *critical* of our ability to know reality with certainty,
> (Trochim, 2006, no page)

This has long had resonance for me in my clinical life. For instance I recognise that differing patients have differing pain thresholds; each individual's awareness and acceptance of pain can change from day to day and mood to mood depending upon a variety of physical, emotional and social reasons. So, too, I can fully appreciate that the belief systems of my research participants can change over time and for a multitude of reasons. This means that

there could be more than one truth because of different interpretations, perceptions and reactions to that phenomenon.

The rationale for the study design

The epistemological approach to this research considered my own reflexive nature and the qualities of the target audience as discussed previously. Based upon the aims of the study the research is one of interpretivism to explore and understand perceptions rather than explain them, (Crotty, 1998). Not only did I wish to explore the implications of accelerated courses for myself but, from the outset of the research process, the dissemination of study findings were an equally important issue to me as a researcher. The research questions were predominantly qualitative and exploratory in nature. If findings were to be presented to the physiotherapy profession I reverted to my belief that a significant proportion might still subscribe to a positivist approach in their outlook. Subsequently their continuous professional development might remain focussed upon quantitative research. For this reason an early decision in the planning of the research was to develop a combination of qualitative and quantitative approaches within the study design and so adopt a 'mixed-methodology'. This approach is:

> 'the incorporation of various qualitative or quantitative strategies within a single project that may have either a qualitative or quantitative theoretical drive. The 'imported' strategies are supplemental to the major or core method and serve to enlighten or provide clues that are followed up within the core method', (Tashakkori and Teddlie, 2003, p190).

The advantage of such mixed methods research is that it enables the researcher to simultaneously answer exploratory and confirmatory questions in the same study in the hope to generate and verify theory, (Tashakkori and Teddlie, 2003). It is:

> 'the combination of the results of two or more rigorous studies conducted to provide a more comprehensive picture of the results than either study could do alone', (Tashakkori and Teddlie, 2003, p190)

and thus provides a workable approach for the physiotherapy researcher.

The sequence of the mixed methods was important. Theoretically, the varied data collection might occur simultaneously or sequentially in order to reflect the research design. This

research study was primarily exploratory and hence predominantly qualitative in nature. Hence semi-structured face-to-face interviews were planned to generate depth of knowledge that was followed up with attitude measurement by questionnaire to consolidate understanding, (Creswell 1995; Foss and Ellefsen, 2002; Sale et al., 2002). Hence an additional quantitative thread was added to the research process. This format is known as 'Sequential Exploratory Strategy' being characterised by an initial phase of qualitative data collection and analysis as the priority, (Cresswell, 1995). The quantitative analysis was then used to test 'elements of an emergent theory resulting from the qualitative phase and therefore it can be used to generalise qualitative findings to different samples', (Cresswell, 1995).

The contrasting approach would be the 'Sequential Explanatory Strategy, (Cresswell, 1995) that suggests that priority should be given to quantitative data. Qualitative analysis could then be used in the interpretation phase of the study to assist in explanation and interpretation of the findings of the primarily quantitative study. In their view Miller and Fredericks (2006, p578) believe that 'insightful qualitative interpretations' complement traditional quantitative methods to expand evaluation of research findings. This approach could be seen as useful when unexpected results arise from a quantitative study, (Cresswell, 1995). However, as stated, it was felt that the focus of the study was exploratory from the outset and that in-depth interviews themselves would inform the study and so the 'Sequential Exploratory Strategy' was adopted.

Triangulation by a mixed methodological approach

I believe that mixed methodologies broadens the constituency of research and the understanding of the research question. However, quantitative and qualitative research approaches are also often combined to enhance claims for the reliability and validity of a study if they can be shown to provide 'mutual confirmation', (Silverman, 2000; Bryman, 1988; Lincoln and Guba, 1985). Of the various types and applications of triangulation, 'data triangulation' is the use of more than one method of data collection, (Robson, 2002). Misunderstandings arise from the use of triangulation. At first glance the two approaches

appear incompatible as quantitative methods seek explanation aimed at 'horizontal' i.e. broad generalisation of findings whilst qualitative research seeks interpretation and theory-building work for 'vertical' i.e. in-depth understanding within the subject area, (Yardley, 2000). The combination of different research strategies can be said to provide a 'multifaceted view' to confirm the accuracy and completeness of one's data in terms of elaboration, illustration, understanding and clarification of the result, (Foss and Ellefsen, 2002, p243).

It is not suggested that any one approach is inferior or more flawed than another although Amaratunga, et al., (2002, p23) highlights that:

> 'The assumption… is that the effectiveness of triangulation rests on the premise that the weakness in each single method will be compensated by the counter-balancing strengths of another'.

Instead, the combination of approaches contributes to the 'credibility' of the study design (Silverman, 2000; Lincoln and Guba, 1985). Hence, according to Foss and Ellefsen (2002, p244):

> 'Knowledge gained from qualitative and quantitative approaches should not be seen as irreconcilable pools of knowledge, but at different positions on a continuum of knowledge'.

As such, it is argued that the combination of strategies offers an 'overview (breadth) and insight (depth)' to provide different kinds of knowledge, (Foss and Ellefsen, 2002, p245). They continue:

> 'The finding of two realities is in itself an important outcome. Furthermore, moving between data can make the 'whole greater than the sum of the parts' and give rise to new hypotheses and questions that would otherwise have remained unnoticed', (Foss and Ellefsen, 2002, p245).

However, Murphy et al. (1998) claimed a fundamental problem with a test of validity as combined approaches can only corroborate findings but never refute them. They also argued that if findings from the two sources contradict each other it is difficult to know from where the differences arise as it is possible that one or both sources may be subject to systematic error, (Murphy et al., 1998). Whilst seemingly a potential problem, the study design should incorporate reflexivity to minimise such risks and thus triangulation within the mixed methods is seen to be a positive design.

My subsequent qualitative approach: interpretative phenomenological analysis

Interpretative Phenomenological Analysis (IPA) was developed by Jonathan Smith in the 1990's promoting greater interpretation of the data than in descriptive phenomenology, (Langdridge, 2007). Interpretative phenomenological analysis is 'concerned with understanding personal lived experience and thus with exploring person's relatedness to, or involvement in, a particular event or process (phenomenon)', (Smith et al., 2009, p40). There is 'less emphasis on description and greater interpretation than in descriptive phenomenology', (Langdridge, 2007, p55). Hence the researcher attempts to interpret the interpretations of the individual but 'the researcher can never, entirely, know this personal world but can only approach somewhere towards accessing it', (Howitt and Cramer, 2008, p373)

Interpretative Phenomenological Analysis was chosen as the approach for this study for a number of reasons that I drew from my career as a clinician, academic and researcher. Given the timeframe in which to meet individuals, whether they be patients, clients, or research participants I believe that it is impossible to fully understand them as people; how their life's experiences have shaped and affected them, their beliefs and their actions. My interaction with them is a snap-shot in time and my understanding of them is, on the whole, an interpretation of what they want me to see and, potentially, what I want to see. This is not a weakness but a strength. In formal settings patients or research participants, alike, can chose their words and demeanour carefully to reflect themselves as they wished to be viewed. Regardless of how we might wish to facilitate a relaxing environment the clinical setting and research setting can have a formal air to it. That is not to say that the trained eye cannot see through an individual's 'superficial front' but a clinician or a researcher must accept the possibility that they are being presented with one version of the person's life. Willig (2001, p53) recognised this 'impossibility of gaining direct access to research participant's life worlds'. The rationale for IPA, therefore, reflects my own beliefs and experiences. As a clinician I must accept and believe the stories within the case history that each patient, or client, presents to me as their absolute truth at that time. Some clinical presentations can

appear obscure to the layman but clarity of thought is important to consider possible causes of the patient's signs and symptoms and so form clinical diagnosis. Equally, my role is not to judge my patients, or clients, and so my clinical approach must be non-judgemental. Geoffrey Maitland was world-renowned within the physiotherapy profession for his teaching and contribution to clinical practice. Maitland recognised that patients are all inherently different in physical structure and emotional state and thus believed that a single diagnosis can have many different physical presentations. As such his approach differed from the anatomical and medical model of health-care arguing that 'many diagnostic titles are sometimes inadequate, incorrect, or may be merely linked with patterns of symptomatology; they may even be based on suppositions' and as such 'it is sometimes difficult to relate a patient's history and examination findings to a precise and meaningful diagnosis', (Maitland et al., 2005, p6). His clinical approach related more to function than anatomy. Maitland insisted upon the need for continuous analytical assessment before, during and after each of the application of each treatment session, (Maitland et al., 2005). There is consideration, reflection and then decision making for the next course of action. This is second nature for me as a clinician and lecturer over twenty years. Hence, as a researcher, I accept Smith and Osborn's (2003) proposition that the IPA researcher has 'a theoretical commitment to the person as a cognitive, linguistic, affective and physical being', (Smith and Osborn, 2003, p52), as I recognise us all as complex, changing beings.

As importantly, I recognise that many individuals, regardless of walk of life and status, wish to be careful in what they say and/or need to 'think on our feet' when 'put on the spot'. There can be:

> a chain of connection between people's talk and their thinking and emotional state…. people struggle to express what they are thinking and feeling, there may be reasons why they do not wish to self-disclose, and the researcher has to interpret people's mental and emotional state from what they say, (Smith and Osborn, 2003, p52).

I believe that, as a researcher, I cannot exclude aspects of my life from my research. The concept of Husserl's epoché (or bracketing) meaning to renounce our presuppositions and preconceived ideas from that we are investigating, (Langdridge, 2007), is problematic. I believe that my insider knowledge is a strength to this exploration but concede that careful

reflexion is required. Coolican (2004, p229) recognised that 'any attempt to report on another individual's experience will necessarily be distorted by the phenomenology of the reporter'. I see and interpret my close world because of my experiences within it - as a physiotherapist, a lecturer, a patient, a researcher and as a family man- and how these relate to me. These give meaning and richness to my life and therefore I cannot, nor want to, detach myself from it, (Maggs-Rapport, 2001). Willig (2001) argued that this separation of the researcher from the study is unlikely and unnecessary as there is a natural interaction between researcher and participant. As a result, Willig informs us the 'analysis by the researcher is always an *interpretation* of the participant's experience', (Willig, 2001, p53).

Analysis of quantitative data

Details of the analysis of the quantitative aspects of the study are addressed in Chapter Five. The quantitative studies had two elements. Firstly the clinical performance of pre-registration physiotherapy students from both accelerated and traditional courses was compared. This was done using their summative marks whilst on clinical placements that were undertaken as part of their training. Simple inferential statistics were used using the t-test for parametric data. Further detail is offered on pXXXX. Secondly, descriptive and inferential statistical tests were used to examine questionnaire respondents' attitudes towards the accelerated courses.

Summary

This chapter has presented personal, professional and academic perspectives of how the research methodology and methods address the research questions of this thesis. My ontological and epistemological beliefs were presented to explain decisions relating to the exploratory approach of the methodology and methods. The choice of a mixed methods approach was seen to enhance the quality of the research process. A 'Sequential Exploratory Strategy' was chosen giving the initial qualitative data collection and analysis priority before the quantitative analysis that would test the emergent theory. Additionally noting the differing

paradigms that exist within the physiotherapy profession findings from the mixed methods approach would also enhance dissemination of research findings.

The justification for the use of Interpretative Phenomenological Analysis was made as a reflection of my personal approach to this research as well as having resonance with my previous clinical experiences. It is important to me to recognise that interpretation within the analysis is key to this approach as interpretation is a translation and a decipherment of the participant's contribution as the researcher can never fully understand the inherent meaning and context of that contribution, (Howitt and Cramer, 2008).

CHAPTER FIVE: METHODS OF DATA COLLECTION AND ANALYSIS

Introduction

Having presented the rationale for the research methodology in the previous chapter this chapter explains the process by which this research study took place. The two chapters must be considered jointly as:

> Methodologies justify methods, and methods produce knowledge, so methodologies have epistemic content, (Carter and Little, 2007, p1320).

In simpler terms, 'methodology justifies method, which produces data and analyses', (Carter and Little, 2007, p1317). As stated previously the aims of the research are:

1. To understand the rationale for, and identify the breadth of, accelerated pre-registration courses in physiotherapy across the United Kingdom.

2. To explore clinician's perceptions of the clinical performance of the accelerated pre-registration M-level physiotherapy graduate in England.

3. To compare these perceptions with clinician's perceptions of the clinical performance of the traditionally trained BSc (Hons) graduate in England.

4. To understand the impact of the accelerated pre-registration course in physiotherapy by determining student performance and exploring clinician's perceptions.

5. To develop a theoretical appreciation of the accelerated pre-registration course in physiotherapy and its implications for physiotherapy education and practice.

The research process was undertaken in stages:

Stage One: A lack of literature regarding the subject of accelerated pre-registration courses within the field of physiotherapy was noted. In order to fulfil Research Aim 1 a literature review was undertaken to understand the rationale, purpose and outcome of accelerated courses in health-care and non health-care professions in the United Kingdom and inter-nationally. These findings have been presented and discussed in previous chapters to fulfil Research Aim 1.

<u>Stage Two:</u> Application was made for ethical approval from The Central Office for Research Ethics Committees (COREC) which was superseded by the National Research Ethics Service (NRES) during the timescales of this study.

<u>Stage Three:</u> Whilst awaiting national ethical approval an additional component of the study was undertaken to measure the clinical performance of accelerated physiotherapy students whilst on clinical placement. It was realised that performance during training does not determine one's graduate performance. However, it was envisaged that outcomes would provide useful insights for future data collection to see how these individuals performed clinically in comparison with their traditional undergraduate physiotherapy counterparts. By doing so this partially fulfilled Research Aim 4 and 5.

<u>Stage Four:</u> In-depth, semi-structured, face-to-face interviews were undertaken as the qualitative exploration of clinicians' perceptions towards the new accelerated courses. Following their transcription the NVivo 8® software program was used to assist in the organisation and the subsequent analysis of the interview data. Interpretative Phenomenological Analysis (IPA) was adopted to explore and interpret the participants' experiences, (Smith, 2003; Willig, 2001). By doing so this partially fulfilled Research Aims 2, 3, 4 and 5.

<u>Stage Five:</u> Findings from the interviews were further tested by questionnaire to as large a sample as possible that fulfilled the inclusion criteria. By doing so this generated a mixed-method approach, (Tashakkori and Teddlie, 2003; Cresswell, 1995). Such an approach enhanced the data analysis and offered differing vehicles for dissemination of findings and so contributed towards Research Aims 2, 3, 4 and 5.

The study design is represented diagrammatically in Figure 2 overleaf.
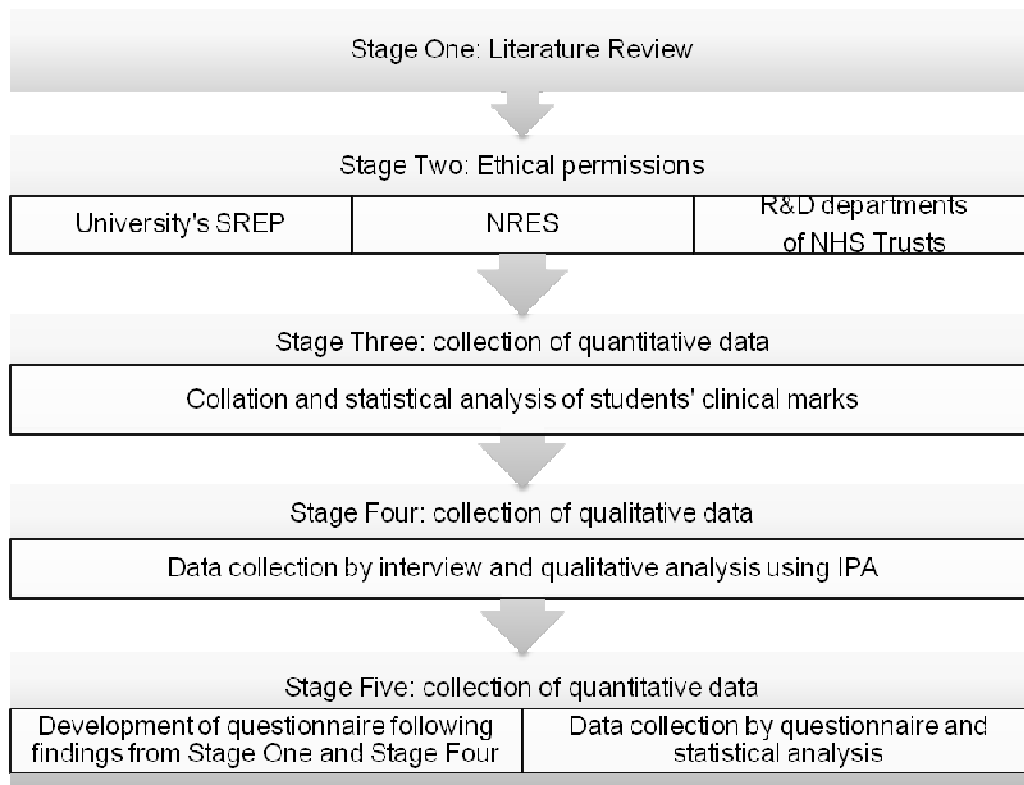
Figure 2: Flowchart of study design in stages

As noted, Stage 1 has already been presented in previous chapters within this thesis. The following sections address the remaining stages of the research process.

Stage Two: Assessing and addressing ethical issues

The code of conduct developed by the British Psychological Society upholds the four ethical principles of respect, competence, responsibility and integrity for all involved. It provides guidelines for gaining consent, upholding confidentiality and anonymity, protecting from discomfort and harm and avoiding deception, (British Psychological Society, 2009a, 2009b). These were fully recognised and accepted. As this study related to professionals' perceptions of the academic and clinical development of their chosen profession, ethical permission was requested and granted by the National Research Ethics Service (NRES) on 9th August 2007.

Local permissions were also sought and gained throughout 2007 and 2008 from each of the relevant Research & Development (R&D) departments of those NHS Trusts in which I wished to research. I identified those NHS Trusts as being likely to have employed a sufficient proportion of accelerated graduates and hence sufficient numbers of staff that fulfilled the study's inclusion criteria. In each of these applications I demonstrated awareness of the need for confidentiality and respect, As the researcher I had insider knowledge of the profession and its membership. It was therefore essential that anonymity and impartiality was assured so that the views of either party remained confidential. In practical terms, participants' informed consent was ensured using detailed participants' information sheets, (see Appendix 5 and 6). These had been approved as part of the NRES application.

The data collection took place on work premises and potentially during the working hours of the participants. It was essential that such data collection did not impede upon participants' time and role in patient care. Negotiation was essential between the researcher, study participants and relevant line managers. Whilst interview data was recorded by audio equipment and transcribed, pseudonyms were used to ensure participant anonymity. Audio recordings were erased following the analysis stage in line with guidance from the Research Office of the University of Huddersfield. For all of these reasons no audio-tape can be or will be used publicly in the dissemination of findings to protect participants' identities.

To avoid contravening ethical guidance within the quantitative data collection by questionnaire, no encryption or other identifying methods were used to encourage participation from clinicians. The disadvantage of this, however, was that non-respondents from the questionnaire survey could not be identified and re-contacted.

Further details of the ethical approval process are provided in Appendix 4.

Ensuring the trustworthiness of the study: credibility, transferability, dependability and confirmability

Qualitative research is concerned with meaning in context and involves a subjective interpretation of the data, (Willig, 2001). The conundrum that attempts to undermine qualitative methods is that any sample size sufficiently large enough to be statistically representative cannot be analysed in depth, (Yardley, 2000). Equally, small sample sizes cannot be considered generalisable. However, findings from qualitative research must be considered genuine. Yardley (2000) offers various characteristics of good qualitative research:

- sensitivity to context meaning a grounding in the approach,

- commitment suggests prolonged engagement with the topic, development of competence and skill in the methods used, and immersion in the relevant data,

- rigour refers to the resulting completeness of the data collection to enable comprehensive and complete analysis and interpretation,

- transparency relates to clarity and sufficient detail to provide depth of appreciation and understanding of the process,

- coherence relates to clarity and cogency [simplicity, logic and reason].

Several authors provide guidelines for good practice in qualitative research to ensure rigour, (Elliott et al., 1999; Henwood and Pidgeon, 1992) but there appears to be no consensus considering the breadth of research from differing ontological and epistemological perspectives, (Madill et al., 2000). Instead, I relied upon Lincoln and Guba's key text of 1985 that related to the trustworthiness of qualitative research and its findings. It posed four questions that relate to truth value, applicability, consistency and neutrality even though some argue that the quantitative terms of reliability and validity are just as applicable as they symbolise good rigorous research, (Robson 2002).

- Truth value: 'how can one establish confidence in the '*truth*' of the findings of a particular inquiry for the subjects (respondents) with which and the context in which the inquiry was carried out?', (Lincoln and Guba, 1985, p290). Whilst an understandable question, 'truth' remains a nebulous concept as reality is 'a multiple set of mental constructions', (Lincoln

and Guba, 1985, p295). Instead I as the researcher must have shown that the constructions were sufficiently well represented and credible. This introduces the concept of 'credibility' which relates to internal validity in quantitative research, (Lincoln and Guba, 1985, p295). Within this research it was important that clinicians fulfilled the inclusion and exclusion criteria and were accessed from as wide a geographical range as practicable to demonstrate the purposive sampling. By doing so this increased the range of experiences of clinicians regarding graduates from differing universities, different courses and different cohorts. It was also important to accurately reflect these findings from subsequent data analysis within the presentation of this thesis e.g. with accurate reference system as an audit trail.

- Applicability: 'How can one determine the extent to which the findings of a particular inquiry have applicability in other contexts or with other subjects (respondents)?' (Lincoln and Guba, 1985, p290). This relates to the likelihood of possible transferability to similar circumstances or situations, noting that the similarity is the important issue. Whilst compared to the concept of external validity in quantitative research it is thought to differ from external validity with its statistical confidence levels because, qualitatively, contexts do differ, (Lincoln and Guba, 1985, p298). As will be discussed further on p95 this study utilised a purposive sample to explore physiotherapy clinicians' views. Given the number of institutions that provide pre-registration physiotherapy training nationally (see Appendix 2) it can be argued that there is applicability beyond this purposive sample towards other members of the physiotherapy profession.and resonance with other healthcare professionals.

- Consistency: 'How can one determine whether the findings of an inquiry would be repeated if the inquiry were replicated with the same (or similar) subjects (respondents) in the same (or similar) context?', (Lincoln and Guba, 1985, p290). The ability for future replication of a study requires reliability, stability, consistency and predictability but assumes that the subject matter to be evaluated is also dependable, stable and replicable. This introduces the concept of 'dependability' that relates to reliability in quantitative research, (Lincoln and Guba, 1985, p299). As the emphasis of the data collection required perspectives from clinicians based upon their experiences the

outcomes could never be predicted nor standardised. However the process of data collection was regulated using an agreed format of semi-structured interview and questionnaire design. These were both verified and agreed by the National Research and Ethics Service (NRES), (see Appendix 5 and 6).

- Neutrality: 'How can one establish the degree to which the findings of an inquiry are determined by the subjects (respondents) and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer?' (Lincoln and Guba, 1985, p290). This asks for assurances that the study findings are independent and hence introduces the concept of 'confirmability' that relates to the concept of objectivity in quantitative research, (Lincoln and Guba, 1985). This will be discussed in the next section.

Reflexivity and bias

Reflexivity is the term given for a researchers' conscious reflection of how the study's design and execution affected the study itself, (Langdridge, 2007). This is important because Interpretive Phenomenological Analysis places an emphasis on making sense of participants' experiences (Howitt and Cramer, 2008; Smith and Osborn, 2003). It accepts that:

> such an exploration must necessarily implicate the researcher's own view of the world as well as the nature of the interaction between researcher and participant, (Willig, 2001, p53).

Hence one must be sure that due consideration has been made to ensure that a reasonable interpretation has been made and presented in this thesis. Willig (2001) differentiated between personal reflexivity and epistemological reflexivity. The former involves reflecting upon ways in which 'our own values, experiences, interests, beliefs, political commitments, wider aims in life and social identities have shaped the research', (Willig, 2001, p10). In contrast epistemological reflexivity considers the study design and 'encourages us to reflect upon the assumptions (about the world, about knowledge) that we have made in the course of the research, and it helps us to think about the implications of such assumptions for the research and its findings', (Willig, 2001, p10).

Regardless of structure of the data collection, whether qualitative or quantitative, bias can exist. Regardless of sincere assurance of anonymity and confidentiality participants may wish to protect themselves and not speak openly or honestly. Alternatively, they could be swayed in their responses by the researcher's personal characteristic or by the way the data collection is conducted.

Despite one's natural reflexive nature bias is possible within any data collection. Hence, in this data analysis it was important to recognise the possibilities of the varied types of bias; gender bias (Fontana, 2003); halo effect (i.e. that which occurs when behaviour is evaluated well only because the participant exhibits likeable attributes, (Mateo and Kirchhoff, 1991); acquiescence responses (i.e. those who agree with statements regardless of content, (Polit and Hungler, 1999); or prestige bias (i.e. that which occurs when an opinion is held only because a prestigious person holds that same view, (de Vaus, 1996)).

As a researcher, I was aware that some participants knew me having worked with, or close to, me professionally or knew me to hold an academic post in their professional field. It was possible that such biases could occur and this required careful listening and careful reiteration. At times it proved useful to ask the participant to explain something more fully that might have been thought obvious to us both 'for the benefit of the tape' [i.e. the readers of the thesis] as a vehicle of unpicking their perceptions. Alternatively contrasting points of view were offered to open discussion further. Hence, at times, and when thought prudent I openly played Devil's advocate to develop conversations.

Langdridge (2007) offers a list of useful questions that the researcher should ask oneself to consider how thoughts and actions determine the outcome. Within the planning, data collection and subsequent analysis of my research for this thesis the decisions and decision-making process were recorded in a diary. The supervisory meetings that oversaw my doctoral studies proved invaluable.

Stage Three: Assessment of the clinical performance of accelerated physiotherapy students

Whilst awaiting NRES approval for the main study a small but important survey took place. This used outcomes of students' clinical experience as one measure to compare the achievements of the newer accelerated course with the more traditional training courses. In order to gain eligibility to apply for membership of the Chartered Society of Physiotherapy (CSP) physiotherapy graduates must have completed the required 1,000 hours of clinically-based experience during their course, (Chartered Society of Physiotherapy, 2002b). Hence, students' clinical performances were measured in partial fulfilment of the research aims of the overall study as it was considered useful to determine if any differences existed between the two cohorts. As noted previously, whilst it was realised that performance during training does not determine one's graduate performance it was hoped to gain some sense whether potential differences existed in the differing cohorts' qualities and clinical skill.

Within the Yorkshire region of England there are four local universities that train physiotherapists. All access the same clinical placements for their student cohorts being scheduled and organised by one central coordinator. Regardless of course, each student undertakes six such clinical placements. Each is of five weeks duration. Because of excellent collaboration these universities also use the same standardised documentation for the assessment of their physiotherapy students whilst on clinical placement. This aids students and clinicians alike. Two of these universities provide accelerated pre-registration physiotherapy training. Hence for the purpose of this study direct comparison of clinical marks and performance was possible to increase sample sizes. Accelerated students were compared with traditionally trained students at the equivalent stages of their training in terms of accessing their clinical experiences; i.e. Year 1 students of the accelerated course commonly work alongside Year 2 students of a traditionally presented course. Equally, Year 2 students of the accelerated course work alongside the Year 3 counterparts of a traditionally presented course.

The two local universities were approached and local ethical permission was sought and granted by School Research and Ethics Panel of the University of Huddersfield and the Faculty Research Ethics Subcommittee of the other university.

Hypothesis for Stage Three

Students will perform to the same standard of clinical competence regardless of type of pre-registration course. The premise is that that despite their shortened course, students of the accelerated pre-registration course utilise their previous transferable skills from an academic background and previous life-skills to attain the same clinical experiences and outcome as their traditional counterparts.

Methods for Stage Three

Regardless of type of course, each students' clinical performance was measured using the six standard categories within the standardised assessment:

i) Patient Assessment [i.e. the skill and ability to undertake a detailed and relevant assessment of a patient including communication skills and collection of relevant information],

ii) Clinical Reasoning [i.e. developing a clinical hypothesis of the cause of the patient's problem(s), the subsequent clinically-orientated problem-solving and application of sound clinical judgement],

iii) Patient Management [i.e. implementation of a suitable and relevant treatment plan],

iv) Evaluation and Reflection,

v) Organisation and Planning,

vi) Collaboration and Teamwork.

As part of the summative evaluation of the student's performance numerical marks and comments are awarded within each category. These were collated from each student and entered for subsequent statistical analysis using the 'PASW Statistics 17.0' software package. For information, during the timeframe of this study this software replaced the similar package known as 'SPSS 12.0.1 for Windows'.

Being quantitative in nature to determine overall scores the free text was not used in this study.

Study participants for Stage Three

Students themselves did not participate in Stage Three of this study. Instead, only statistical data was collated from their relevant placement documents. These were studied from consecutive cohorts from 2004-to-2007 from both types of course from the two universities. Thus four sets of data were collated for the four cohorts per academic year. As noted, ethical permission was granted by both universities. Data was collected retrospectively and anonymised at source. No attempt was made to compare one individual with another or to compare one university with the other.

Analysis of data from Stage Three

Simple inferential statistics tested the hypothesis that students perform to the same clinically competent standard regardless of type of pre-registration course. A normal distribution of data was confirmed and inferential analysis of statistics undertaken using the t-test for parametric data. Results will be discussed in the next chapter.

Stage Four: Qualitative exploration of clinicians' perceptions towards the new accelerated courses by interview

As noted previously, the research was largely exploratory and based upon meaning derived from conversations and the interpretation of such responses. Asking questions is widely accepted as a cost-efficient and efficient method of gathering information about beliefs, values and attitudes, (Foddy, 1993). To gain interaction semi-structured face-to-face interviews were used as the primary data collection.

Study participants in Stage Four

Given the idiographic nature of the research and specificity of the research aims (to explore the perceptions of a sample of Chartered Physiotherapists who have supervised both BSc graduates and accelerated pre-registration course graduates), purposive and homogenous

sampling of participants was undertaken, (Langdridge, 2007; Mason, 2002). Langdridge (2007) believes this to be an appropriate method of sampling for IPA. This is because a purposive sample type selects the most representative of the issues involved in the research, (Coolican, 2004). Otherwise known as 'expert choice samples' these individuals have a 'particular shared experience' and/or are most likely to have appropriate expertise in the subject, (Langdridge, 2007, p5). Whilst it is recognised that findings reflect the views of this sample there could be transferability and applicability beyond this particular set.

In this instance, the sample population was derived from Chartered Physiotherapists who had had experience working with graduates from both accelerated and traditional physiotherapy training courses. I sought volunteer study participants via a number of local physiotherapy committees such as the Yorkshire-based '[Physiotherapy] Clinical Educators Committee' or directly from Physiotherapy Managers within the Northern Region. These were able to identify possible participants using a snowball approach. All participants were volunteers to minimise the risk of coercion. Mauthner et al. (2002, p56) are correct that 'the motives around why some people become participants and others resist should concern the researcher'. However by delegating the recruitment of participants to a third party meant that I was not the 'gate-keeper' to the research, (Mauthner et al., 2002, p56). Instead, line managers became the ones to decide who could participate and who could not. However, being purposive, it was accepted that the sample of participants may not, or would not, accurately represent the total population, (Oppenheim, 1992), and that those nominated and accepted may be prejudiced. This is immaterial as findings relate only to those who participated.

As noted previously, participants were provided with detailed information sheets that were authorised by NRES (see Appendix 5 and 6) and were asked for work-based contact details to minimise need for giving personal data.

The inclusion criteria for the study sample were:

1) Chartered Physiotherapists who had undergone pre-registration physiotherapy training within the United Kingdom

2) Those physiotherapists with experience of working with pre-registration physiotherapists

trained via the accelerated route and traditional route

3) Physiotherapists working in the public or private sector.

The exclusion criteria related to:

1) Physiotherapists who had not undergone pre-registration training within the United Kingdom

2) Those physiotherapists without experience of working with pre-registration physiotherapists trained via the accelerated route

3) Physiotherapists who were not working; e.g. retired

4) Potential participants who have not been granted permission by relevant line-managers.

Given that accelerated physiotherapy courses are only provided from three universities in North East England (Chartered Society of Physiotherapy, 2009b) it was thought that the number of participants that fulfilled the inclusion criteria might be relatively small. Given the constraints of available time for clinical staff it was envisaged that between 10 and 20 participants might be available for interview. Further anonymised details of the interview participants are presented in Chapter seven on p120.

Gathering data: interviews

The interview 'is literally an *inter view*, an inter-change of views between two persons conversing about a theme of mutual interest', (Kvale and Brinkmann, 2009, p2). As opposed to an everyday conversation the interview has 'structure and a purpose' (Kvale and Brinkmann, 2009, p3) as the researcher wishes to gain insight into a particular aspect of the participant's world. Steinar Kvale believes that the interview:

> is not a conversation between equal partners, because the researcher defines and controls the situation. The interview researcher introduces the topic of the interview and also critically follows up on the subject's answers to his or her questions, (Kvale and Brinkmann, 2009, p3).

Oppenheim (1992) appears to encourage structure claiming that within interviews the 'equivalence of stimulus' is crucial, namely that every participant should be asked the same questions, with the same meaning, in the same words, same intonation, same sequence, in

the same settings etc., (Oppenheim, 1992, p67). Yet he also concedes that the interview should:

> move naturally from topic to topic, maintaining the fiction of an interesting conversation. The interviewer may start with any of the topics on the agenda and proceed in any order, (Oppenheim, 1992, p70).

In his defence, Oppenheim recognised that each participant should be managed in a way that suits them in order to gain the required outcome. This requires balance and skill that I, as many researchers, found difficult to learn and master as Oppenheim puts so eloquently:

> Depth interviews must, as the saying goes, 'listen with the third ear'. They must note not only what is being said but also what is being omitted; must pick up gaps and hesitations and explore what lies behind them; and must create an atmosphere which is sufficiently uncritical for the respondent to come out with seemingly rational ideas, hatreds or misconceptions, (Oppenheim, 1992, p67)

The decision to have specific structure and format within my interviews was an important issue to me. There are benefits to an unstructured interview as Patton (1990) suggested that informality enables questions to vary and flow from the immediate context and is 'the best means of securing the personal and private concerns of respondents', (Wimpenny and Gass, 2000, p1487). Equally, Bryman suggested that:

> '… rambling is interesting because it may reveal a matter of importance…, in the unstructured interview a phenomenon like rambling can be viewed as providing information because it reveals something about the interviewee's concerns', (Bryman, 1988, p47).

Indeed, as a clinician and researcher I value this perspective greatly. However, given the 'structure and purpose' of this research and given the confines of available time from my participants I felt it necessary to draw guidelines to the interview process which then gave parameters to the process. Careful planning and execution was required to glean the required information. This planning included the use of additional probes to develop conversations, (Howitt and Cramer, 2008). Its structure was derived from the initial literature review to explore the rationale for, and outcomes of, other such courses in other disciplines in-and-out-of health-care. For these reasons, semi-structured interviews were chosen for this research to enable the overarching topic to be investigated in a targeted fashion with specific questions but with the possibility in variation from a strict predetermined sequence, (Kvale and Brinkmann, 2009; Lee, 1999). This provided a framework to discuss previously targeted issues yet be 'open' enough to allow participants the opportunity to engage in open dialogue

to report on their own thoughts and feelings in depth (Holloway, 1997). It also enabled the researcher to probe areas of interest and importance, (Smith and Osborn, 2003). In the main, the interview had a funnel structure (Oppenheim, 1992) meaning a filtering from broad questions becoming progressively more focused to the specific point of interest.

The style of the final set of questions were confirmed by NRES. They fell into the following categories in a funnel structure (Oppenheim, 1992):

1) Introductory statements to ensure informed consent

2) Ice-breaker questions regarding:

- the participant's career to date

- the participant's understanding of the rationale, purpose and format of the accelerated course

- the participant's experience of working with both accelerated graduates and traditionally trained graduates

3) In-depth questions exploring:

- what qualities are demonstrated by either accelerated graduates and/or the traditionally trained graduates?

- whether differences exist between the accelerated graduates and the traditionally trained graduates?

- who might benefit from an accelerated course?

- relevance of the content of the previous degree

- the impact of Masters level training as opposed to Intermediate and Honours level training for an accelerated course

- what the outcomes might be from an accelerated training?

- whether one type of graduate might more easily acclimatise to the new working environment

4) Specific final questions to determine choice or preference:

- 'So how do you feel about the accelerated pre-registration course?'

- 'Given the choice, would you choose to work with a traditional graduate or an accelerated graduate?'

- 'Has this conversation made you think about anything else that you weren't aware of before? Will you do anything differently following this conversation?'

Interview participants

Seven NHS Trusts were approached to participate in the data collection of this study. These were geographically spread across Yorkshire, Humberside and Teesside. Of note six universities provide the traditional pre-registration physiotherapy training in this Region. Three also provide accelerated pre-registration training courses, (Chartered Society of Physiotherapy, 2007a). It was important to this study that the data collection was spread to give opportunity to explore the performance of accelerated graduates from more than one university.

Many clinicians agreed to be interviewed. In all fourteen interviews took place. The clinicians represented the breadth of physiotherapy specialities and rank of seniority. Nine had graduated with BSc (Hons) qualifications in physiotherapy and five had been awarded Level 5 Diplomas (meaning that they had trained prior to 1986). Interviews stopped after the fourteenth because of saturation of data. Saturation occurs when 'new data no longer spark new insights', (Smith, 2003, p107). In a practical perspective it means that data collection stops when 'you reach diminishing returns and you are not adding to what you already have", (Robson, 2002, p192). The term is better known in Grounded Theory. Strauss and Corbin (1998) rightly warn that a researcher must continue to gather data 'until all categories are saturated, [otherwise] the theory will be unevenly developed and lacking density and precision', (Strauss and Corbin, 1998, p212).

Interview transcription

Each interview was recorded using a EDIROL R-09 24 bit WAVE/MP3 digital recorder and then transcribed verbatim by an experienced secretary. I agree with Kvale and Brinkmann (2009) regarding the benefits of a speedy and accurate record of the interview. I appreciate the argument that much can be gained from the researcher undertaking the transcription to become even more immersed in the content but this is not always practical. However, as sole

researcher I have the best of worlds; being present at the recording to gain both the detail and the essence of the conversation but also to have the transcript. This offers a detached sense of the conversation to allow the reader to 'read between the lines' to gain an alternative impression of the conversation. That said, these verbatim transcriptions included a variety of additional pauses, laughs, giggles and sighs to enlighten the reader. Kvale (1996) rightly stated that:

> Transcripts are not copies or representations of some original reality, they are interpretative constructions that are useful tools for given purposes. Transcripts are decontextualised conversations, they are abstractions, as topological maps are abstractions from the original landscape from which they are derived, (Kvale, 1996, p165).

In the transcription there was no attempt to note tone of voice or emotion. However, at times during the conversation I commented on the participant's facial expressions or emotion as an aide memoire to myself and to develop the thread of the conversation further.

Participant validation: pros and cons

Participant verification suggests that tentative results are returned to the participants and refined in light of their reactions, (Silverman, 2000). Perhaps like many researchers I would have liked to have re-visited some aspects of some conversations. Listening back to the conversations and reading the transcripts have highlighted some subtleties and turn-of-phrase that I did not appreciate at the time. It would be interesting to ask why the participants phrased them as they did but I believe that these subtleties are lost in time. The verification of research data has ethical relevance (Kvale and Brinkmann, 2009). Kvale (1996) highlights the social and power relationship between participant and researcher asking who owns the interpretations and meanings constructed within the analysis of the interview. One can ask whether the 'original authors' of the interview, the participants, have a say in the interpretation and the subsequent presentation of their stories. Whilst I appreciate this ethical dilemma the issue of asking participants for their authentication is, to me, unresolved. Kvale and Brinkmann (2009) rightly state that:

> 'to transcribe is to transform, to change from one form to another. Attempts at verbatim interview transcriptions produce hybrids, artificial constructs that may be adequate to neither the lived oral conversation nor the formal style of written texts', (Kvale and Brinkmann, 2009, p178).

As noted, a paper transcription of an interview is a bare representation of the interaction devoid of emotion. To ask the participant to authenticate such interaction after the event can be difficult if it is presented out of context or in a different style than expected, (Langdridge, 2007). It also assumes that the participant feels able to make such honest feedback and to request relevant changes, (Langdridge, 2007). Should a participant later wish to change their record this causes difficulty. One wonders which is the more accurate version, the spontaneous or the considered? By asking for verification, one is forced to choose between the two. I believe that what was said at the time is important because it *has* context. Interpretation has much interest and importance by bringing new perspectives to the phenomena, (Kvale and Brinkmann, 2009). For these reasons I chose against participant verification. Instead, I did my best to probe and paraphrase participants within the actual conversation itself. This enabled each individual the opportunity to confirm or refute my summaries within the context of the conversation, (Kvale and Brinkmann, 2009).

Pilot study: interview

The purpose of the initial pilot study was to evaluate the practicalities of the proposed interview in terms of format, phraseology, technique and duration. Useful lessons were learnt. Whilst the interview was tape-recorded, the introductory explanations were not. At the first pilot interview the participant focused very much upon one element, namely the interpersonal skills of the accelerated graduate. This stilted the conversation somewhat but it was unclear afterwards why this had been the case. Absence of a record of the preamble conversation was regrettable as an opportunity was lost to review the entire conversation. As can often happen once the tape-recorder was switched off a more natural conversation flowed, some of which was pertinent to the study. The subsequent plan of action was to standardise the preamble so that each participant was given identical information prior to the interview to enable informed consent. As one topic had dominated the majority of the first pilot interview questions were re-phrased and re-ordered to enable greater explanation and offer openness of response. Many more prompts were developed to enable the researcher to steer the conversation to new ground, if needed.

Subsequent early interviews remained a learning process. Whilst the interview structure provided a useful 'safety- net' it felt, at times, equally restrictive as on reflection the very early interviews sound less like a conversation but more like a series of questions. Listening back to interview recordings and the subsequent transcription certainly highlighted where further exploratory questions should have been asked thus improving my future technique. Equally, my own use of unnecessary interceptions reduced with each interview encouraging and indeed forcing the participant to speak more.

Analysis of interview data

Interpretative phenomenological analysis seeks to ask 'Do I have a sense of something going on here that maybe the participants are less aware of?', (Smith and Osborn, 2003, p51). The spirit of this statement reinforces, to me, that the interpretation of the meaning of the participants' contributions is an important element of the research. As such the analytical stage is not mere repetition or description of the participants' contributions but idiographic in that it makes specific statements about the participants as individuals, (Howitt and Cramer, 2008; Smith and Osborn, 2003). Conversations allow 'meaning to emerge intersubjectively (between the interviewer and the interviewee)' (Langdridge, 2007, p110). Hence my analysis started within the interview itself and immediately afterwards trying to gain the essence of the conversation.

However, to enable the more formal analytical process the interview tapes were transcribed to Word® documents and verified for accuracy by listening to each interview repeatedly. Each Word® file was then transferred to the NVivo 8® software program to facilitate the organisation and analysis of the qualitative data, (Bazeley, 2007). Such software enables efficient coding and subsequent retrieval of data and is not used to, and cannot, replace the analytical skills of the researcher to identify and develop hypotheses or propositions about the data, (Pope et al., 2000).

The following is a series of steps to facilitate analysis from an IPA perspective as suggested by Howitt and Cramer (2008) and Langdridge (2007) with additions from Smith and Osborn (2003) and Willig (2001):

1. Initial familiarisation with a case and initial comments

2. Initial identification of [major] themes

3. Identify emerging theme titles, (Smith and Osborn (2003, p67)

4. Look for connections between themes [to group them into clusters to form broader themes or superordinate themes by looking at the connections between the original themes]

5. Produce a table of themes

6. Continue with further cases

7. Write up because 'the analysis will be expanded during the writing phase, (Smith and Osborn, 2003).

In this context 'clusters' signify groups of themes (Howitt and Cramer, 2008) that have 'common links' (Langdridge, 2007, p111) and 'formulated meanings' (Crotty, 1996, p22). 'Superordinate theme' subsume these clusters to create over-arching themes, (Langdridge, 2007). The final analyses and superordinate themes will be presented in Chapters Seven and Eight.

Stage Five: Quantitative data collection by questionnaire subsequent analysis

As stated, the purpose of the questionnaire was to further explore, confirm or refute the themes derived from the interviews, (Tashakkori and Teddlie, 2003). The questionnaire was drawn together from the previous literature searches and the subsequent early stage analyses of the interviews' recordings and transcripts. These had developed a range of themes that warranted further exploration. In line with the essence of the interviews the questionnaires required a comparative approach. As such participants' opinions were sought regarding the traditionalist approach that favoured the traditional three-year pre-registration undergraduate training course and a more contemporary view that could appreciate the benefits of a two-year accelerated pre-registration course.

The literature review and preliminary analysis identified the following issues:

- Issues related to training and to successful graduate employment.

- The type of characteristics or traits of the accelerated student and graduate:

    - intelligent, motivated and dedicated, (American Association of Colleges of Nursing, 2005; Kasworm, 2003)

    - medicine and patients better served by mature medical students than school-leavers, (McCrorie, 2002),

    - mature medical graduates 'may be better equipped to deal with the challenges of a medical degree', (Halpenny, 2004, no page).

    - are better prepared for their clinical practice than their Honours degree counterparts, (Warren and Pierson,1994).

- The required skill levels of both accelerated students and accelerated graduates and the attributes of M-level graduates:

    i) Synthesis and integration of the evidence base,

    ii) Critical reasoning and problem-solving skills,

    iii) Innovation within autonomous practice,

    (Chartered Society of Physiotherapy, 2003a; Chartered Society of Physiotherapy, 2003b).

- The academic ability of the Master's level accelerated student and graduate

    - demonstrate a systematic understanding of knowledge, deal with complex issues, 'make informed judgements in the absence of complete data' and show 'originality in the application of knowledge, (Quality Assurance Agency for Higher Education, 2000, no page).

    - comparison of clinical and academic marks showed that accelerated pre-registration students scored 'at least as well as traditional students', (Duke, 2001, p14).

    - accelerated courses are 'too compressed to produce consistent educational value; sacrificing breadth and depth, resulting in learning that is crammed and poorly developed', (Shafer, 1995 cited in Wlodkowski, 2003, p7).

- Perceived threats to the individual, to the university or the profession

- confusion of the award as the accelerated qualification 'belittles the enormous amount of work, knowledge and skills gained by experienced clinicians who achieve a Masters', (Elliott and Philips, 2003a, p20).

- The political agenda that potentially drove the development of the accelerated course
    - to cater for the a 'significant' number of graduates in related disciplines who wish to become physiotherapists, (Chartered Society of Physiotherapy, 2003a),
    - Alternatively, 'to move as many people (paying customers) through a program as quickly as possible, so that more may be recruited into the next cycle' (Brookfield, 2003).

Additional questions for the questionnaire were developed to answer the research questions of this study, namely the perceived advantages or disadvantages of accelerated pre-registration courses to the profession. The first draft therefore produced 23 questions which were balanced to offer 12 statements that supported a traditionalist view and 11 statements that supported a more contemporary view. In terms of layout the questionnaire was designed in three distinct sections.

The first section related to students and their training. It asked respondents to consider how they viewed the attributes of both traditionally trained and accelerated trained cohorts. Such questions related to age and life experience. Questions were purposefully intermingled to offer variety and encourage respondents to consider each question in turn. Hence other non-related questions examined the driving forces behind the development of the accelerated pre-registration courses. The second section related to physiotherapy graduates and their employment. It explored respondents' views regarding accelerated graduates skills and performance in the clinical setting. One question required free text boxes to encourage respondents to describe the attributes of the accelerated graduate as compared to the traditionally trained graduate. The questionnaire ended with a series of questions relating to the respondents' demographics. This was designed to enable correlations such as differing views based upon academic award or clinical speciality. See Appendix 7 for the final version.

Decisions regarding Likert scales

Likert scales relate to the scoring of attitude continuums, (Oppenheim, 1992). It is common for Likert scales to list five options offering two positive statements, two negative statements and a neutral option, (Saunders et al., 2007). Whilst this enables the participant to record a 'not sure' decision it can equally relate to neutrality. This could be described as a 'sit on the fence' option, (Saunders et al., 2007). For this study the Likert scale was deliberately limited to four options, omitting the 'Don't know' or mid-point option. By doing so this required participants to decide a positive or negative options for each question and hence gave a clearer interpretation of the results. Some respondents disliked this and annotated their questionnaire accordingly.

Pilot study: questionnaire

The questionnaire design was re-designed several times following feedback on presentation, style and phraseology to draw comparisons between one type of graduate with the other.
The pilot studies themselves provided invaluable feedback as it transpired that the typical Likert scale statements 'strongly disagree' to 'strongly agree' did not provide the information that I first thought it would as shown in the following example:

8. The knowledge base of the accelerated graduate is greater than the traditional graduate.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

Whilst the phraseology was acceptable it became apparent that such a format would not enable a useful analysis of responses: a 'disagree' response would not inform me whether the respondent thought that the accelerated graduate was the same or worse than the traditional graduate; merely that they disagreed with the statement. This required re-writing of several Likert scales. Final versions therefore phrased questions to compare the traditional graduate with the accelerated graduate often in that order to enable the respondent the opportunity to offer a more valued judgement:

8. To what extent does the clinical knowledge of the traditional graduate compare with the accelerated graduate.

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

The questionnaire design and implementation proved a steep learning curve to me.

Study Respondents in Stage Five

The method by which interview participants were recruited was discussed on p90-91. The same physiotherapy managers from the seven participating NHS Trusts were approached again to identify as large a sample as possible that fulfilled the inclusion and exclusion criteria presented on p91. Whilst the distribution of questionnaires in Stage Five took place many months after the interviews in Stage Four it was still unknown how large the sample would likely to be. It was intended to seek volunteers and then send paper copies of the questionnaire to enable a count. However, some staff requested electronic copies to aid the recruitment process. It is envisaged that around one hundred questionnaires were distributed which yielded a 50% success rate. Anonymised details of the questionnaire respondents are presented in Chapter Seven on p120.

Analysis of the questionnaire data

Data from the questionnaires were entered into the 'PASW Statistics 17.0' software package for statistical analysis. Descriptive and inferential statistical tests were used to examine respondents' attitudes towards the accelerated courses in relation to those themes that arose from the qualitative data analysis. Likert scales with numerical values from 1 to 4 or 1 to 5 were used to indicate the degree of respondents' agreement or disagreement with specific statements, (Polit and Hungler, 1999, Oppenheim, 1992). Consistency was required in the phraseology of questions however a balance of statements were provided that enabled respondents the option of offering positive or negative attitudes to statements relating to either course. This meant that not all questions provided high marks for positive attitudes or low marks for negative attitudes. In the analysis stage the scoring system of some questions had to be reversed to identify strength of opinion, (Oppenheim, 1992).

The results will be presented alongside findings from the interview in Chapter Seven and Eight.

CHAPTER SIX: RESULTS FROM STAGE THREE
Assessment of the clinical performance of accelerated physiotherapy students

Introduction

To successfully complete their pre-registration physiotherapy studies students are required to undertake and pass formal assessments of their clinical competence, (Health Professions Council, 2007). The Chartered Society of Physiotherapy dictates that such students should successfully complete 1,000 hours of clinically-based experience during their course, (Chartered Society of Physiotherapy, 2002b). Universities negotiate with clinical managers to provide this essential work-based experience across the breadth of physiotherapy specialities and in a variety of health-care settings. Whilst the student is on their clinical placement the assessment of their clinical performance is undertaken by their named Clinical Educator, being a qualified member of clinical staff in that setting.

As a separate, but important element of the overall study, the summative marks of students' clinical placement experience were examined to determine if any differences occurred between accelerated and traditionally trained groups. Whilst students are assessed in six different categories the final mark is a calculation of all six. With ethical approval, consecutive cohorts of both accelerated and traditionally-trained physiotherapy students were compared retrospectively across two local universities. At the time of the data collection these cohorts were of the academic years 2004-2007.

Results of summative marks

The sample included all students from Years 2 and 3 of the traditional (BSc Honours) course and Years 1 and 2 of the accelerated course from two universities. All student profiles were investigated except for the summative marks from Foundation level [Year 1] placements of the traditional BSc (Hons) Physiotherapy course. These were not considered from either university as there was no comparable placement for the accelerated courses. It was noted that all four courses suffered some attrition rate. These were not, however, recorded as part of this study. As students from both courses from both universities were required to undertake three clinical placements per academic year their summative marks were collated for a total of six placements per student. The sample size is shown in Table 1 broken down by type of course.

Table 1: sample numbers from which to measure students' clinical performance

	Number of students	Potential number of sets of marks from the 6 clinical placements	Percent of total
Traditional BSc (Hons) courses	187	1122	75.7
Accelerated courses	60	360	24.3
Total	247	1482	100

Average marks per course

The average marks per course across all 6 placements are presented in Figure 3 as histograms.
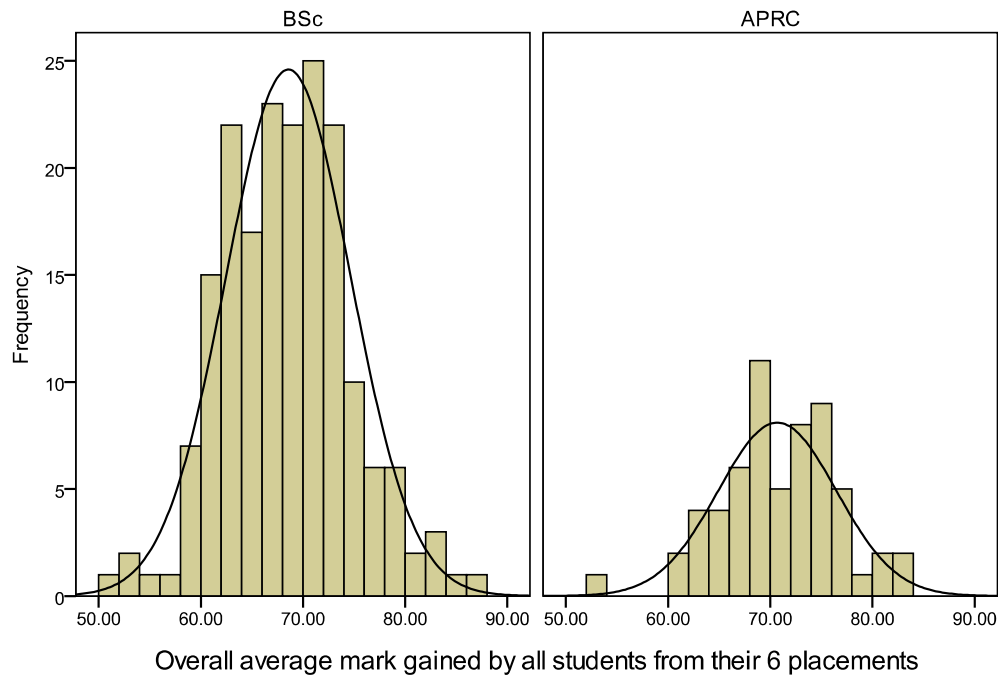
Figure 3: Histograms indicating the frequency of the overall clinical marks for students of the traditional BSc (Hons) physiotherapy courses from both universities and for the accelerated physiotherapy courses from both universities

Visually an approximate normal distribution appears to exist within both cohorts. There was no evidence of extreme outliers in either set of data. However more marks appeared in the 50-60% range and the 80-90% range for the traditionally trained students. The data could be considered to be normal by the principle of robustness, (Armitage et al., 2002). It is usual to accept a 5% for the p-value to assess significance this applies to single tests, (Armitage et al., 2002). Whilst an approximate normal distribution was anticipated a Shapiro-Wilk test confirmed that there was no evidence that the distributions were non-normal, as the p-value in each case, exceeded 0.05 as shown in Table 2 overleaf.

Table 2: Shapiro-Wilk test of normality: Average of 6 placements

Course	Statistic	df (degrees of freedom)	p-value
Traditional BSc (Hons) courses	.994	187	0.627
Accelerated courses	.980	60	0.448

An alternative method of demonstrating the average clinical marks per course is shown in the box and whisker plots in Figure 4.
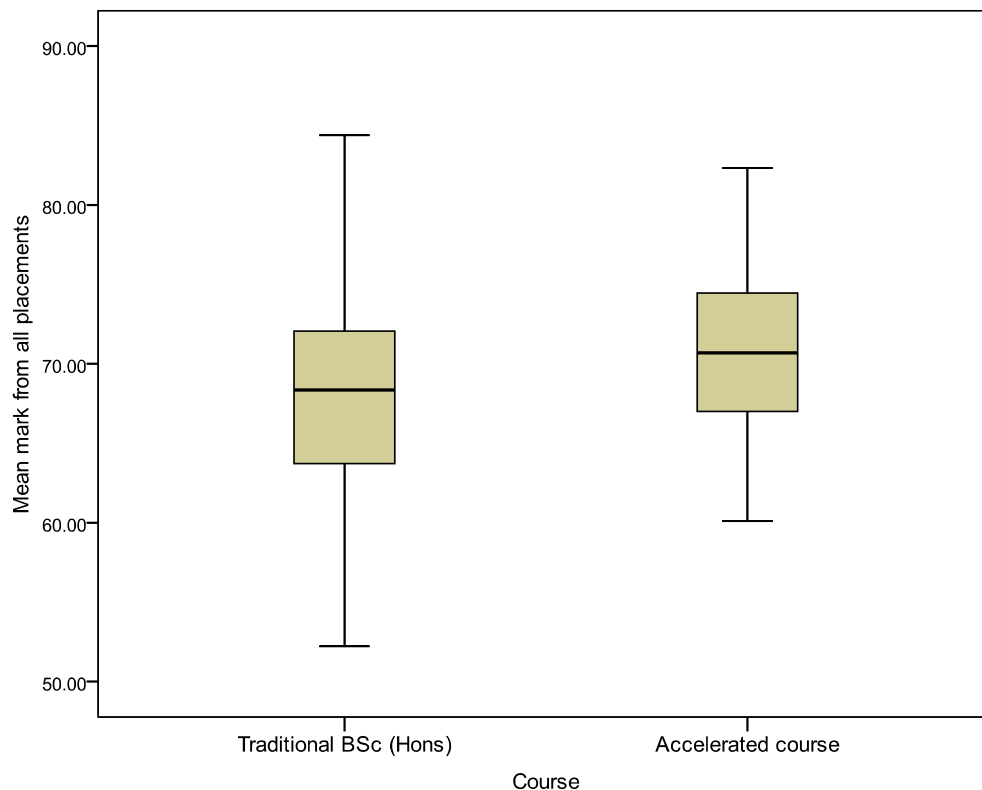
Figure 4: Comparison of the overall average marks from all 6 categories gained by traditional students compared to accelerated student from their 6 student placements

An overall difference was seen between the clinical performance of the accelerated pre-registration students over that of the traditionally trained students however the mean marks appeared close. The interquartile range of the accelerated courses appears more narrowed than those of the traditional courses.

Student performance with each progressive placement

The overall marks for all cohorts were also evaluated to gauge whether marks changed from placement to placement. This is shown in Table 3.

Table 3: Range of the clinical marks per placement for all students (regardless of cohort)

	Placement 1	Placement 2	Placement 3	Placement 4	Placement 5	Placement 6
Number of students' marks	243	245	232	243	245	240
Number of missing marks	4	2	15	4	2	7
Mean mark per placement	65.51	68.47	68.05	70.36	70.33	71.73
Minimum mark	15.83	21.83	43.83	39.17	40.00	48.67
Maximum mark	97.50	98.00	94.17	97.17	98.00	97.00

Graphically the box plots within Figure 5 highlight the extent of high ranging marks. It shows that for all placements at least 75% of all students gained a mark of 60% or greater.
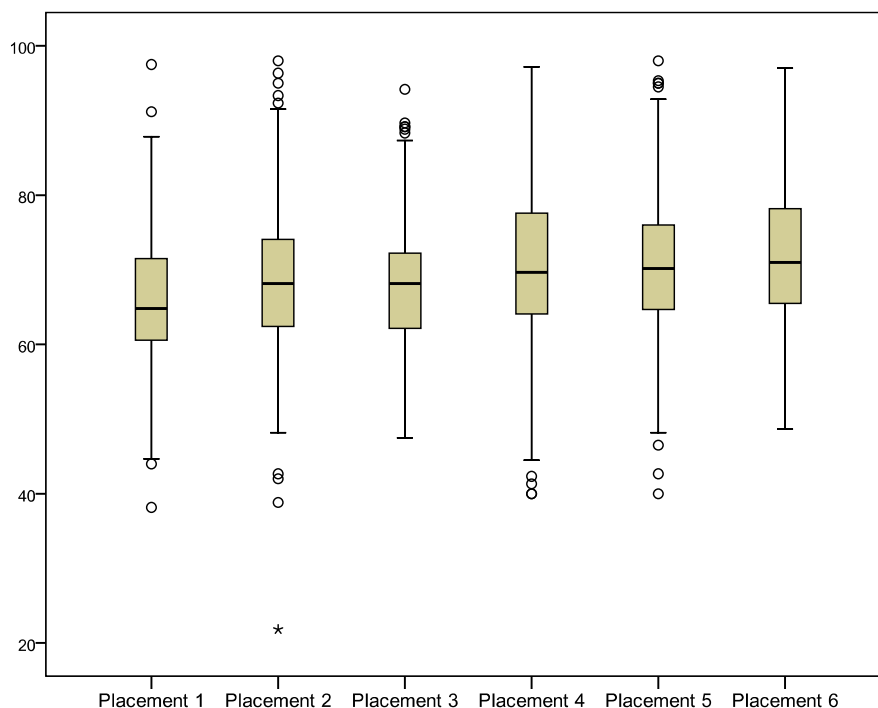
Figure 5: Box plot indicating the clinical marks per placement for all students (regardless of cohort)

The box plot of Figure 4 also indicated a slight progression of marks from the 4th, 5th and 6th placements for both sets of cohort in comparison to the 1st, 2nd and 3rd. This is suggestive that greater experience resulted in greater summative marks for both sets of cohorts.

Student performance per category

The first three categories within the students' standardised assessment documentation considered their clinical skill involved in i) patient assessment, ii) patient management and iii) clinical reasoning. It seems likely that at the beginning of their studies all students of both cohorts would be clinical novices. The last three categories relate to iv) evaluation and reflection, v) organisation and planning and vi) collaboration and teamwork. It could be argued that the accelerated students might introduce transferable skills from an academic background and previous life-skills into the workplace. Within each of these categories

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statistical analysis was undertaken to determine if the accelerated student performed better than the traditional undergraduate. Results are shown in Table 4 and graphically in Figure 6.

Table 4: List of the clinical marks per category per cohort

	Assessment	Reasoning	Management	Evaluation	Organisation	Teamwork	Mean mark
Mean mark from the Traditional BSc (Hons) courses	66.9	66.1	68.4	68.7	70.2	70.1	68.40
Mean mark from the Accelerated courses	69.1	68.5	70.8	71.7	72.1	72.8	70.84
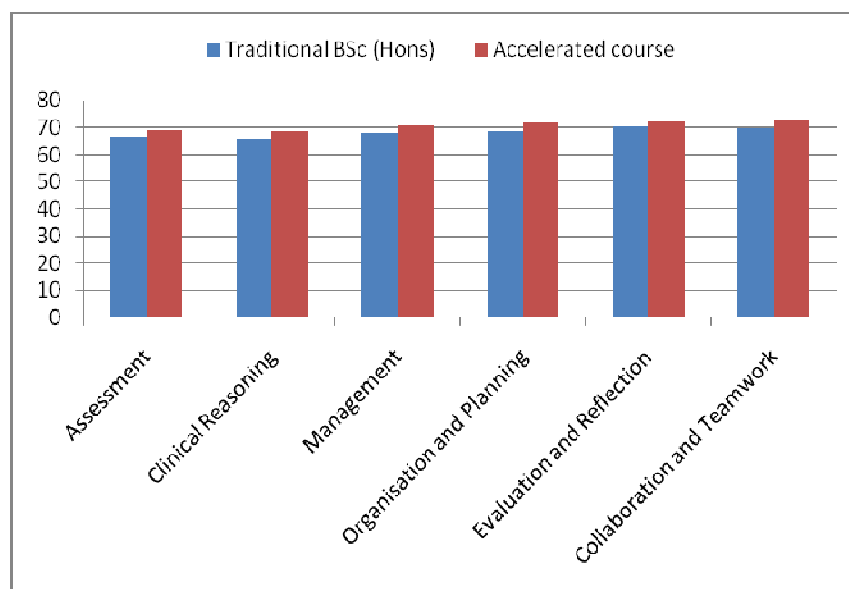
Figure 6: Bar chart indicating the mean clinical marks per category per cohort

It transpired that the accelerated pre-registration students outperformed their traditional counterparts in each of their assessed categories. Having confirmed the likelihood of a normal distribution of data independent samples t-tests were then performed. This was to determine if the overall average of the accelerated physiotherapy students' clinical performance was notably higher than that of their traditional counterparts. These are shown in Tables 5.

Table 5: Independent Samples test of all 6 categories

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value.	p-value	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	0.268	0.61	0.007	-2.44	-4.22	-0.66

Levene's test determines whether there is a significant difference in the distribution of scores between the two groups, (Robson, 2002). It may be seen from Table 5 that there is no evidence for a difference in the distributions of scores in either group. Given the null hypothesis that both groups have equal variance, the probability of the given result for a more extreme result is 61%. The t-test indicated that, on average, a significant difference of 2.4 was noted between the clinical marks of students of the accelerated two-year course (n=60) compared with the three-year traditional course (n=187).

The following tables present this data for each of the six categories upon which the physiotherapy students were assessed and rated whilst on their clinical placements during their training. These categories relate to 'Patient Assessment', 'Clinical Reasoning', 'Patient Management', 'Evaluation and Reflection', 'Organisation and Planning' and 'Collaboration and Teamwork'. The tables below suggest that the students' marks differed in three of the six categories depending on their type of training course. However, as the independent samples t-test was undertaken 6 times the critical p-value was adapted using the Bonferroni correction, (Armitage et al., 2002). Hence the usual critical p-value of 5% was divided by the number of tests (n=6) to produce a new critical p-value of 0.0083.

Table 6: Independent Samples t-test for 'Patient Assessment'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	.453	.502	.014	-2.22	-4.59	.155

Because p=0.014 is greater than 0.0083 in Table 6 this indicates that the students' marks for their skills involved in 'Patient Assessment' showed little difference between student's performances from either course because of the reduced critical value.

Table 7: Independent Samples t-test for 'Clinical Reasoning'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	0.439	0.508	0.012	-2.39	-4.91	0.12

Equally, because p=0.012 is greater than 0.0083 in Table 7 indicated little difference between students of either course in their 'Clinical Reasoning' section.

Table 8: Independent Samples t-test for 'Management'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	0.029	0.86	0.007	-2.44	-4.80	-0.07

However, the p-value in Table 8 of 0.007 indicated a difference between the two courses. The negative result in the 'Mean Difference' section indicating that, overall in this section, students from the accelerated courses performed slightly better.

Table 9: Independent Samples t-test for 'Evaluation and Reflection'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	0.053	0.82	0.003	-3.02	-5.69	-0.36

Equally, the p-value in Table 9 of 0.003 indicated that students from the accelerated courses performed slightly better in the 'Evaluation and Reflection' section.

Table 10: Independent Samples t-test for 'Organisation and Planning'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	0.001	0.98	0.05	-1.95	-4.59	0.69

The p-value in Table 10 was the only one from the six categories to equal 0.05. It reflects no differences between students' performances from either course because of the reduced critical value. This is confirmed as the Upper score nearly equalled zero.

Table 11: Independent Samples t-test for 'Collaboration and Teamwork'

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	p-value	p-value	Mean Difference	99.17% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	1.024	0.31	0.007	-2.61	-5.15	-0.06

Lastly, the p-value in Table 11 of 0.007, again, indicated a difference between the two courses in that students from the accelerated courses performed slightly better in the 'Collaboration and Teamwork' section.

Discussion

Findings from Stage Three

The importance of clinical experience is supported in the literature which suggests students of second-degree nursing programs often request more clinical experiences, (Cangelosi,2007). According to Cangelosi (2007) this may be because such students often join the training programme with no prior clinical experience. Accelerated physiotherapy students must undertake clinical placements within months of the start of their training and be expected to demonstrate the skills of a safe novice practitioner.

Results from Stage Three indicate that accelerated pre-registration physiotherapy students performed well in the clinical environment by gaining higher marks across the six assessment categories than their traditional counterparts. This rejects the null hypothesis. Indeed the last three placements gained them even higher marks. This is in contrast to claims that the accelerated course is:

> too compressed to produce consistent educational value. [Conventional academics] perceive these courses as sacrificing breadth and depth, resulting in learning that is crammed and poorly developed, (Shafer 1995 cited in Wlodkowski, 2003, p7)

In her qualitative study of second-degree nursing students in the USA Cangelosi (2007) offers a different concern. Whilst acknowledging the abilities and confidence in academic work Cangelosi found that accelerated students need care and support to overcome feelings of inadequacy in the clinical environment. This is to be expected as the vast majority of these students will have limited relevant clinical experience in their initial clinical placements. One would suspect that all students, regardless of training route, would still be developing their basic competences and would also require guidance and lack discretionary judgement, (Miller et al., 1999; Benner, 1984). Within this analysis it appeared that the performance of the physiotherapy accelerated students suggested no such inadequacy. Indeed, other literature suggests that the characteristics and attributes of accelerated students to be very different from the traditionally trained student:

> The typical second-degree nursing student is motivated, older, and has higher academic expectations than traditional entry-level nursing students. Accelerated

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students excel in class and are eager to gain clinical experiences. Faculty find them to be excellent learners who are not afraid to challenge their instructors, (American Association of Colleges of Nursing, 2009).

Of note, the accelerated students out-performed the traditional student in all categories, three of them significantly. This is of interest given that they have had less time to develop and consolidate such skills at the equivalent stage of their training, i.e. missing the Foundation/ Level 1 academic year. They had, however, studied a previous Honours degree.

The benefit of clinically-based experience is that it is contextual. Indeed, Gourgey (1998) cited several authors who argued that it is the relation of subject material to real-world behaviours that enable a deeper learning and understanding and the transfer of knowledge. The assumption is that content itself will drive the students desire to become effective learners. If questioning is an advanced principle directed towards higher-order thinking, as confirmed by the Quality Assurance Agency for Higher Education (2000), questions generated by the students themselves promote active thinking and learning compared to those generated by the teachers, themselves, (Gourgey, 1998).

This questions whether accelerated students utilise their skills that have been previously gained and/or newly developed. One suggestion is that such clinical success might be due to the varied academic skills of the M-level student. The concept of metacognition is important when understanding how accelerated courses might work. Schraw (1998) suggested that students can regulate their cognition with a set of activities that can control their learning and improve their performance. Firstly, planning involves selection of appropriate strategies and allocation of resources that affect performance; then monitoring refers to periodic self-testing while learning to enable awareness of comprehension and task performance. Thirdly, evaluation relates to the appraisal of the efficiency and outcome of one's learning including re-evaluating one's goals and conclusions.

Other reasons that might explain higher clinical marks amongst accelerated students include problem-solving and the learning of skills. Mayer (1998, p49) differentiated between 'retention tests', meaning the use of cognitive skills in similar situations, and 'transfer tests', meaning

the use of cognitive skills in differing situations. This has a resonance with vocational pre-registration training. According to Mayer (1998) the problem-solver has domain-specific knowledge as well as the knowledge of what to do, when to do it and how to monitor it. These are best learnt within the context of realistic problem-solving situations which seem ideal for the pre-registration health-care student. Mayer (1998) also cited several studies relating to 'interest theory' suggesting that students 'think harder and process the material more deeply when they are interested rather than uninterested'. There is an assumption here that adult learners are more motivated than traditional school-leaver students when studying vocational courses. This assumption is explored in the qualitative interviews with clinical staff in Stage Four. Alternatively, the accelerated student might use their transferable life skills to fit into the working environment more adeptly than the traditionally trained. This has resonance with communities of practice, (Wenger, 1998a). The question is whether the accelerated student learns the workings of their new team quicker and so ingratiate themselves into the new working environment more quickly or more successfully than the traditionally trained students. According to Miller et al. (1999) the clinical novice only wish to develop their own competencies. They suggested that whilst clinical novices focus on 'making sense of their professional identity, they have little interest in other professions'. Whether or not the accelerated student seeks a wider perspective is also explored in Stage Four. The complexity of participating in communities of practice is important as such clinical placements in these physiotherapy courses are only of five weeks' duration each. This gives little time for a newcomer to learn the ropes. These issues were also considered in interviews in Stage Four.

Limitations of Stage Three

The limitations of the study should be considered. It should be noted that the format of the courses differed between the two universities as the accelerated course of one university utilised a problem-based learning approach whilst the other offered a more didactic method. Both universities provided a similar format of three placements of similar duration per academic year. However, the timetabling of these clinical placements differed. The BSc (Hons) degree at University 1 provided three clinical placements towards the end of one academic year and two close to the beginning of the next making five within a twelve month

period. Its accelerated course also offered three clinical placements per academic year but with all six taking place in a single calendar year. In contrast the clinical placements for both the BSc (Hons) degree and the accelerated course at University 2 were more spaced out across two calendar years.

It is not within the scope of this study to debate problem-based learning versus didactic teaching and learning methods. Whether or not this relates to educational theory or timing of clinical placements this remains an important consideration and is worthy of future study.

Summary

Stage Three of the research took place at an important time. The accelerated courses in question were in their infancy. As a quantitative study this survey provided useful results that informed the respective teaching teams. At the time I considered Stage Three to be a 'stand-alone' and independent study. For me as a researcher it provided a useful opportunity to study and achieve an element that would address the overall research aim. By doing so at the time it gave me confidence yet I did not wholly appreciate the extent to which these results would enhance the overall research process. According to Yardley (2000, p220) quantitative studies produce 'horizontal generalisation' of their findings. Qualitative research, on the other hand, aspires to theory-building work of 'vertical generalisation'. The analysis of Stage Three results determined that accelerated students perform better than their traditionally trained counterparts. Given the lack of research relating to physiotherapy APRCs, these findings corroborate findings from nursing literature that pre-registration accelerated nursing students synthesise knowledge and skills effectively and quickly and so enable studies in a shorter-timeframe, (Duke, 2001; Pepa et al. 1997). The results from this study suggest the same.

This study also raised important questions that deserved exploration and inspired me to pursue these potential explanations:

- Does the accelerated graduate maintain their momentum? Do they perform better than the traditionally trained graduate?

- How does an individual from an accelerated course achieve their high standards of performance?

These questions were explored further in the additional data collection in the interviews in Stage 4 and the questionnaires in Stage 5 and reported in Chapters Seven and Eight.

CHAPTER SEVEN: FINDINGS AND RELATED DISCUSSION FROM STAGES FOUR AND FIVE

Introduction

This chapter relates to findings and related discussion from conversations with interview participants and from questionnaire results. As discussed in Chapter Four on p76 this research incorporated a mixed methods approach meaning:

> 'the combination of the results of two or more rigorous studies conducted to provide a more comprehensive picture of the results than either study could do alone', (Tashakkori and Teddlie, 2003, p190)

It enables a researcher to simultaneously answer exploratory and confirmatory questions in the same study in the hope to generate and support theory, (Tashakkori and Teddlie, 2003). Within the next two chapters greater emphasis will be placed upon the detailed analytical findings from the interviews in Stage Four. As will be discussed in this and subsequent chapters the questionnaire results from Stage Five did not provide the breadth of responses expected. However, where able the informative findings from these questionnaires will be combined with relevant findings from interviews in Stage Four for depth and breadth of discussion.

Interpretative Phenomenological Analysis (IPA) was used to explore the texts from semi-structured interviews with senior physiotherapy clinicians in Stage Four. As the name suggests IPA is a version of the phenomenological method that recognises that it is the researcher's interpretation of what is said and what arises in the analysis (Willig, 2001).

Presentation of findings

Two superordinate themes are presented and reflected upon in this and the next chapter Superordinate themes are over-arching themes which, themselves, are 'clusters of concepts

that share meanings or references', (Willig, 2001, p55) that developed from the data analysis (Langdridge, 2007; Smith, 2003).

The findings are presented in sub-sections which are shown in progressive schematic diagrams that build with each additional theme. These are also shown in the summaries of Chapter Seven and Chapter Eight. The full list of themes is presented in Appendix 11. Within these next two chapters notable themes from the analysis are purposely presented in such a way to show my incremental appreciation and interpretation of clinicians' points of view. They are also presented with a sense of chronology; how clinicians view those wishing to train as physiotherapists via the accelerated route; clinicians' understanding of the accelerated pre-registration training courses; and clinicians' experiences of working alongside such students and graduates. Whilst logical in its presentation this format offers less opportunity to represent which themes have had greater impact upon my analysis and understanding of the accelerated pre-registration course. However, these will be presented in such a fashion in Chapter Nine, being the final discussion and reflection chapter, having first presented what I believe to be a balanced view of clinicians' responses.

The themes arose from the interview conversations that explored the participants' perceptions relating to:

- their understanding of the rationale for the newer accelerated pre-registration courses and

- the format and delivery of the accelerated course in comparison to the traditionally delivered course,

- the qualities of a physiotherapy graduate and how and where such qualities are developed

and

- the perceived differences in such qualities that might exist between the two cohorts

and finally

- the skill base of the accelerated graduate and

- how the accelerated graduates achieved that skill base.

These conversations were necessary to address the overall research questions: specifically to explore the participants' perceptions of the accelerated pre-registration course, to investigate the clinical performance of those cohorts and, in doing so, to so explore the implications for physiotherapy education and practice. The full list of themes and development of superordinate themes can be seen in Appendix 11. The resultant two superordinate themes consider how the participants perceived the characteristics and performance of the accelerated graduates.

Clinical interview participants and questionnaire respondents

The purposive sampling for the interviews and questionnaires proved successful in that the clinicians that took part represented a breadth of clinical physiotherapy backgrounds within hospital settings in Acute NHS Trusts. Fourteen senior clinicians took part in the interviews and fifty-one senior clinicians responded to the questionnaire. Their demographic information is presented in this section. This is not to suggest or prove any generalisability beyond this purposive sample nor that the samples from the interviews and questionnaires were similar. This was an idiographic study being derived from the examination of individuals. All that is possible is to make specific statements about these individuals, (Howitt and Cramer 2008; Smith and Osborn, 2003). Hence, the following simply demonstrates that the clinicians that were involved had a variety of clinical skills and experiences.

As required in the Inclusion Criteria the purposive sample of clinicians all had senior posts as shown in Figure 7 and Figure 8 overleaf.
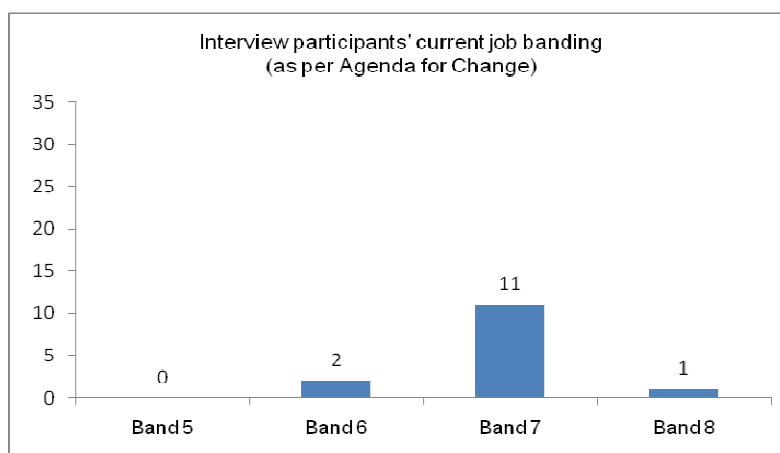
Figure 7: Bar chart indicating the interview participants' current job Bands [rank] as per Agenda for Change
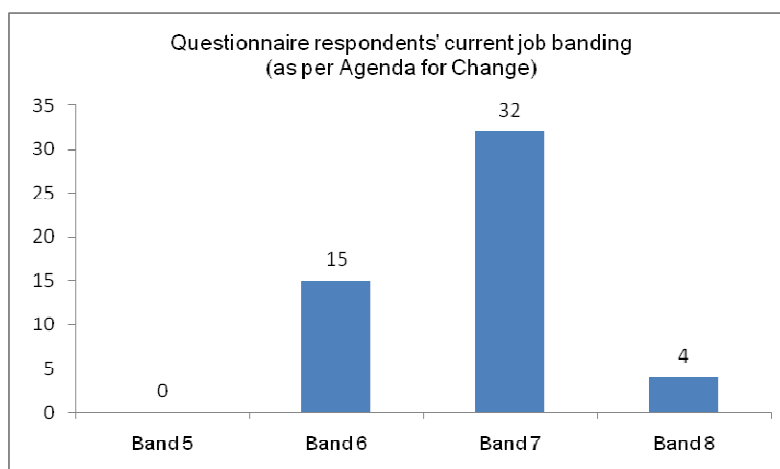
Figure 8: Bar chart indicating the questionnaire respondents' current job Bands [rank] as per Agenda for Change

From the interviews eleven participants had Band 7 posts indicating seniority within their physiotherapy team. One was the higher Band 8A being a Team Leader and two were Band 6 physiotherapists suggesting a developing level of senior experience, (NHS Employers, 2009). A similar range and proportion of seniority occurred amongst the questionnaire respondents as seen in Figure 7.

Of the many and varied specialities within physiotherapy the common areas of expertise relate to the neuromuscular system (relating to the brain and nervous system), the musculoskeletal system (relating to soft tissues, bones and joints) and the cardiovascular and

respiratory systems, (Chartered Society of Physiotherapy, 2010b). These common specialities, and others, were represented by clinicians from both the interview and the questionnaires as demonstrated in Figures 9 and 10.
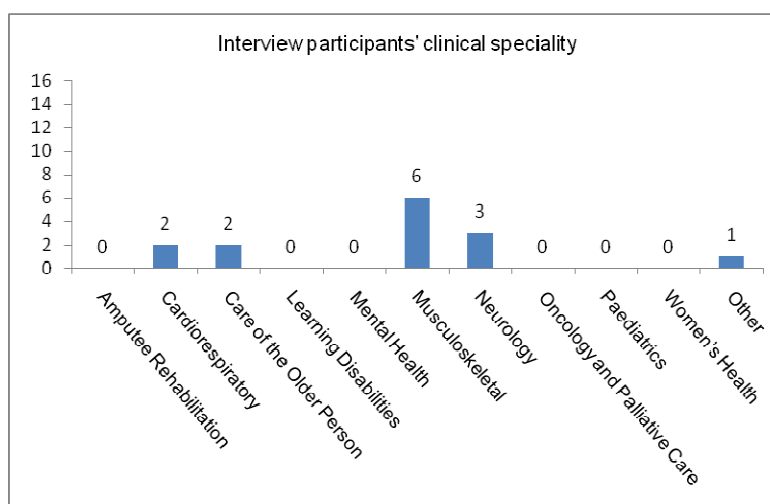
Figure 9: Bar chart indicating the range of interview participants' clinical specialities
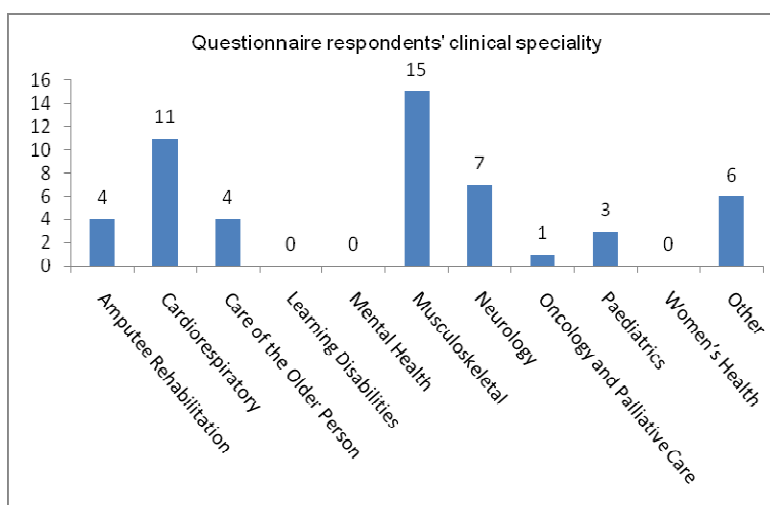
Figure 10: Bar chart indicating the range of questionnaire respondents' clinical specialities

All interview participants had trained via the traditional route with a minimum of three years of training as shown in Figure 11. Nine of these clinicians had graduated with university-based Level 6 BSc (Hons) Physiotherapy qualifications from circa 1983 onwards. The remaining five

had qualified earlier from the previous hospital-based systems with Level 5 Diplomas as shown in Figure 11.
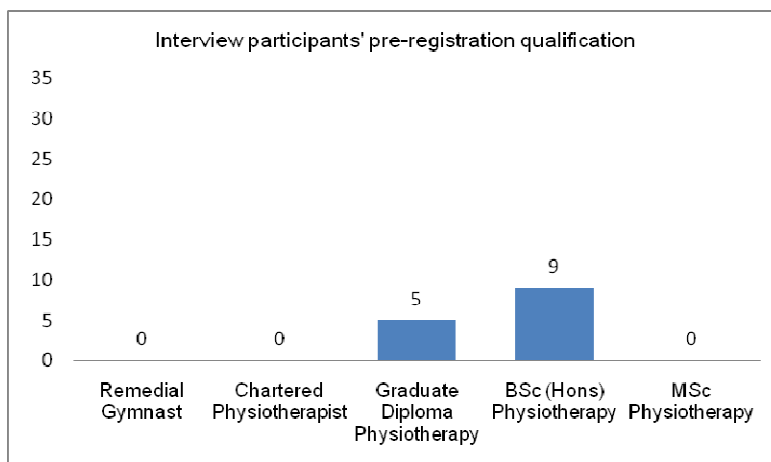
Figure 11: Bar chart indicating the various interview participants' awards when they qualified as physiotherapists.
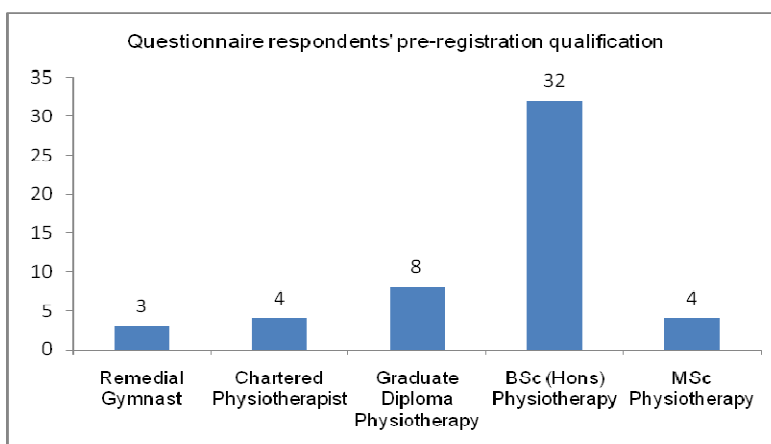
Figure 12: Bar chart indicating the various questionnaire respondents' awards when they qualified as physiotherapists.

The questionnaire respondents represented a broader academic background as shown in Figure 12. Fifteen clinicians had qualified as Remedial Gymnasts, Chartered Physiotherapists and Graduate Diplomates in Physiotherapy being Level 5 awards of higher education. Figures 13 and 14 confirm the length of their postgraduate clinical experience.
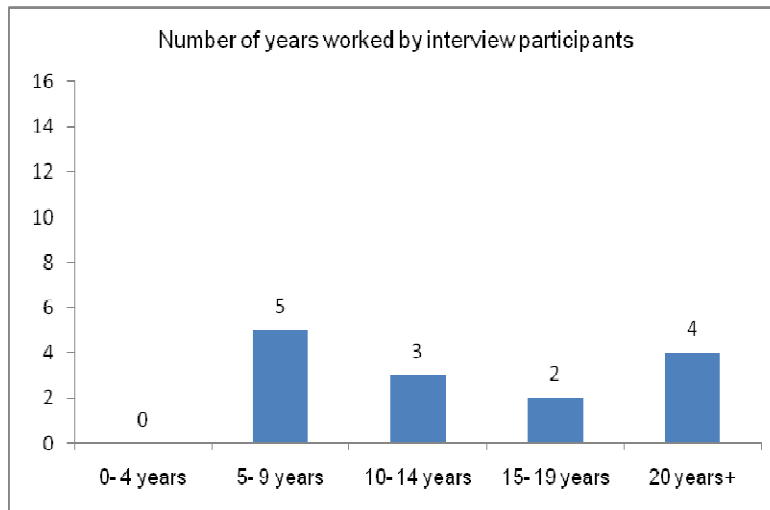
Figure 13: Bar chart indicating the number of years of clinical experience of the interview participants'
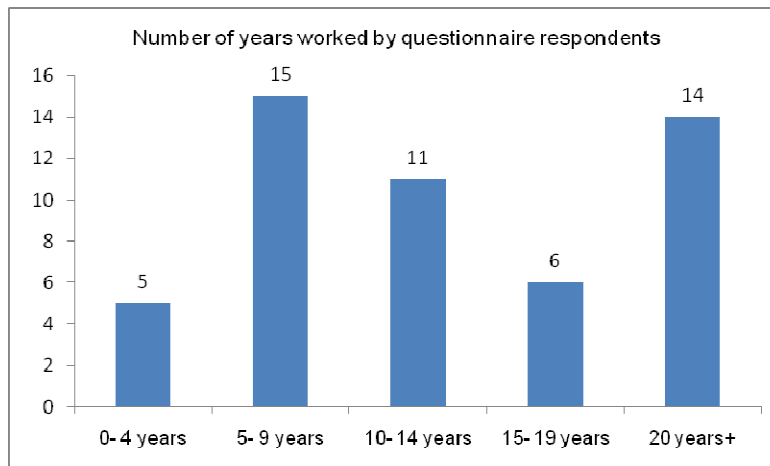
Figure 14: Bar chart indicating the number of years of clinical experience of the questionnaire respondents'

Much emphasis will be placed upon the analysis of findings from the interviews. Of the fourteen interview participants eleven were female (81%) and three were male (19%). This reflects the 79% proportion of females to males that occurs in the current population of all qualified physiotherapy staff (Clews, 2010). For this reason and to ensure participant anonymity in the subsequent chapters of this thesis all clinicians will be referred to using the female gender.

Superordinate theme: Perceptions of success

'Super-human' attributes

Super-human

Many participants described the accelerated graduates in positive terms in relation to their personalities and characteristics. The term 'super-human' was developed in response to the way in which participants viewed the accelerated graduates' ability to study what they considered to be an intense and in-depth course. It became a central tenet to this superordinate theme as the analysis showed that it encompassed many differing elements of these graduates' characteristics and attributes. The term 'super-human' appeared to be said in awe and could therefore be taken as a compliment. When asked to describe the accelerated graduates one participant described them as 'a different calibre to a lot of people' who were 'super people [laughs]'. Another described them as 'super-intelligent... [in the shortened] timescale to learn everything that you need to learn and learn how to apply it', (Participant 2: line 119-121). This suggests some connection between the super-human skills and the time to complete the shortened pre-registration course. The description of super-human abilities appeared to arise from the participants' beliefs that it would need to take a considerable intellectual ability with an ability 'to motive themselves [erm], and be flexible about how they can approach learning' (Participant 7: line 715-722). Together with a high level of motivation 'to take in the amount of information that they have to take in the time that they've got' (Participant 1: line 677-678), be able to learn, comprehend, assimilate and implement all that they considered was necessary to learn to gain the qualification for the licence to practice in the two-year course. This was supported by Bernadette Waters, Senior Lecturer in occupational therapy, who stated that for an accelerated course to be successful 'it would require a special student with enormous capacity for hard work, intellectual rigour and speed of ingestion' (Waters, 2000, p501). Of note it directly contrasts the focus group findings from Halkett and McLafferty (2006, p164) whose students nurses perceived their accelerated student counterparts as 'cheating' or 'getting an easy ride'. Equally, the analogy

with the fast food retailer creating the 'McDonalds of higher education' is also rebuffed, (Traub, 1997, p121). Instead, Participant 12 also believed that they 'must be exceptional people to be able to go away and actually be that … focused to do that, (Participant 12: line 649-652).

Very many participants spoke openly of how they viewed the difficulty and complexity of the new course:

> they get the two years and it's hard work for them, you know, and they've come through it, they've done the placements, you know, it's not an easy course by any stretch of the imagination, they have to work very very hard and you see that every time that you see them coming in as students so, you know, if they have managed to get through the course and actually have completed then, you know, they must have had, must have some skills that makes them prepared to come into the work place,
> (Participant 12: line 472-481).

Yet participants only rarely commented on the accelerated graduates' intellect or academic abilities as being 'exceptional' (Participant 12: line 650). More often they complimented them on their high levels of self-motivation, communication skills and organisational prowess.

Within interpretative phenomenological analysis the researcher must have a reflexive role as a validation in the interpretation of their participant's perceptions and experiences (Coolican, 2004) and hence the possibility of irony should be considered. Hence, the term super-human could be some slur or could reveal a lack of understanding of the nature of the accelerated course and its provision. Perhaps there was no compliment. However, despite this reflection there was nothing in the data to suggest some 'tongue-in-cheek' comparison to super-people. Some participants did have concerns as will be explored later but the majority remained complimentary.

From this over-riding description the participants offered several specific characteristics and traits by which to describe the accelerated student and graduate. To be successful in their goal to be physiotherapists I was told that these individuals needed, and had, positive qualities such as: commitment, focus and direction, 'get-up-and-go' and an ability to 'knuckle down', an independent learning style, self-awareness, self-confidence, initiative and

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leadership skills. These attributes added to the participants' sense of acceptance of the newer accelerated courses as they believed these graduates' skills had benefited the workforce. They will be considered in turn.

Focus and direction
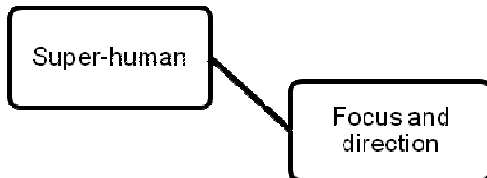
UK pre-registration physiotherapy training courses have, historically, been well over-subscribed and difficult to gain entry to and complex to study (Burnett, 2008). It is not uncommon that some traditionally trained graduates have long aspired to become physiotherapists from their early teenage years. However some interview participants were more likely to believe that the accelerated graduates had made a conscious and adult decision to change pathway away from the nature of their first degree towards a health-care profession. This life-changing and calculated decision seemed to be seen more positively than teenage aspiration. Indeed, some participants suggested that the accelerated group showed an additional sense of ambition:

> the sort of person that takes on the Masters is somebody that's had to sort of really sit down and think, 'this is where I would like to see myself and this is what I need to achieve to get it', more so than perhaps a BSc that's come straight from school and just thought ' I'd like to be a physio', erm,
> I, I would just imagine that the MSc students have possibly put more, possibly put more thought into the reason that they're going into the course in the first place,
> (Participant 9: line 418-430).

This sense of ambition was supported by Harriet Feldman, Dean of the Lienhard School of Nursing at Pace University who considers her accelerated students to be 'sophisticated consumers of higher education' who want to reach their career objective 'as quickly and efficiently as possible' (American Association of Colleges of Nursing, 2005). As such most participants believed that:

if you're an accelerated graduate you've probably thought long and hard about whether you actually want to go back and spend two more years studying, (Participant 6: line 621-624).

This 'long and hard' consideration is also reflected in the literature. Such potential applicants are said to face difficult issues related to additional study as accelerated courses are considered to be highly demanding, intense studies (Rushforth, 2004). They are said to face alternative domestic pressures to the traditional school leaver and with little additional time for paid work during the course (Rushforth, 2004). Indeed, financial implications are significant as these second-degree students face additional years of study and associated costs (Halpenny, 2004). Whilst these additional pressures are genuine one could argue that this reasoned consideration later in life belittles those traditionally trained graduates who successfully implemented their own life-plan from teenage years showing their own determination (Burnett, 2008). However none of the participants spoke of this. Instead they preferred to highlight what they saw as the positives of the accelerated graduate. Indeed, one participant described the accelerated graduates as having a certain 'mindset' as a career choice:

so their whole mindset is ' I'm here to do this' as opposed to [a traditionally trained student] that might be 'I want to do physio but I also want to be a student', (Participant 7: line 584-589).

According to the Oxford English Dictionary a mind-set is:

an established set of attitudes; esp. regarded as typical of a particular group's social or cultural values; the outlook, philosophy, or valued of a person; (now also more generally) frame of mind, attitude, disposition
(Oxford University Press, 2009, no page).

In the context of this analysis the term mindset suggests a frame of mind with a sense of determination as the participants described them as having 'made their decision' they therefore had 'more drive'. This was in contrast to the many participants who considered the traditionally trained students and graduates to be much more passive in their attitude and approach in very many aspects of their development and training.

I think there's gonna be a difference between them because a traditionally trained student could come directly from school, be pressured into going to university, get their degree, get a job erm, and then just go with the flow. Whereas a, an accelerated erm, accelerated version, version? not a good word for them but (laughs), erm, the accelerated er, band five [graduate physiotherapist has] been through the, the student life already, they've got a commitment to the learning and to then move on and do a, a physio degree as well erm, it shows a real commitment to want to be in that area,

(Participant 2: line 254-262).

Hence the recurrent theme of the accelerated graduates was that they had greater drive, focus and direction than their traditionally trained counterparts.

Know where they want to be
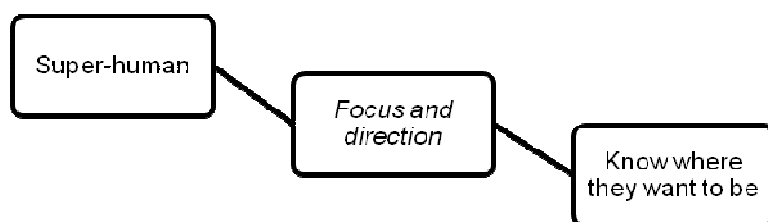
As a specific example of focus and direction several participants suggested that both these accelerated students and accelerated graduates knew why they wanted to be physiotherapists and knew which clinical or geographical areas they wanted to work in. They were thought to have had a greater career plan having 'a better idea of where they want to go' than the traditional graduate. This is somewhat unusual as, historically, most new graduate physiotherapists have been encouraged to gain clinical experience across a broad spectrum of clinical specialities within hospital based settings over a lengthy period of time before deciding upon their chosen speciality and field of expertise (Chartered Society of Physiotherapy 2008b; Stewart, 1998). However, unemployment difficulties in recent years amongst health-care workers, including physiotherapy (Chartered Society of Physiotherapy, 2009), have caused some graduate physiotherapists to seek alternative career pathways in-and-around physiotherapy. The introduction of the 'Agenda for Change' (AfC) career structure within the NHS and the introduction of the 'NHS Knowledge and Skills Framework' (KSF) have enabled changes to these historical employment routes for the new graduate (Skills for Health, 2009a; Skills for Health, 2009b; Department of Health, 2004). Some interview participants noticed this difference:

> 'what most physiotherapists [now] want to do is to chop through their portfolio getting this piece of experience and this piece of experience' (Participant 6: line 148-151).

rather than gain a breadth of clinical experience from various specialities.

Yet Participant 11 sees a difference between the two groups. The accelerated graduates were said to be 'a lot more focused on getting out of [rotational work] straightaway' (Participant 11: line 665) and wanting to 'get through and move up in their career quicker' because they know 'where they want to be'. (Participant 11: line 589-597). Another agreed:

> so they're usually … more focused on what they'd like to achieve- so a lot of [traditionally trained] juniors don't necessarily know which area they'd like to specialise in but I'd say the MSc students that I've had have been clear from the start where they wanted to go,
> (Participant 9: line 418-430).

Indeed, these career plans seemed to be based upon the content or nature of their previous degree despite the breadth of specialities within physiotherapy that is available to them:

> I think there's definitely a difference in background, a lot, erm, a lot of Masters students do come from like a sports injury, a sports erm, science, sports studies kind of background erm, so a lot of them are, maybe quite moti, maybe more motivated because they've had to do another degree before they've even got onto the course, erm, and they really have suddenly decided what they want to do, erm, some of the, a lot of them seem to be quite focused on sports injuries, and, and private practice and things like that,
> (Participant 11, line: 384-385).

The sense amongst the participants was that the accelerated graduates relied upon their previous backgrounds to give them added focus and direction. In contrast traditionally trained graduates appeared to be 'happy doing the [breadth of] rotations for longer and getting sort of the general feel [of the job]', (Participant 11, line 589-597). Yet Participant 8 was rather more disparaging of the traditional graduates describing some of them as:

> a bit more in school mode where they don't necessarily know where they want to go with their careers and they're kind of waiting for somebody to direct them,
> (Participant 8: line 93-107).

The literature offers both perspectives regarding the implementation and execution of a career plan for both accelerated and traditionally trained students. Meyer et al. (2006) used an open ended survey amongst the 67 nursing students of an accelerated baccalaureate degree at Saint Louis University, USA, and found that 69.9% already had a planned career trajectory. Additionally, it appeared from a questionnaire study that all 60 Canadian final year physiotherapy students (all of whom had previous first degrees) had career plans (Őhman et al., 2002). Equally, 74 traditionally trained physiotherapy students at the University of Otago, New Zealand, also had career plans (Dodson et al., 2001). Nonetheless, the physiotherapy

clinicians of this study commended the accelerated graduates for their drive and ambition whilst the traditional graduates were considered more acquiescent. However, as will be seen later the accelerated graduates' drive was seen to have had positive and negative consequences.

The implications of course design

Course design

Participants suggested that the condensed structure, format and higher academic expectations of the accelerated course influenced the students. Yet they also admitted knowing little about how the accelerated pre-registration course might be organised or presented. They appeared to believe the presentation of current traditional courses will have remained the same in style as their own several years ago. They described their own traditional training to have been taught in a didactic fashion 'in stages' that was then 'advanced each year' (Participant 13: line 38-41). Several recalled their own teaching to have been didactic 'the way you learnt was much more 'taught, I listen' ' (Participant 7: 618-627). In contrast they believed that in the accelerated course students had to get 'used to dealing with things thrown at them' 'more aggressively' than the traditionally trained students. Equally accelerated graduates had to 'adapt quickly' to 'learn their trade' from an 'early state' (Participant 14: line 330-336) whereas the traditional cohorts had the longer timeframe. This was reflected in the views of Brookfield (2003) and a study by Meyer et al. (2006) who used an open ended survey amongst the 67 students of an accelerated baccalaureate degree in nursing at Saint Louis University. Meyer et al. (2006, p326) were told that despite enjoyment in the accelerated nursing course 'nothing prepared me for this program. I had no idea how hard it would be'. They described 'the insanity of the work- very intense, no relief', (Meyer et al., 2006, p326). As noted previously the physiotherapy accelerated pre-registration course is taught and assessed at Masters level. The impact of the course design and characteristics of the accelerated graduate will be discussed in the next sections.

Get-up-and-go and knuckle down
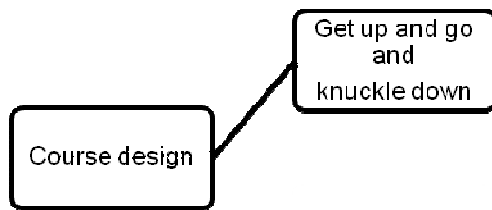
The majority of participants commented upon the students', and graduates', drive and efforts to cope with the stringent academic demands of the training course in the shortened time. Some spoke of accelerated students studying for longer hours at evenings and weekends than they recalled doing themselves in their own traditional courses (Participant 3, line 73). This can explain the notion amongst participants that these accelerated students really had to 'knuckle down and, and have to just study all the time' (Participant 1, line 168-169). There was a strong sense amongst the participants that both accelerated students and accelerated graduates had greater levels of motivation than their traditionally trained counterparts:

> these students obviously must have a lot of erm, get up and go, really.
> [J: Do they?]
> Yes they have, ones that I've had, have…
> [J: What, what is 'get up and go'? What do they have?]
> Erm, just that erm, keenness and initiative, erm, … they, they must to get through it… so they must have to have er, determination rather than sit there and be spoon-fed like I was,
> (Participant 1: line 357-370).

The concept of get-up-and-go had very positive connotations and was described by other participants who also appeared to value these attributes greatly. Accelerated graduates were described as being:

> very disciplined for the self-directed learning that they do and the fact that they have to be quite dedicated to fit three years worth of training into two. As well as a lot of them are holding down other jobs and having to earn money because they've already been at college for so long. I know a lot of them that, well, that I've worked with have done so they do, they are very very disciplined,
> (Participant 13: lines 181-189).

This was supported by Rønning (2009, p448-449) who explored the study behaviour of adults with 'substantial working and family-life obligations' and identified good time-management as an important element 'to successfully fit study efforts in with [these] other obligations'.

However, according to the Leadership Foundation for Higher Education (LFHE) 60% of all students in England work part-time whilst studying (Leadership Foundation for Higher Education, 2008). The recommendation has been that full time students should only work a maximum of 15-20 employed hours per week during term time (National Association of Student Employment Survey, 2009). Interestingly, none of the participants appeared to consider that traditionally trained students need part-time jobs for their financial stability. They appeared only to consider the get-up-and-go as a positive attribute of the accelerated cohorts alone.

Kasworm (2003) agreed that accelerated students have 'specific motivation, dedication and responsibility to the intensive demands of the accelerated courses and programs' with the suggestion that unsuccessful students could not accept such pressures (Kasworm, 2003, p21). Within medicine, Wilkinson et al. (2004) positively associated students with prior degrees as having attributes of achiever, assertiveness, co-operativeness, goal orientation and motivation. The American Association of Colleges of Nursing also agreed describing its accelerated students as being able to 'excel' in class and being 'excellent learners who are not afraid to challenge their instructors' (American Association of Colleges of Nursing, 2009). These attributes were also confirmed by Donaldson and Graham (2002) and Cangelosi and Whitt (2005) and are reflected in formal expectations of both Master's level education and abilities as deemed by the Quality Assurance Agency for Higher Education, (2008).

Participants in this physiotherapy study acknowledged the hard work involved but suggested it was an important feature in developing the accelerated students that 'you're taxing them a little bit more… making them develop their skills a little bit more', (Participant 12: lines 534-544). As such 'if you put somebody straight from college into a two-year route' without a prior degree they would not be as 'proficient', (Participant 14: line 636-645). These comments were reflected by Elliott and Francis (1998) who stated that a successful programme is not only dependent upon the organisation and mode of delivery but the commitment of the student and the student's ability to use the higher level academic skills. Pepa et al.'s (1997) study of the critical thinking of US accelerated nursing students found that their prior learning enabled

them to 'grasp the concepts relating to nursing more quickly and to matriculate through the program at a faster rate' than traditional students, Pepa et al. (1997, p48).

Metacognition is one such skill being the ability to monitor, evaluate and plans one's learning, (Everson and Tobias, 1998) that was discussed in Chapter Three on p58. Metacognition is said to be essential to successful learning because it enables individuals to determine their weaknesses and to better manage their cognitive skills, (Schraw, 1998). Everson and Tobias (1998) stated that metacognition requires two elements to be effective: knowledge about cognition and the regulation about cognition. These are well-recognised characteristics of academic expertise (Jones and Rivett, 2004; Schraw, 1998). It has significance to this study because the individual's ability to 'internalise and translate' experiences to create relevance is seen to be of great importance. According to Everson and Tobias (1998, p66) 'those who can accurately distinguish between what they have already mastered and what is yet to be learned have the advantage over others'. This was also shown in Suliman's 2006 study of learning styles and critical thinking. It was found that the predominant learning style of the 50 accelerated baccalaureate students in Saudi Arabia were abstract conceptualisation and active experimentation; i.e. they learnt by thinking and doing, were inquisitive and self-confident. Meanwhile their 80 traditional route students were found to learn by concrete experiencing and reflective observation; i.e. they learnt by feeling and watching, (Suliman, 2006). Of note Bernadette Waters, Senior Lecturer in occupational therapy, disagreed that the format of the accelerated course should involve abstract conceptualisation instead arguing that the Honours degree was the more appropriate pre-registration award for developing skills and competencies (Waters, 2000). In contrast, the physiotherapy participants of this study believed that these M-level pre-requisites are achievable and indeed necessary to develop the accelerated student. There was a consensus amongst these clinicians that the physiotherapy accelerated graduates had differing attributes to their traditionally trained counterparts. The former could seek information more independently, be more 'analytical', 'more critical' with 'more advanced' thought processes than their traditionally trained counterparts (Participant 7: line 630 and 625; Participant 8: line 664-666; Participant 14: line 81-83; line 666-670). The term 'critical' was not only said to mean 'critique in the research' 'to a much higher level' (Participant 10: line 212-219) but also to mean that 'they're not just kind

of taking things as read because the Senior [staff] says this is how it is', (Participant 8: line 663-686). As such:

> that they'll question their practice and the practice of others more… erm, that they won't take things as er, as a given, they're, you know, they're, they're less accepting (Participant 14: line 343-347).

Equally, their views reflect the outcomes expected by The Quality Assurance Agency for Higher Education that dictates that graduates of Masters' level studies should have:

> a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice, (Quality Assurance Agency for Higher Education, 2008, p20).

By doing so the clinicians appeared to recognise the purpose and format of the Master level accelerated course. They viewed the accelerated pre-registration course positively and valued the academic skill base of the accelerated graduate. According to them Masters level courses had a higher rigour demanding 'a lot of responsibility on you exploring things yourself and I, I think that's healthy, I think that's good and I, I don't think you get that on the BSc routes' (Participant 14: lines 598-602). Some participants also compared their own postgraduate M-level education course with the accelerated cohorts' pre-registration M-level course.

> I mean obviously from my experience of doing the Master's it's kind of doing it as erm, a postgraduate physiotherapist so you'd kind of expected to have all those physiotherapy skills and I'm not sure how that translates to training as a physiotherapist. Erm, but I mean there's much more emphasis on erm, being able to justify and being able to critically analyse and appraise things, (Participant 8: line 659-665)

The participants seemed to make direct comparisons between M-level pre-registration studies and M-level post-registration studies. However, as highlighted on p48 the CSP have not necessarily equated the two forms of learning, (Chartered Society of Physiotherapy, 2003b, p3). Hence one explanation for accepting these accelerated trained graduates could be their assumptions that the current traditional course remains as didactic as they recall their own experiences of training. At the same time they seem to compare the accelerated course with their own recent experience of M-level work as post-graduates. Hence there may be an element of mutual self-congratulation in which the interview participants recognised the academic rigour and effort of M-level work and therefore they could not belittle accelerated

graduates' success. Perhaps unsurprisingly none of the participants appeared to consider this.

Independent learner

Course design → Get up and go and knuckle down

Course design → Independent learner
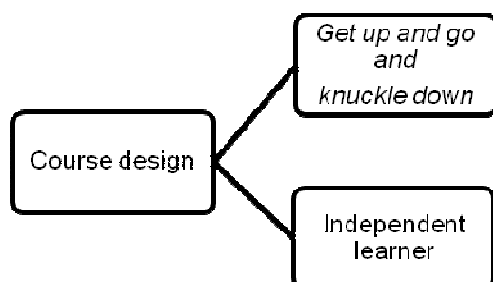
All participants believed and stated categorically that students must undertake significant amounts of self-directed study to be able to complete their studies in the allotted time. Participant 8 noticed 'a real shift in how independent' the accelerated students were noting that their ability to learn had been 'really, really impressive' (Participant 8: lines 842-846). Participants also thought they had 'more responsibility' for their own learning and thus were more likely to do 'more off their own back' (Participant 14, lines 177-178). This was supported by Kell and van Deursen (2000) who studied the learning styles of 43 pre-registration physiotherapy students in Wales. Of note 12 were mature, being over the age of 21. Four of these had spent the previous year in full-time education; the other 8 in full-time employment. Results showed the mature students to have greater skills for flexible learning, were less dependent upon 'teacher' input, more self-reliant and more able to undertake self-directed study. Donaldson and Graham (2002, p7) agreed that accelerated students managed their learning better than traditional graduates 'due to their age and maturity'. To them this was because accelerated students have learnt the poor consequences of cramming. Instead they wish to 'achieve a deeper understanding and improved retention'. This was also supported by Wilkinson et al. (2004) who found that medical students with prior degrees had a greater sense of why and how they learn being the attributes of achieving motive, surface motive and surface strategy.

According to the participants of this study it was thought that to manage an accelerated course:

> they'd have to be very much an, an independent learner, somebody who can sort of self-direct some of their own study and erm, be able to motive themselves erm, and be fl, flexible about maybe how they can approach learning, 'cos you know, in, in terms of the different styles, obviously every, erm, but … and be able to sort of invest sort of the, the time in, in that study because it doesn't reduce the volume of what you have to cover…
> (Participant 7: lines 715-722).

Wolters and Pintrich (1998) highlighted the importance of motivation in learning. They described students as self- directed and self-regulating students to mean those that are aware of, and able to, control their actions in order to reach learning goals. This was highlighted by Malcolm Knowles' principles of andragogy and what it is to be an adult learner:

- adults need to be responsible for their own decisions and to be treated as capable of self-direction

- adults are motivated to learn to the extent that they perceive that it will help them perform tasks they confront in their life situations, (Knowles, 1990).

It has been stated that the accelerated student is self-aware and has learnt how to learn (Swenson, 2003) and is therefore at an advantage. From their literature review Donaldson and Graham (2002) related age and maturity to learning style. They believed that the learning style of the accelerated student was more equipped to manage their learning and less inclined to cram as they realised that the subsequent knowledge retention would be 'fleeting'. Their accelerated students had developed their learning style and methods to 'achieve a deeper understanding and improved retention', Donaldson and Graham (2002, p7). Indeed my physiotherapy participants spoke of accelerated graduates' 'self-awareness' when considering the learning and consolidation of knowledge and skills. It appeared that by the time of their graduation they were perceived to be better at the process of self-appraisal than the traditional graduates. They were said to be more 'aware of their own learning needs' and 'a lot clearer in setting out what they'd like to achieve'. In contrast the traditionally trained graduate was said to be 'a bit more blank, a bit more 'yes I'd just like to get better at everything' ', (Participant 9, line 215-223).

However, one physiotherapy participant described both positive and negative experiences of self-directed accelerated students. On the one hand there were those who were said to be 'very good at self-directed learning and going away and learning it' (Participant 10: line 363-365). Such students were considered to be 'excellent throughout their placement because they're going away and reading all the time and working really hard' (Participant 10: lines 363-367). This was supported by Warren and Pierson's (1994) study of randomly selected American final year physical therapy students who found that the 225 Master degree students felt better prepared for their clinical practice than their 287 counterparts studying the Honours degree. However, not all accelerated students were said to perform well. The same physiotherapy participant from my research argued that there is variation in all students. Some accelerated students had not undertaken the sufficient pre-learning and so did not prepare themselves for the clinical experience placements in the early part to their training. There are those

> who aren't very good at the self-directed learning and perhaps if they're not told they have to go and do it they don't bother erm, they can come out on their placement and be, then background knowledge can be desperate…
>
> … [so much so that] 'when I see I have an MSc student coming my heart sinks', (Participant 10: lines 363-371, line 379).

This disparaging reaction indicates the breadth of responses from participants and gave insight into their varied reactions to the two differing training routes. McBrien (2006, p673) raised concern that 'students who are unable to direct their own learning will potentially lack the skills necessary to meet the demands of modern health-care'. Perhaps for this reason other participants viewed this self-directed approach with some suspicion:

> I suppose on the other hand if you don't know what you don't know, you don't know that you've got anything to learn do you?
> (Participant 1, line 187-189).

This is suggestive that students require insight as well as motivation to learn as, according to the interview participants, independent learning is not without its risks. It highlights the variance between education and training to ensure fitness for practice. Hence adult learners must recognise the significance of the content of their learning to ensure effective health-care rather than to pass assessments. This is a worthy reminder to academics; both students and staff.

Traditional passive learners need to be spoon fed
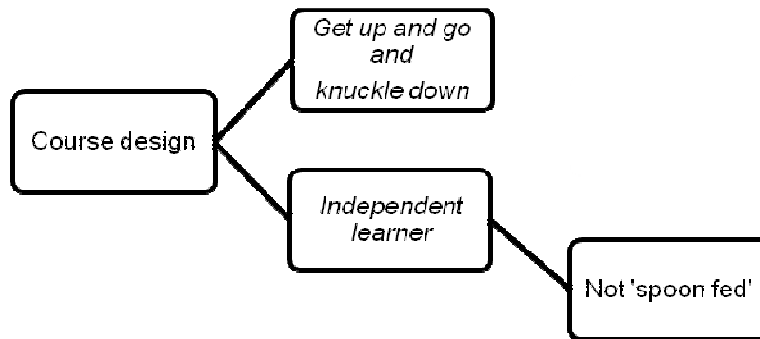
Participants were thus complimentary towards the accelerated pre-registration students and graduates. However, as noted previously they were damning of their own traditional training which they viewed as didactic to be 'sitting there and be spoon fed like I was' (Participant 1, line 357-370). When comparing the two types of student all participants viewed many traditional students and graduates as having a more passive approach to their learning. They were said to appear less self-reliant and 'seem[ed] to, to want the information given to them erm, a lot of the time' (Participant 14, line 180-181). This general impression created a common theme indicating that traditionally trained students were 'spoon fed'. The term was used by numerous participants to mean needing to be 'guided through things' (Participant 3: line 419); for information to be 'very much given to them' (Participant 14: line 217); to be less able to 'think for themselves' and to have less 'initiative' (Participant 13: line 158 and line 177). The term 'spoon-fed' was not only used to describe the traditionally trained cohorts but used to describe what the accelerated cohorts were not. For instance, the accelerated graduates were said to work hard 'because nobody's spoon feeding it to them' (Participant 10: line 454-456; Participant 13, line 156). Based on her own experiences Participant 14 envisaged a very prescriptive mode of teaching for traditionally trained students that did not require them to 'actually thinking that there might be alternatives'. This was contrasted with her 'non-spoon-fed option' in which the same teaching scenario would be offered to the accelerated student. Being the more independent, this student would be told to consider 'alternative diagnoses', seek 'potential management things' and then 'come back to the classroom and be prepared to actually discuss your, discuss your findings' (Participant 14: line 219-231). Hence the two groups were viewed very differently but this is supported by

other instances in the literature. Daley's qualitative study in 1999 suggested that novice nurses considered themselves to be sponge-like 'just soaking up information' and wanting to be 'spoon-fed the information'. She concluded that 'novices in this study did not seem to understand the process in which they learn and would not rely on trial and error being too afraid to make a mistake', (Daley, 1999, p145).

It is of note that these comments associated with spoon-feeding oppose the outcomes and abilities for Honours degree graduates as indicated by the Quality Assurance Agency for Higher Education (2008) and Health Professions Council (2007). The QAA (2008) dictates that Honours degree graduates will have developed analytical techniques and problem-solving skills that can be used in the workplace. This requires the skills to critically evaluate arguments and evidence, to make sound judgements and to communicate them effectively. These graduates would also need to have initiative and self-responsibility (Quality Assurance Agency for Higher Education, 2008; Health Professions Council, 2007). It is recognised that in this research the participants have made direct comparisons between accelerated graduates at Master's level and traditional graduates at Honour's level. Whilst judging the latter less favourably they may be suggesting that generally traditional graduates lack initiative. However, the clinicians' feedback is noteworthy and would benefit further study.

Benefit of M-level education to the profession

Hence it transpired that interview participants suggested that the M-level education benefitted the accelerated student in their learning and development in order to successfully study and complete the course. When asked if the clinical team benefitted from having a highly educated accelerated graduate there was less consensus. Participant 14 agreed that the accelerated graduates are more 'adept' at critiquing research literature and so performed better in in-service training and journal clubs than the traditionally trained graduates, (Participant 14: line 353). Participant 10 recognised the importance of research to further develop the profession but was unsure whether 'having that [Masters] qualification in the first instance makes a difference to the profession', (Participant 10: line 710-719). This was supported by others, (Participant 13: line 486; Participant 12: line 240-247). In terms of

participating in clinical research neither graduate group was said to take part. 'I must say none of the erm, junior staff have ever really expressed more than a passing interest in it', (Participant 9: 822-828). The questionnaires from Stage Five enabled further elaboration as 90% (n=46) of the questionnaire respondents supported the interview participants who suggested that the profession was unlikely to benefit from having accelerated graduates educated at Masters' level. This is shown in Figure 15 and Table 12.
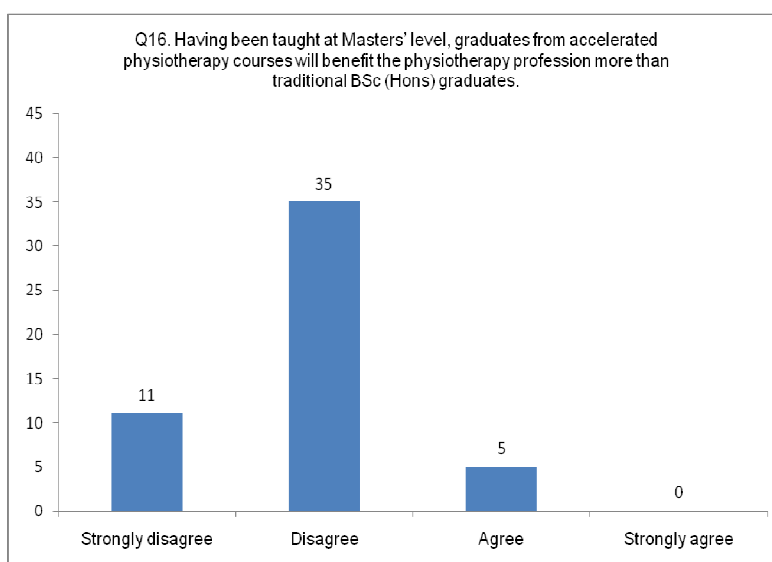
Figure 15: Perceived benefit to the profession of Masters level pre-registration training as viewed by all questionnaire respondents

Table 12: Perceived benefit to the profession of Masters level pre-registration training: per participants current highest post-registration qualification

Q16. Having been taught at Masters' level, graduates from accelerated physiotherapy courses will benefit the physiotherapy profession more than traditional BSc (Hons) graduates.					
	Strongly disagree	Disagree	Agree	Strongly agree	Total
Diploma or Chartered status	0	7	1	0	8
BSc (Hons)	4	7	1	0	12
M-level modules	5	14	3	0	22
MSc	1	7	0	0	8
PhD	1	0	0	0	1
Total	11	35	5	0	51

Table 12 indicates that this perception was also reflected by those questionnaire respondents who had themselves gained additional M-level post-graduate education. They, too, disagreed that Masters level accelerated graduates would enhance the profession any more than the traditionally trained BSc (Hons) graduates.

Age, experience and maturity

Age, experience and maturity

There is a suggestion in the literature that maturity and life-experience benefit health-care workers in their daily work. For example, within medicine it has been thought that patients may be 'better served by mature medical students than school-leavers' (McCrorie, 2002, p676) and that older students 'may be better equipped to deal with the challenges of a medical degree' (Halpenny 2004, no page). Within physiotherapy Sparkes and Mason (2002, p287) argued that mature students have 'a wealth of experiential learning, social acumen and informed judgement to contribute to physiotherapy undergraduate education' and as such 'should become a proportionally represented population within the profession'. Physiotherapy participants of this study agreed. Indeed one seemed to value these types of attributes more highly than the actual training:

> I would say that it's 60 percent on good life skills and 40 percent on good content and knowledge. And that's because you can always…, it's much easier to give people the content and the knowledge with which to then use that. I think you can't change people's fundamental approach to life very easily,
> (Participant 6: line 436-443).

Participants often wove the notion of age, experience and maturity into many conversations in attempts to explain how and why they felt the accelerated students could manage the shortened training. The use of the terms 'mature' and 'maturity' proved complex and hard to disentangle within the analysis as they seemingly had differing meanings to different participants with differing interpretations of the word:

> I don't know whether it is because they're older, because they've all, it, just by the nature of the fact that they've done their degree first and then gone onto do

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the MSc so they are actually physically older but they are much more mature in their outlook,
(Participant 13: line 149-155).

As such, a generic theme was developed with the three attributes 'Age, Experience and Maturity'. According to The Oxford English Dictionary (OED) being mature can mean 'complete in natural development or growth' whilst maturity can mean 'the state of being of age' (Oxford University Press, 2009, no page). This combination of terms proved common amongst participants who used the term 'mature' to mean chronologically older (Participant 10: line 170-173; Participant 13: line 191-192). Perhaps because of age discrimination the term 'mature' is now less used by organisations. However in education it has historically been taken to mean being of an age group of 21 or more (Universities & Colleges Admissions Service, 2004). At times participants appeared to use the term in a similar fashion: 'she's a mature student so she's probably rough guess ten years older than the majority of new graduates' (Participant 7: line 268-270). According to the Chartered Society of Physiotherapy 47% of the overall UK physiotherapy student population are mature students. This figure from 2007/ 2008 statistics has remained constant for the previous four years. The average age for physiotherapy students upon graduation is 24.5 years and is the same for both the traditional and accelerated pre-registration physiotherapy courses across the UK as shown in the Figure 16 from the Chartered Society of Physiotherapy (2009a).
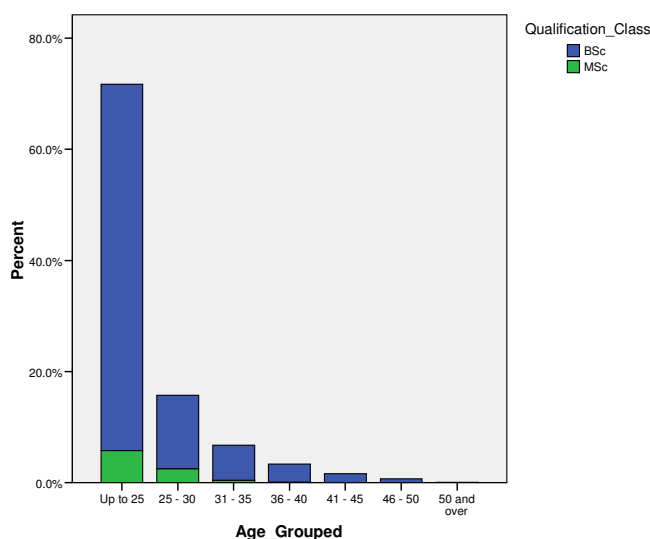
Figure 16: Percentage breakdown of graduating students by age for 2007/8 (Chartered Society of Physiotherapy, 2009a).

This was supported by an on-line Statistical Enquiry Tool on the Universities & Colleges Admissions Service (UCAS). Their web-site showed a similar spread of age groups across applicants who were accepted to study health related courses other than nursing and medicine and so named 'subjects allied to medicine' (of which physiotherapy is one).

Table 13: Applicants to study subjects allied to medicine by age group in 2008, (UCAS, no date).

Age 20 and under	21- 24 years	25- 39 years	Age 40 and over	Total
22016	6134	9729	2804	40683
54%	15%	24%	7%	100%

Table 13 also indicates that in 2008 46% of the total population were mature students. Both surveys indicate that there is public demand to study health-care courses from across the age groups.

As expected from these statistics it transpired that the physiotherapy participants had had experience of supervising older students and graduates from both types of course. As such they recognised the feature of maturity in some traditionally trained graduates as well as the accelerated graduates (Participant 9: line 520-527). However, several also recognised that chronological age does not necessarily lead to maturity in that some 19 or 20 year olds have 'far more life skills than I do [did] at that age', (Participant 4: line 549-553). This was supported by others:

> there'll be people who at 18 are really quite mature and really erm, patient-focused and patient-centred erm, equally as there will be at age 21. So I don't think it's necessarily an age-related thing. I think often with age it, it improves simply because you've got that experience with which to reflect on but it's not always the case really,
> (Participant 6: line 485-491)

Confirming this argument, Participant 13 recalled one mature student on the traditional route with poor organisational and time management skills who proved problematic:

> [He] would take no constructive criticism whatsoever, really don't even know how he got to the third year without this being tabbed up before 'cos it was awful, it was an absolute nightmare, but that, that was the worse case scenario and he, he ended up, well he failed the placement.
> [J: But interesting he was a mature student?]

He was a mature student, yeah. Yeah. Which he, he, my expectations when I met him on the first day was, he's gonna be good and I think that was me just being biased by the, the fact that he was older. Awful. (Laughs), (Participant 13: line 631-640).

It was of note that this participant expected the older student to be easier to manage. This was a common perception. In the main accelerated graduates were thought to be better placed to cope with everyday clinical issues. Participants spoke of accelerated graduates' age, experience and maturity enabling a confident disposition and hence greater communication skills (Participant 13: 253-256). Indeed one wondered:

maybe it's the maturity rather than the accelerated programme that makes them more confident and … erm, just er, better at relating with the patients, (Participant 1: line 504-508).

This has particular resonance as physiotherapy takes place in a variety of settings each having their own demands:

so people who are mature students going in find it much much easier to actually work within a community setting because they already have a lot of experience about dealing with people, dealing with different situations, and given that erm, it's never really just physio you're dealing with in the community it's whatever the raft of social problems are and physio is simply one part of that then I think some of the graduates who are graduating at 21 really struggle to actually see that in context, (Participant 6: 54-62).

This could draw a third meaning of the term in that the term 'mature' can also relate to being 'of thought or deliberation' (Oxford University Press, 2009, no page). As such, all participants considered maturity in outlook to be an important attribute of both accelerated graduates and traditional graduates albeit for various reasons.

In Stage Five 71% (n=36) of the questionnaire respondents associated the good performance of the accelerated graduates as being due to their life skills as shown in Figure 17 overleaf.
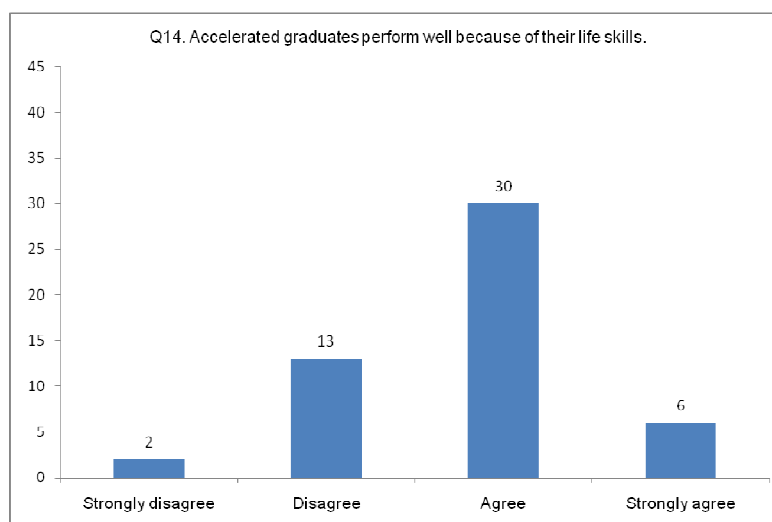
Figure 17: Perceived effect of life skills to accelerated graduates' performance as viewed by all questionnaire respondents

According to the literature prior life experience has significance in theories of active learning and, hence, to accelerated learning. According to Knowles (1980, p45) an adult's 'growing reservoir of experience' is a rich resource for learning. Scott (2003, p31) and Swenson (2003, p84) agreed that students should not be viewed as 'blank slates' or 'empty vessels' but as having a 'plethora' of previous knowledge and skills. Both Cangelosi (2007) and Scott (2003) also argued that active, and successful, learning and teaching occurs when meaningful connections are made between the participants' previous experiences and the new information. Rønning (2009) studied the impact of age upon 1477 part-time, adult students in higher education enrolled in flexible study programs in Norway in 2004 with a mean age of 38.5 years (age range 20–67). The younger, and first-time, students were said to be more surface learners who were 'reproducing orientated' whilst the older students were more deep learners who were 'meaning orientated'. Hence this common trait amongst these adult learners was their search for meaning and relevance that they could then associate with life experiences (Rønning, 2009). This is suggestive of the accelerated physiotherapy graduates. Participant 1 viewed one student's previous employment and experience of travel as being important factors to the clinical performance and hence 'age and life-experience does definitely help', (Participant 1: line 530-531). Another participant highlighted the benefits from having studied a degree prior to her own traditional physiotherapy training that added to her life experience and skill-base. This participant recalled having grown as a person:

there was a lot more that went on there than just academic study a lot of self-development…, call it socialising, call it self-development,
(Participant 4: line 642-649).

This has resonance with Donaldson et al. (2000) who related the accelerated students' success with being able to concentrate more on their learning rather than other developmental tasks which traditional-aged students have to contend with. Participant 14 agreed. Speaking of accelerated graduates who qualified at the same time as him/herself as a traditionally trained participant:

they were about three or four years older than, than, than we were so they did have that bit more life, life experience behind them and erm, where we'd perhaps took, took us a bit longer to get used to, you know, working and, you know, perhaps getting a house, car, et cetera, which all adds to the experience of actually being at, being at work erm, they, they, they already had that sorted,
(Participant 14: line 456-462).

Within the interviews some participants encouraged the universities to select applicants with relevant life skills and to consider 'what experience they have and what experience they feel they can bring to physiotherapy' (Participant 3: line 385-386; Participant 6: line 256). Hence, the participants of this study believed that previous life-experience enhances the academic studies and clinical performance of physiotherapy graduates. The manner in which these transferable life skills presented themselves are discussed in the next sections.

Self-confidence
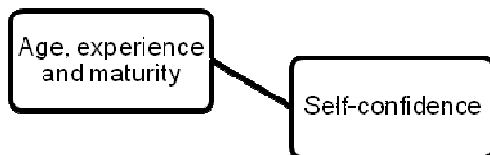
There was a common perception amongst the participants that age, experience and maturity lend themselves to greater self-confidence. Generally, the term 'confidence' was used in the clinical context:

> Confidence to see patients [independently] and be happy that they're competent with what they're doing, erm, and to need less support and supervision, (Participant 4: line 391-396).

or people who are 'happier to work under pressure' and are 'more confident in their abilities' (Participant 4: line 778-780). This suggests some sense of self-belief and self-efficacy. According to Carol Dweck, Professor of Psychology at Columbria University:

> If students have a history of success, they will have enough faith in their abilities to be able to cope with challenges successfully. Intuitively, this makes a great deal of sense. After all, students who have succeeded many times should know that they can do it, and this knowledge should serve them well (Dweck, 1999, p53).

Having successfully mastered previous knowledge and skills these accelerated cohorts were also said to have self-confidence and personal judgement of one's competence to undertake tasks (Bandura, 1997; Seifert, 2004). Rønning (2009) suggested that students with high levels of self-efficacy tend to be more self-regulating and achieve deep-level learning. Heale et al. (2009, p371) agreed that those that 'put forth a vigorous effort, and attain mastery, [which] will subsequently maintain or heighten their self-efficacy expectations'. Those with positive efficacy meet the challenges unlike those with low self-efficacy who refrained from doing so, (Heale et al., 2009). There was a sense amongst the physiotherapy participants that the accelerated graduates' self-efficacy enabled them to succeed because they have developed the abilities to do so, (Participant 7: line 770; Participant 9: line 457-459). The accelerated graduates' confidence was seen as a result of their own efforts and studies and so 'probably because they do more for themselves, er, they have more confidence in themselves', (Participant 1: line 537-538).

Self-confidence was also highlighted as one characteristic within the predominant learning styles of the accelerated students (Kasworm, 2003). However, some contradictions existed between the differing participants. Some believed that all graduates to be more confident now than in previous years regardless of training route (Participant 1: line 732). Others believed that it is more related to personality than training route (Participant 4: line 375). The majority of participants, however, considered the route to be more important stating that both the accelerated students and accelerated graduates to be the more confident of the two cohorts

particularly as new graduates (Participant 11: line 223). Participant 12 described them as having 'a certain character about them' and 'extra awareness' and 'self-assurance', (Participant 12: line 608-616). This reflects the aforementioned beliefs of The American Association of Colleges of Nursing characterising their accelerated nursing students, (American Association of Colleges of Nursing, 2009). Yet significantly, it contradicts the findings from Cangelosi's (2007) nursing study who concluded that the accelerated students needed care and support to overcome feelings of inadequacy in the clinical arena despite confidence in their own academic abilities.

In this study these accelerated physiotherapy graduates were said to have had confidence in their own judgement, confidence in communication and thereby were more confident in debate and clinical reasoning as indicated by Participant 7 when talking about one of her students:

> so potentially her life skills and the experience that she's had from ha, doing her first degree [and] then working then coming on to do the accelerated course has been different so as a person she's obviously got a maturity about her, the, the thing I, I've pro, particularly noticed with this person is her ability to be much more independent but that's not in, been in, in, inappropriately independent for her stage of experience within physiotherapy but she would erm, often come maybe where she feels she needs some advice but she, she would come with a whole range of solutions because she's actually thought about, she's, she's had the question but she's thought about the possible answers and solutions to it before she's actually physically come to myself or another sort of senior member in the team …
> [J: And why does she then come to you, if, if she's got the answers herself, why does she come to you?]
> Well she hasn't got the definitive answer, she's appraised [a few potential solutions] and maybe come up with a, a list of different options [for the supervisor] and [say] 'this is what I've thought and this is what could be, what do you think?',
> (Participant 7 line 273-295).

According to Participant 7 this accelerated graduates' self-confidence appeared to be interlinked with maturity in terms of having thoughtful deliberation as defined by the Oxford University Press (2009). It contrasts with the traditionally trained graduates who were said to equally seek the advice but would not offer any possible solutions themselves reinforcing the participants' perception of their passivity.

Hence there was said to be a suggestion of differences amongst the two types of graduate in terms of confident behaviour. According to Patricia Benner all graduates could be categorised as Advanced Beginners in that whilst coping with real situations they demonstrate marginally acceptable performance (Benner, 1984). However, it appeared from the participants' stories that the accelerated graduate can also demonstrate some higher level achievement. Whilst it is not suggested that at the early stage of their careers the accelerated graduate is an expert there could be a suggestion of some element of a Mastery pattern based as noted by Seifert (2004):

> What drives the mastery pattern is a strong sense of self. Mastery students have a sense of competence and self-determination that gives rise to mastery goal pursuit. These students are confident in their capabilities to do the work (high self-efficacy) and believe that they are 'masters of their fate'. That is, they have a strong sense of control and tend to make internal, controllable attributions for success and failure and are unlikely to make external attributions for success of failure,
> (Seifert, 2004, p146).

Confidence and self-belief were recurrent themes. The manner in which participants described the accelerated graduates was complimentary as shown in this, and the following, section.

Hit the ground running
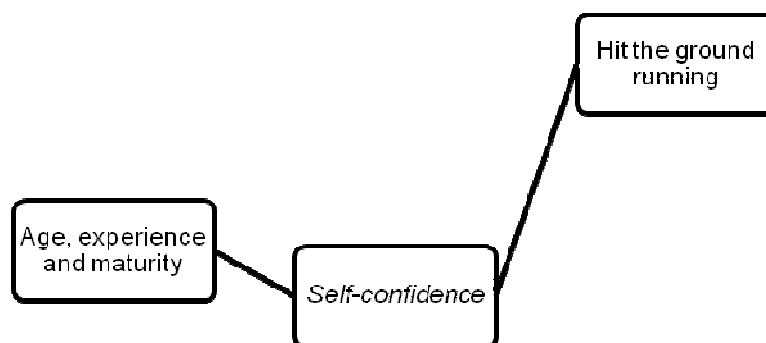
The following quote succinctly reflected many participants' beliefs. The theme 'hit the ground running' arose verbatim with the first participant who praised the accelerated graduates with

their skill at acclimatising to their new working environment. To her this appeared to be associated with the graduate's self-confidence:

> they hit the ground running, you know, they, they come on the ward, you show 'em round and they're ready to work erm, they don't erm, they don't ask if they can watch you for er, a day to learn the ropes, you show them the paperwork and erm, they just get on with it,
> (Participant 1: line 711-715).

It appeared that the accelerated graduates' abilities to settle in from Day 1 were seen as a distinct advantage to the institution over the traditionally trained graduates. Being busy clinicians the interview participants viewed the accelerated graduates as needing less support which thus freed up these senior clinicians to do their own work. It is, however, in direct contrast with Water's reports that that accelerated occupational therapists did not hit the ground running (Waters, 2000) although the manner in which the term was meant in Waters' (2000) paper cannot be confirmed. However, in her discussion paper Bernadette Waters, Senior Lecturer in occupational therapy, offered concerns about the newly created accelerated courses. The physiotherapy participants of my study appeared to use the term to reflect a sense that the accelerated graduates were ready for action because of their self-confidence and self-belief. Indeed they associated the accelerated graduates' greater self-confidence with excellent communication skills and were impressed with these graduates' abilities in, what they saw as, complex busy workplaces. Participant 7 gave a detailed example of an accelerated graduate who 'much more rapidly' fitted into a busy and complex multidisciplinary team. This was in contrast to some traditional graduates who 'really, really struggled' to fit into the team and the 'dynamics of how that works'. In contrast the accelerated graduate would have viewed the situation and said 'oh I see that this has to happen' to be able to successfully negotiate her therapeutic input into the busy ward schedule. According to Participant 7:

> It's almost like she's moved through and just sort of engineered what is a very practical solution. Without sort of coming back and saying 'oh I'm not really sure what to do' [which a traditionally trained graduate was more likely to do]
> (Participant 7: line 404-412).

Hence the self-confidence of the accelerated graduate influenced their interaction with other staff. Participant 7 also spoke of a perceived 'hierarchy' amongst the clinical team that

reflected the medical model. Some thought that a consultant-led team might intimidate some newly qualified physiotherapy staff. Participant 10 suggested that:

> a brand new junior at 21 on a ward they can be quite nervous when it comes to relating to doctors and, and sort of multi-disciplinary team meetings and putting their case forward,
> (Participant 10: line 173-176).

This was not thought to be the case with accelerated graduates. Indeed, the perceived confidence of the accelerated graduates had other positive impacts upon clinical team work. In terms of their presentation skills to other professionals the accelerated graduates were said to be 'very confident erm, and, and are not intimidated by, by, by other people, other professionals at all', (Participant 14: line 488-493). In direct comparison with the traditional route the accelerated graduates had 'increased skills around the critical, critical thinking erm, and been more confident to, to lead in, in, in their clinical area', (Participant 14: line 413-418; Participant 10: line 194-196).

According to Higgs et al. (2001) physiotherapists need this skilful interaction with clinical colleagues in complex settings in order to make proper professional decisions. Perhaps for this reason, this self-confidence and greater communication skills was perceived to further enhance the status of the accelerated graduate.

Being a notable finding from the interviews the questionnaire respondents were asked to offer their judgement in Question 19 that asked: 'To what extent do traditional graduates acclimatise to the workplace compared with the accelerated graduate?' The results are presented in Figure 18 from the viewpoint of the questionnaire respondents' ranked seniority by Band. Of these respondents 16% (n=8) indicated that traditional graduates were slower to acclimatise. These 8 questionnaire respondents reflected a range of the clinical specialities indicating that the acclimatisation may not necessarily reflect the complexity of the clientele.
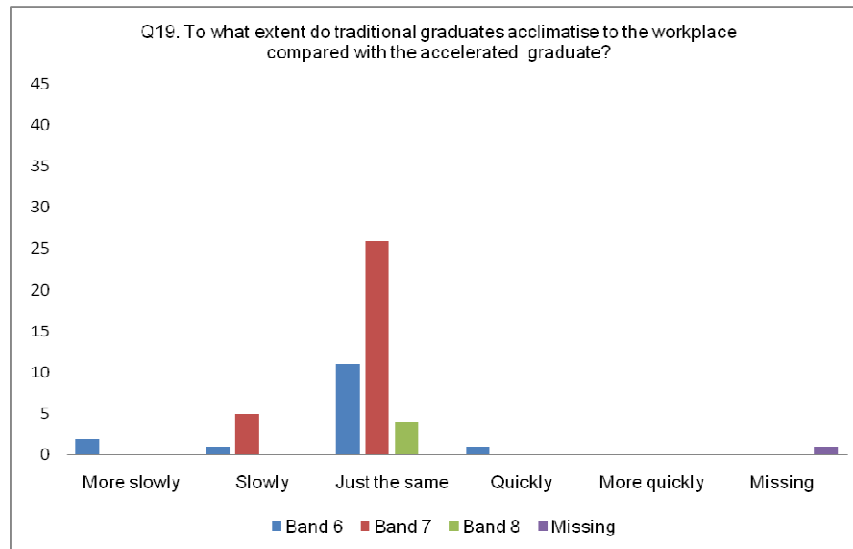
Figure 18: Perception of the manner in which traditional graduates acclimatise to the working environment compared to their accelerated counterparts as viewed by level of seniority of staff

Only one respondent claimed a faster acclimatisation. This was a Band 6 clinician meaning that they were developing their supervisory role, (NHS Employers, 2009). Whilst there was one non-respondent the remaining 82% (n=41) indicated both cohorts to be the same in their acclimatisation. These respondents reflected high ranking seniority and clinical experience being Bands 7 and 8A, (NHS Employers, 2009). This indicates the strength of a mixed method research approach as it forces the researcher to review the previous analysis and data collection. It may be that the term 'acclimatisation' held differing connotations to differing staff. It may be that some considered acclimatise to mean 'adapt' or 'become adjusted to', or other such meaning, but these, too, have different interpretations. Such ambiguities are recognised as a disadvantage of questionnaire surveys, (Robson, 2002; Oppenheim, 1992). Alternatively, the issue may be that this question offered the neutral response despite my initial intention to do otherwise. Hence it remains unclear whether the questionnaire respondents did consider both cohorts to be the same or simply reserved their judgement. In the belief that the interviews produced rich and contextualised material, having had the opportunity for elaboration, the interview findings remain noteworthy .

Accept the gauntlet
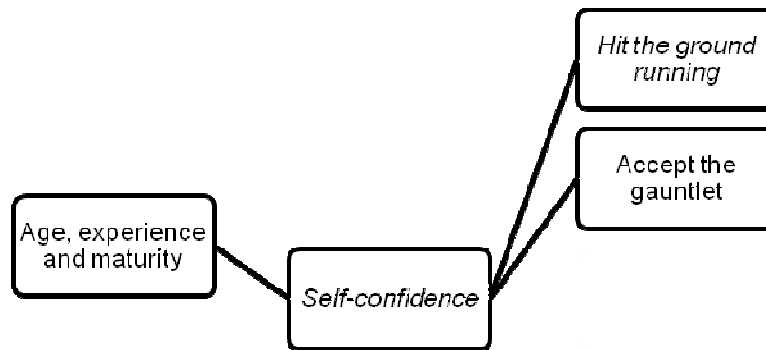
According to the participants, newly qualified accelerated graduates were thought to be more courageous than their newly qualified traditional counterparts. They were 'braver in trying new things in the first few weeks' because interestingly in the sense of this analysis 'they have read more widely and retained more things' (Participant 9: line 701-706). Even though both types of new graduate might find a topic 'very challenging' Participant 14 described the accelerated graduates as 'picking up the gauntlet' to demonstrate their knowledge and skills and then be 'more happy to, to actually start to, to demonstrate them and, and, you know, utilise' them than their traditional counterparts (Participant 14: line 292-297).

One such example would be the night-time emergency on-call respiratory work for physiotherapists. For newly qualified staff this is said to be:

> quite a daunting environment for them to work on, for example, intensive care or the medical wards and there's, so there's a lot of theo, erm, knowledge erm, and theory to, to actually take on board, a lot of skills to become erm, competent in erm, you then throw in the whole clinical reasoning a, aspect, the problem-solving approach and what-have-you, it's a lot to take on board and the actual challenge seems to be grasped far more readily by the staff who've been through the MSc route erm, they will be … not as daunted by the whole experience and will be more willing to, to, to, to get on with it,
> (Participant 14: line 254-267).

This impression was supported by Participant 4 who described both sets of graduate as being 'terrified' when due to join the respiratory physiotherapy on-call rota. Yet the accelerated graduate was, again, said to be 'happier' to go and see patients independently 'earlier and come to me if there was a problem'. In contrast the traditional graduate 'was a lot keener for me to go and see them from the start and assess them together' (Participant 4: line 367-373).

There is little in the literature to compare this type of clinical performance between traditionally trained and accelerated trained graduates. More studies of student training suggest that both cohorts would be anxious with feelings of inadequacy in the clinical arena. (Levett-Jones et al., 2009; Cangelosi 2007; McBrien, 2006; Cook et al., 1996).

This particular theme was not specifically investigated within the questionnaires from Stage Five. Instead the questionnaire respondents were asked to consider the ability of the traditional graduate to deal with complex clinical issues as compared to their accelerated trained counterparts. 18% of respondents (n=9) believed the traditionally trained graduate to be less able to manage difficult cases whilst 14% (n=7) suggested them to be more able. This suggested a lack of consensus. However, questionnaire respondents were also offered the option of the neutral response. This became the consensus being 68% (n=35) suggesting that questionnaire respondents could not or wished not to claim that either cohort to be more able than the other. This is shown in Figure 19.
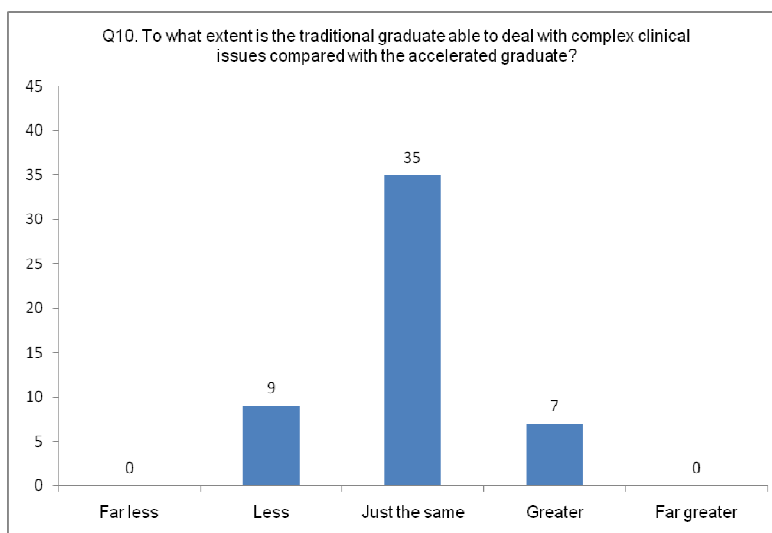
Figure 19: Perception of the manner in which traditional graduates were able to deal with complex clinical issues as viewed by all questionnaire respondents

Despite general consensus across respondents as a whole it was worth considering if this was also reflected across the clinical specialities. A similar consensus appeared although it is

recognised that this limited by the relative small numbers of cases with which to manipulate such data as shown in Table 14.

Table 14: Perception of the manner in which traditional graduates were able to deal with complex clinical issues as viewed by clinical speciality

Q10. To what extent is the traditional graduate able to deal with complex clinical issues compared with the accelerated graduate?					
	Far less	Less	Just the same	Greater	Far greater
Amputee Rehab'	0	0	4	0	0
Cardiorespiratory	0	1	7	3	0
Care of Older Person	0	0	4	0	0
Musculoskeletal	0	4	10	1	0
Neurology	0	1	5	1	0
Oncology Palliative Care	0	0	1	0	0
Paediatrics	0	1	2	0	0
Other	0	2	2	2	0

Within the interview conversations many stated that they had higher expectations of the accelerated trained students and graduates in that they suggested that they should have, and did have, more to offer. There is a risk amongst participants that they mistake maturity and confidence for proficiency. This was highlighted by Participant 1 speaking of an in-service training session that her accelerated graduate had volunteered to present to the rest of her clinical team. It transpired that the chosen topic was in-depth and complex:

> but she was willing to tackle it although she, I mean she did say after a while she said 'this was a lot more complicated than I thought it was going to be' …
> [J: Okay]
> … erm, but she really, she really researched it a lot …
> [J: Uh huh]
> … erm, where she could've taken an easy option but she didn't…
> … she knew it'd be a challenge but wanted to rise to the challenge, erm, although she did, it, she was out of her depth …
> (Participant 1: line 407-416 and 460-462).

Whilst it appeared that the accelerated graduate was demonstrating keenness to deliver something of importance the latter comment is suggestive that the accelerated graduate had, in fact, miscalculated the task in hand. Yet this was not seen negatively by the participant. On the contrary:

> [J: … erm, would you imagine that a traditional graduate would've chosen and done, done that particular topic?]
> Erm, … the, the traditional ones that I've had have done more, they've still been very good but they've done more erm, conditions or erm, smaller topics if you know what I mean, more with boundaries that you knew where to stop whereas

with balance [the topic chosen by the accelerated graduate] you seem to look at one thing and then that leads you to look at something else and then it gets very big.

[J: Wh, why would they [the traditional graduates] choose something with boundaries?]

Erm, well it's definitely easier because you know when to stop erm …

(Participant 1: line 420-431).

Hence the accelerated graduate was complimented on undertaking a complex task despite the fact that this graduate had failed to recognise its complexity. The theme of accepting the gauntlet links to the theory of self-efficacy, namely the confidence in one's own abilities (Wlodkowski, 2008; Seifert, 2004). This could have convinced them to persist when undertaking more challenging tasks (Ferla et al., 2009). Here it was seen as a positive attribute of the accelerated graduate. In contrast, and in this analysis, knowing 'when to stop' was seen less positively as the Participant 1 appeared to indicate that traditional graduates were less willing to stretch themselves but this could perhaps have been the more realistic approach than the one taken by the accelerated graduate.

Initiative
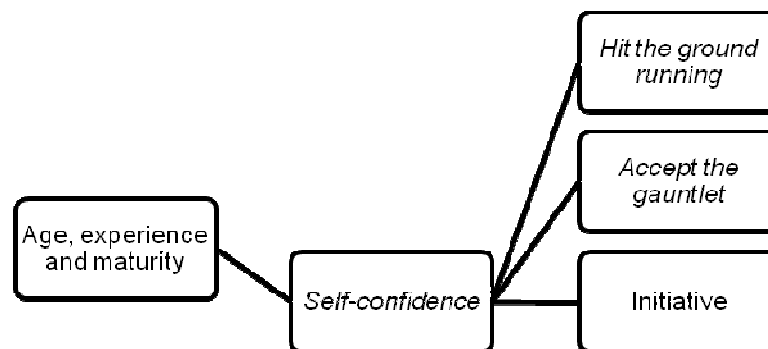
The theme of 'initiative' has a clinical perspective and reflects the participants' perceptions that the accelerated graduates had a sense of enterprise and could take the lead. One participant in particular was impressed with the initiative demonstrated by accelerated graduates:

there's a girl who works here and she's a brilliant physio, but as a junior physiotherapist she was erm, working on the wards and all she wanted was a, a particular mattress for a patient and she actually went out of her way and got in touch with er, a mattress company to come in and bring a mattress for this patient. Far beyond her scope of practise years, it should've been really a

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nursing procedure, but she was just really really keen and determined to get this
patient and she felt it was all her role,
(Participant 13: line 174-179).

This participant spoke highly of the accelerated graduate. It is of interest to note that she

recognised that this graduate failed to appreciate the boundaries of her role and expectations

as a physiotherapist by undertaking the duties of another member of the team. Yet the

participant did not pursue this. This misunderstanding or blurring of roles was highlighted by

another participant who, at first sight, appeared complimentary of the accelerated graduate

who wanted to extend his skills as the accelerated graduate:

> certainly when erm, he came into our team erm, he was very much sort of
> looking for learning opportunities, he's accessed erm, training opportunities that
> some of the other [traditional] graduates wouldn't have done, so sort of working
> on, he worked on the medical wards and finding out from different members of
> the MDT [multi-disciplinary team] sort of where he could go like going on erm,
> things like watching erm, ECGs [electrocardiograms] being done and those being
> explained to him which a normal, the graduates from the undergraduate
> programme possibly wouldn't have done, they would've come more to physio' to
> ask for training in things whereas I think he went more out and wider to look for
> learning opportunities,
> (Participant 8: line 109-120).

However it then transpired that the accelerated graduate was pursuing his own interests

without first having fully consolidated his physiotherapy skills and knowledge. This initiative

had, in fact, misled him:

> There was nothing he was doing that wasn't appropriate from a physio' point of
> view erm, but I'm not sure whether he saw the bigger picture from a physio' point
> of view before then going and looking at other MDT [multi-disciplinary team]
> issues. I think he saw what he was doing as, that was what he was doing as a
> physiotherapist and then what could he find out from other MDT members, but
> possibly wasn't pushing what he was doing as a physiotherapist and developing
> in that way,
> (Participant 8: line 181-189).

As such his initiative had led him away from developing his physiotherapy skills as would be

expected for his rank and level of experience. This leads to a differing theme to be discussed

later in which, despite their positive attributes, some accelerated graduates may need to be

supervised more closely.

Participants contrasted the clinical performance of the accelerated cohorts with the

traditionally trained cohorts in terms of initiative. Rather than having self-reliance, self-

independence and self-motivation the traditional students and graduates were said to have

less initiative than their accelerated counterparts and be more dependent upon senior staff:

> Some of the BSc students that come out, they just follow you and you, they're
> asking questions all the time. 'Can I do this?, can I do this?'. They just don't
> seem to have as much initiative. They're very very … spoon-fed. I don't know
> whether that's the right word but they do tend to be very very, or I feel they are,
> in comparison to the MSc students,
> (Participant 13, line 174-179).

Once again, this raises the issue of active decision-making for the accelerated graduate whilst

the traditional graduates are presented as being more passive; wishing to be led by the hand

and 'waiting for somebody to direct them' (Participant 8; line 106-107). Participants suggested

that these attributes characterise the clinical performance of the two differing groups of

graduate. Being a 'strong feeling' for Participant 14 (line 240) passiveness is also discussed

in the next theme.

Not 'wet behind the ears'
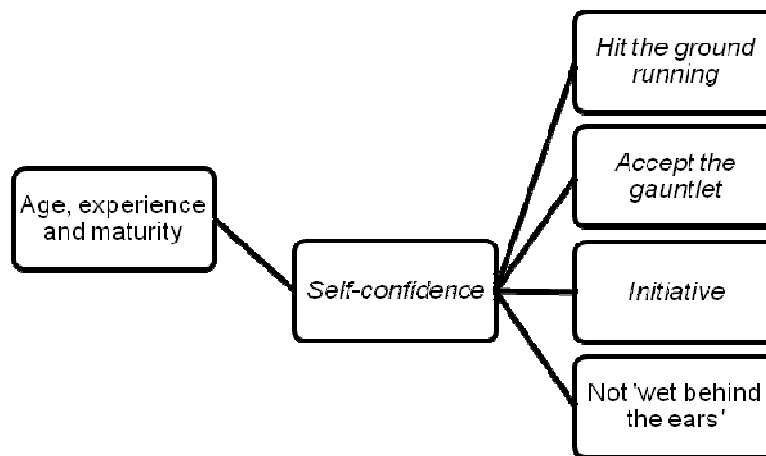
Some participants contrasted the confidence of the accelerated graduates with under-confidence in the traditionally trained graduates. Even though they were known to have a 'good broad knowledge base' it was suggested these traditionally trained graduates were not yet ready to be 'in the big wide world doing things for themselves'. For this reason one participant considered them to be 'wet behind the ears' as they needed mollycoddling (Participant 13: line 203-204; 742-744). This appeared confusing to this clinician 'cos they've had the same clinical experience' as the accelerated graduates (Participant 13: line 208-209). Several other participants described the traditionally trained students and/ or graduates in more downbeat terms such as 'nervous' and 'anxious' (Participant 10: line 174; Participant 11: line 239; Participant 12: line 285; Participant 14: line 274) although the term 'anxious' appeared to have differing connotations:

> the BSc students are a lot more anxious erm, to please and also a lot more
> anxious that they're not fa, they're not up-to-scratch,
> (Participant 11: line 238-240).

This one statement succinctly represented an overwhelming viewpoint of many participants that traditionally trained students and graduates appeared to need, and ask for, on-going support in their clinical work. Of note, there was an additional sense that these traditional students felt it was good to do so and that, perhaps, they thought that it was even expected that they should do so:

> they tend to show their faults and they're quite, they seem to be more open
> about the fact that when they don't know things,

(Participant 11: line 225-229).
In other ways the 'anxious' student was seen even less positively:

> they come to you a lot more erm, maybe sometimes they're a little bit, you need to protect them a little bit more, they seem to be quite nervous, a bit more kind of, 'ooh what shall I do here, I'm not quite sure I'm, and so unconfident really' erm, and you often have to lead them a little bit more than you do the Masters,
> (Participant 12: line 282-288).

One participant went further describing a minority as 'timid, terrified to be qualified, terrified to be working on their own' (Participant 10: line 296-297). Again this seems at odds with the QAA descriptors of an Honours graduate (Quality Assurance Agency for Higher Education, 2008). However, this reaction is noted in the literature. In their seminal work Miller et al. (1999, p168) predicted that any newly qualified member of staff may feel 'considerable future shock' when leaving 'the relative protection of the student or probationer status'. According to them this can result in a noticeable reduction in confidence and competence (Miller et al., 1999). It is of great interest that from the participants' stories only the traditionally trained graduate might suffer this outcome whilst the accelerated graduates appeared not to do so.

Perhaps anxiety and nervousness are more related to personal stress. Timmins and Kaliszer (2002) studied the causes of stress in 110 nursing diploma students in Ireland. Relationships with nurse tutors were said to cause stress in 33% of respondents and relationships with clinical placement educators caused stress in 28%, (Timmins and Kaliszer, 2002, p209). Lőfmark and Wikblad (2001) considered that unfamiliarity of a new working environment and the subsequent adjustment to the working conditions can hinder the learning process in the students. Brammer (2006, p702) agreed that students can view the clinical placement with 'trepidation' and as 'daunting' and 'even more daunting when students are not feeling welcome'. Each of these could explain the reasoning for my physiotherapy participants' viewpoints who indicated that the relative 'immaturity' of traditional students was an issue as they had less significant life experiences:

> My problem I would say from a downside is sometimes some of the younger ones when they're first out on placement they are very very immature in that that have got things wrong with them, and I do find that a bit bizarre because I have had, had students through who really aren't prepared for placement in that they, clinically they, they haven't got a clue and socially they haven't got a clue (laughs),
> (Participant 13: line 274-282).

Within the questionnaires in Stage Five this was supported by the respondents as 75% (n=38) indicated that the younger aged traditionally trained students were less equipped to undertake pre-registration physiotherapy training as shown in Table 15.

Table 15: Perception of how well prepared younger traditional students are for training as viewed by all questionnaire respondents

Q1. To what extent is the eighteen year old student with A-levels equipped to start physiotherapy training compared with the accelerated student holding a first degree?			
	Frequency	Percent	Cumulative Percent
Less well equipped	3	5.9	5.9
Less equipped	35	68.6	74.5
The same	11	21.6	96.1
More equipped	2	3.9	100
Very well equipped	0	0	100
Total	51	100	100

Equally to Question 5 33% (n=17) respondents agreed with the statement that 18 year old students lacked the ability to cope with emotional stressful situations as shown in Table 16. However, this suggested an inconsistency between these two questions as 65% disagreed with the statement suggesting a conflict between the two results.

Table 16: Perception of how likely younger traditional students would cope with emotional stress of healthcare as viewed by all questionnaire respondents

Q5. The student aged 18 years is less likely to cope with the emotional stress of patient care than the accelerated student with a prior first degree			
	Frequency	Percent	Cumulative Percent
Strongly disagree	4	7.8	7.8
Disagree	29	56.9	64.7
Agree	15	29.4	94.1
Strongly agree	2	3.9	98.0
Missing response	1	2.0	100
Total	51	100.0	100

Nevertheless, if one is to believe that some of the questionnaire respondents valued age, experience and maturity this can be pursued in the analysis of the interview data. When asked why the entry requirements for pre-registration training were not simply raised to a higher age group one interview participant stated that it 'would spoil the diversity that you actually get within the profession' (Participant 6: line 483-484). However this awareness of

widening participation seems to be challenged by the majority of interview participants who seemed to value greater age and experience and thus appeared to favour the accelerated graduate.

Leadership skills
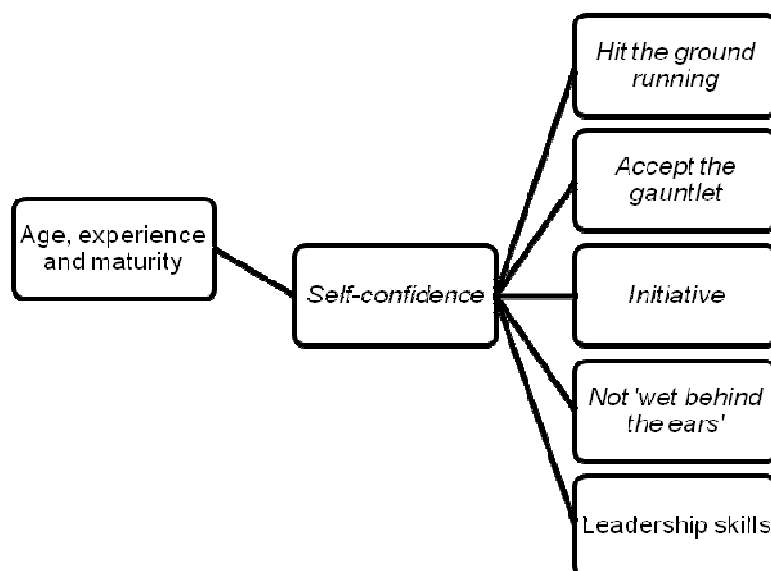
Another positive comment was the accelerated graduates' early demonstration of leadership which appears to be resultant from many of the positive attributes discussed thus far. The newly qualified accelerated graduates appeared to be:

> more willing to a, to accept erm, a role which would, requires more, more leadership er, than perhaps the, tho, those qualified staff who've had the three year training,
> (Participant 14: line 321-324).

As such, this participant suggested some element of hierarchy:

> I think their [traditionally trained] peers do look to them [the accelerated graduate] on occasion for, for support erm, more than they perhaps look to some of their, their, their, their other peers erm, and I think that is, you know, that, I always look to somebody who I feel's got a bit more experience than, than me, whether it's just purely clinical or, or, or, or other and I, I think that does, does happen so they, they do bring some erm, some leadership and, and, and support to the, to the team and they're working, working alongside (Participant 14: line 539-546).

By using the term 'peers' Participant 14 did seem to suggest that these clinicians are on an even footing, perhaps by job title. However, she suggested that the traditionally trained graduate was more likely to look up to the accelerated graduate for guidance or leadership. This reflects the M-level outcome as noted by the Post-qualifying Programme Endorsement Group of the CSP, (Chartered Society of Physiotherapy, 2003b) and supports Kasworm's conclusions in 2003 that accelerated graduates are skilful and knowledgeable workers.

Summary of 'Perceptions of Success'
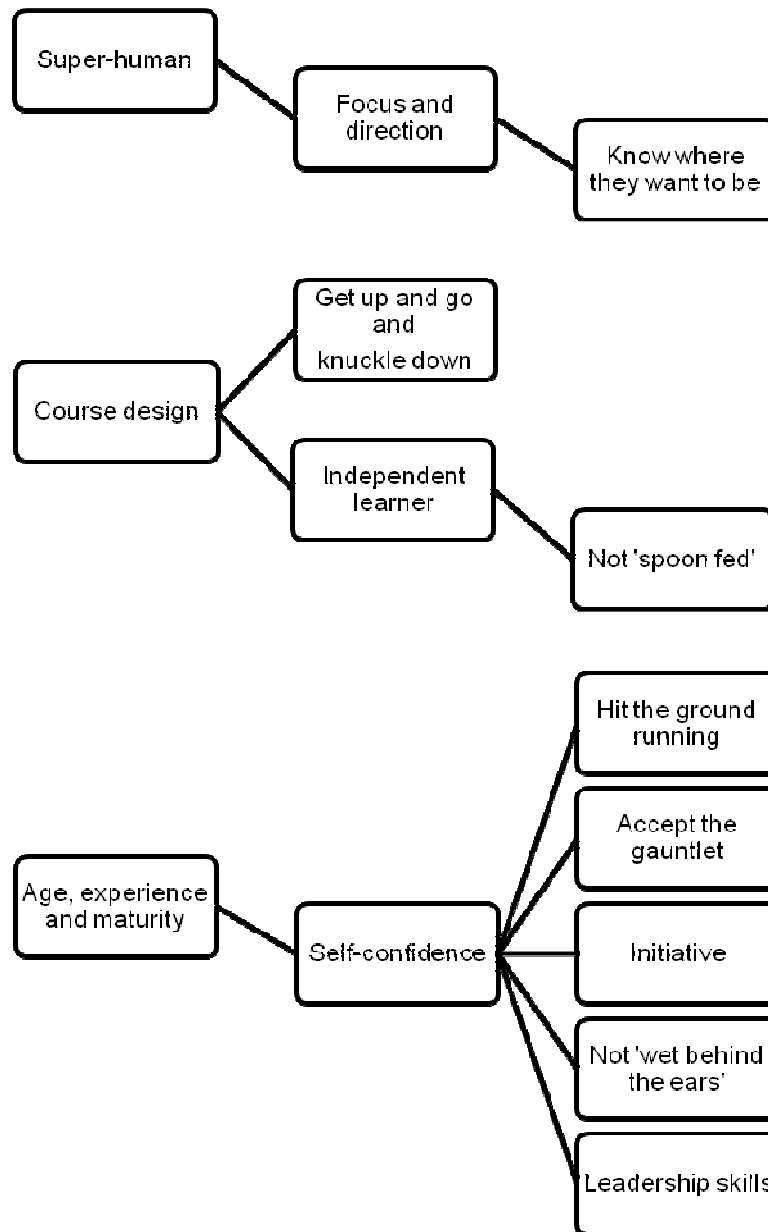
Figure 20: Summary of 'Perceptions of Success'

In summary, participants appeared to admire the superhuman attributes of the accelerated graduate. Whilst, on balance, there are more positive features there remain some negative issues. Participants admired the accelerated graduates for their abilities to successfully study the shortened course considering it to be very different from their own training. Hence, there

is little to suggest that accelerated students or graduates would need to hide their academic backgrounds from their clinical supervisors for fear of recrimination as suggested by Halkett and McLafferty (2006). In the themes 'Focus and direction' and 'Know where they want to be' the analysis suggested that those from the accelerated route were tenacious in that they appeared to be highly motivated, hard-working and focused in their goal to become physiotherapists in their chosen field. Interestingly there was less recognition of such characteristics in the traditionally trained graduates, Participants gave examples of accelerated graduates' self-efficacy in that they wished to succeed and would succeed because they developed the abilities to do so. Such self-efficacy appeared to be associated with a strong sense of self-belief. These graduates appeared to be self-confident individuals. Accelerated graduates were also said to have greater self-confidence to undertake tasks that were relatively complex for their status. Whether by training or personal experience they were said to have superior communication skills that enabled them to participate in busy working environments amongst the larger clinical team. As such they were said to 'hit the ground running' and demonstrated more qualities of leadership than the traditionally trained graduates. For these reasons the interview participants valued these new staff. However, there were some negative perceptions. Some interview participants viewed the some accelerated students' and accelerated graduates' self-confidence differently. Accelerated students were seen by some to be ill-prepared for their clinical placement so much so that the clinician's 'heart sinks' as noted on p143. Whilst the accelerated graduates were thought to be more likely to 'accept the gauntlet' some of them were thought to have misunderstood the complexity of the task involved as shown on p161. Alternatively, they were thought to misinterpret their own role as noted on p163. These issues contrast with the positive attributes that many clinicians described the accelerated cohorts to have had. Other negative perceptions arose. These will be discussed in the next chapter.

CHAPTER EIGHT: ALTERNATIVE PERSPECTIVES FROM STAGES FOUR AND FIVE

Introduction

This chapter continues the exploration of themes derived from the interviews in Stage Four and the questionnaires from Stage Five. The interviews with the clinical supervisors of physiotherapy graduates provided a wealth of data. The last chapter presented an analysis that suggested that those graduates' attributes made a valuable contribution to clinical teams and to the workforce in general.

The following superordinate theme 'A note of caution' explores other important factors revealed in the analysis that were said to influence the graduates' clinical performance. Some clinicians showed a misunderstanding about the accelerated pre-registration course whilst others had doubts. Some had had negative experiences. These provide cautionary tales for educators and clinicians alike.

Superordinate theme: A note of caution

Squeezing a quart into pint pot?
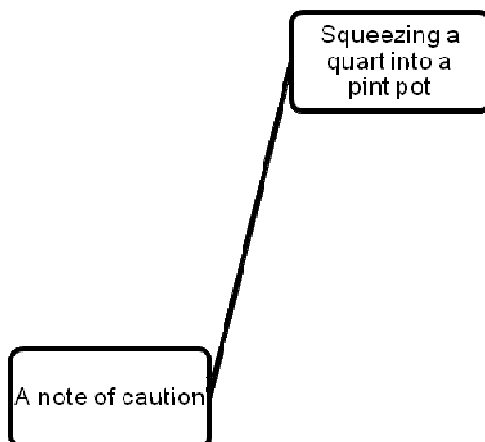
Despite their comments regarding the M-level accelerated pre-registration course many of the participants admitted knowing little about its delivery and format 'I mean I'm not entirely sure of the, how crammed in and the exact content of the course, … I haven't really thought about it …, (Participant 11: lines 162-165). Another agreed:

> how they might actually condense it into two years I, I'm not a hundred percent certain I must, must admit. Erm, … I'm trying to think what, I, I, nobody's ever actually talked to me about it, where, erm, no I, I'm clutching at straws, (Participant 14: lines 211-215).

The term 'condensed' was noteworthy and will be considered shortly. Many 'hoped' that students taking the course 'would come out as having the same qualities and the same abilities' as the traditional course (Participant 3: lines 458-460). This assumption is understandable as each and every UK physiotherapy training course has commonalities as dictated by the relevant statutory bodies which enforce the same standards of proficiency and curriculum frameworks (Health Professions Council, 2007; Chartered Society of Physiotherapy, 2002b). Re-validation events for such courses then ensure that the physiotherapy courses remain current, relevant and fit for purpose. Perhaps for this reason participants found the shortened timescales of such training to be confusing.

The perception of squeeze

The previous quote indicates that participants believed that the accelerated physiotherapy course was simply a shortened version of the traditional degree. Apparently it had a similar content but was simply compressed. Hence, to them, the accelerated physiotherapy course has 'a year to make up' (Participant 1: line 147). The following was a common point of view which illustrates the theme:

> having sort of undertaken the three year course myself it was a squeeze to get everything into three years… er, so initial er, thoughts would be how do you do it in two? How do you get to the right standard in two, erm, without a good background already (Participant 2: line 74-80).

From such responses the theme of 'squeezing a quart into a pint pot' was created to reflect the perceptions of many participants. It was a question that was reproduced in the questionnaires in Stage Five. Of the 51 respondents 63% (n=32) agreed that 'three years of

training are required to develop the necessary skills to become a physiotherapist'. In contrast 37% (n=19) disagreed.

According to the Oxford English Dictionary (OED) 'accelerated learning' is taken to mean 'an intensive method or course of study which enables material to be learnt in a shorter time than is usual' (Oxford University Press, 2009, no page). The term 'fast-track' can mean 'a route to rapid advancement or development' (Oxford University Press, 2009, no page). These terms appear to be neutral or non-judgemental. However, several participants expressed their concern and/or confusion regarding such accelerated training:

- 'it does seem quite a lot to do from, within a two-year sort of space …very intense' (Participant 3: line 205-207),

- 'there's a lot more packed in'... 'into a much tighter timescale' (Participant 11, line 37; 43),

- 'It's quite compact for them isn't it, everything's sort of thrown at them at one go' (Participant 13: line 36-37),

Thus it appeared as though some participants interpreted the concept of accelerated learning meaning 'hurried' or 'rushed' as suggested by Swenson (2003). The OED defines 'rushed' as

> to have much to do in a limited time, to be hard-pressed by shortage of time (also with the activity or the period of time as subject). Hence in colloq. phrases 'to be rushed around, to be rushed off one's feet (Oxford University Press, 2009, no page).

The perception of absence

However, other participants showed greater concern. For them it was not an issue of compressing course content but one of reduction of course content:

> I find it difficult to think you can get the same amount of knowledge in there within a two-year period compared to a three-year period, (Participant 3: line 244-246).

For this reason Participant 3 'can't imagine' what elements of a physiotherapy training could be excluded from an accelerated training course and yet enable a student to qualify (Participant 3: line 145-146). They suggested from their own experiences that sufficient time was required to develop the intricacies of their vocational training. This was supported by Brookfield's (2003) critical theory perspective on accelerated learning highlighting that:

extended contact time and a teacher's skilled help are also believed to be necessary so that learners are able to uncover dimensions and applications of ideas that would remain hidden in on-line or independent study environments, (Brookfield, 2003 p73).

Yet it contrasts with Scott's (2003) findings that compared accelerated courses and traditional courses that were presented by the same instructor. Scott found that the uninterrupted delivery and 'intensive' format of the course enabled synthesis and understanding rather than detracting from it, (Scott, 2003).

The perception of lost depth

Lastly, the sense of reduction progressed to a sense of lost depth of knowledge, understanding and application. For one participant 'there's only so many hours in, in a year… how many hours are in a year? (laughs)' (Participant 2: line 650; line 661). To another 'I don't think it's [the basics are] covered in perhaps as much detail' (Participant 14: line 172-173).

These doubts are reflected in the literature of other disciplines suggesting that accelerated courses sacrifice breadth and depth as noted in the fast-food analogy of the 'McDonalds of higher education' (Wlodkowski, 2003; Traub 1997).

Meanwhile, other participants spoke of particular elements of the training course to highlight their concerns. Some participants recognised the timetabling issues for students to gain the required 1,000 hours of clinically-based experience that is needed to successfully complete any validated physiotherapy course (Chartered Society of Physiotherapy, 2002b). They calculated that students must 'spend more or less a year out on placement' out of total of 2 years, (Participant 13: line 32-35). To this individual this had ramifications upon the remaining theory-based instruction sensing that consolidation of knowledge and skill could be affected. Perhaps for this reason Participant 7 appeared equally concerned:

> I would say my own personal opinion would've been, I would've been very wary about somebody who would've come on the back of an accelerated programme because how can you suddenly in two years acquire some of the actual skills erm, particularly some of the practical skills in a shorter time and take on board all the information from a theoretical point of view and sort of synthesise that into your like clinical reasoning process?
> (Participant 7: line 568-575).

The choice of the word 'suddenly' in the context of a two-year course indicated Participant 7's unease. She questioned whether there would be 'elements or bits missing from the curriculum' (line 885). Another participant spoke of a dilemma that the accelerated route lessened the abilities of such graduates but sensed, logically, that this could not, or should not, be the case. The following quotes summarise a lengthy conversation that needed some teasing out. Despite having already supervised accelerated graduates there was:

> still just at the back of my head… erm, that, that they might have missed something maybe in …
> [J: What might they have missed?]
> I:… some, something they might have not learned that they needed to learn which is kind of ridiculous because if they had they wouldn't have got through their exams and their clinical placements.
> (Participant 1: line 761-770).

> [J: What's niggling at the back of your mind?]
> …I wonder if it's like … a little bit like, took me three years to learn this stuff, what makes them think they can do it in two?
> (Participant 1: line 806-812).

The last statement 'what makes them think they can do it in two?' signified unease and even suspicion giving a negative position to this 'squeezing' theme. It suggested that she believed the accelerated student to be arrogant or unaware. However, it is an interesting contrast to the interview participants' beliefs that the accelerated graduates were super-human. The distrust has some comparisons with the findings of Halkett and McLafferty's (2006) study of traditional nursing students who showed animosity towards accelerated students. In that study they were perceived as 'cheating' or 'getting an easy ride'; and questioned 'who do you think you are?' (Halkett and McLafferty's (2006, p164).

Participant 5 offers concerns from a practical perspective:

> I think if you're trying to learn in two years what other people are learning in three then there are things that you've probably done that you haven't absorbed in depth that there are probably written in your notes somewhere but you perhaps haven't had time to consolidate that knowledge erm so I think sometimes yes there is that possibility or that the course just didn't have time to explore some of the treatments or conditions perhaps as much as we used to,
> (Participant 5).

For these reasons the content of a first degree proved to be an important issue to be able to 'cope with the accelerated learning' (Participant 10; line 525). It was considered that

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accelerated students needed 'relevant knowledge to be able to cope with the amount of work to get done in two years rather than three' (Participant 10: line 613-615). This suggests relevant prior knowledge. Whilst some participants did not consider the graduates' first degree others did recognise the accelerated graduates' benefit of two combined courses. This gave them five years' worth of study of 'quite similar kind of things' (Participant 11: line 683). Such accelerated graduates would therefore have a 'broader knowledge' and 'a bit more of an overview' (Participant 4: lines 421-426) giving them a 'head-start' (Participant 12: line 434). Another went further stating that it 'had almost shaped the kind of people that they were' (Participant 8: line 285). Accordingly it would be:

> it'll be much more 'oh yeah I've done that and now I've, just let me sort of re-look
> at it in this sort of term from a physiotherapy angle',
> (Participant 7: line 833-836).

Such comments are reflected in the literature as Pepa et al. (1997, p48) suggested that the accelerated students' prior learning enabled them to 'grasp the concepts relating to nursing more quickly and to matriculate through the program at a faster rate' than traditional students. This offers one explanation for the perceived success of these courses.

Hence there was a divide amongst participants. A few suggested that the accelerated graduates were at a disadvantage by not having studied a three-year physiotherapy course. Others offered less concern for the accelerated students by believing that they had more in their armoury, not less, by virtue of five years worth of study. Nonetheless it transpired that the nature of the previous degree was of concern to some participants as discussed in the next section.

Is the previous degree useful?
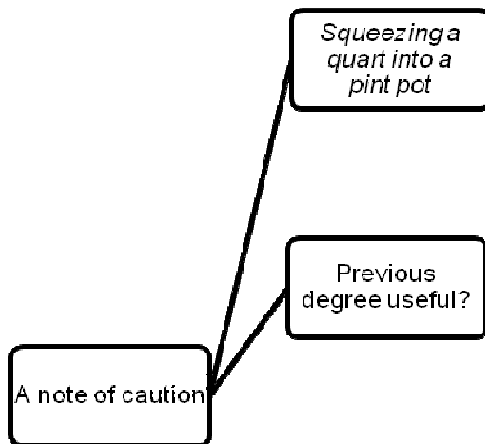
When asked if the participants would treat an accelerated graduate any differently from a traditionally trained graduate one thought that 'it might depend on what their other degree was in' (Participant 1: line 815-818). Because of their concerns of squeezing a quart into a pint pot all participants believed that a 'foundation' of prior knowledge and skill was necessary for accelerated students to manage their new course (Participant 1: line 148). Most indicated that this content should be derived from the first degree or other specific life experience. The term 'foundation' appeared to have a more primal sense:

> this is gonna sound strange but erm, I think when you've learned something after a while it sort of soaks into your bones and, and you just, it's automatic and it's not even cognitive, you just know things,
> (Participant 1: line 874-877).

This familiarity is important considering Schon's theories of knowledge and reflection to influence behaviour (Schon, 1987) and may help to explain how accelerated cohorts succeed.

Considering the physiotherapy profession to be science-based many were adamant that such prior content should also be science based because the 'mind-set tend to be in a similar area' (Participant 2: line 91). As such many participants would find it 'strange' or inappropriate if the student was from an Arts background rather than a science background (Participant 11: line 688-692; Participant 8: line 11). Hence these participants suggested that it would be as though the students were 'coming from somewhere blind' (Participant 11: line 459) and so they would 'struggle' (Participant 13: line 574). However, this was not supported by Craig et

al. (2004) who studied the academic performance of 317 medical students with previous first degrees from differing academic backgrounds at the University of Sydney. Whilst a temporary advantage was noted in those with science backgrounds no overall difference was noted by the third year of their four-year studies. This could be supported by Rushforth (2004) who found that in 2003 45% of the 90 medical students at the University of Nottingham were non-science graduates, (Rushforth, 2004). Equally, Miklancie and Davis (2005) described how a student with a business background might successfully apply some pertinent strategies to help them in their nursing. However they also noted that where attitudes and values differ from the business world to health-care this could cause some difficulties. For instance some business graduates utilised a 'black-and-white' approach that might have been more suitable in their previous career by expecting straightforward answers. Either way the physiotherapy participants of this study remained cautious:

> 'concerned' is probably the wrong word, I would just erm, perhaps want to make sure, a bit more sure with them when they came to me as a student about their background knowledge,
> (Participant 3: line 536-540).

Indeed this same participant appeared wary:

> it's just if they're coming from an Arts background I would wonder why they hadn't done a Science before if it was something they weren't as strong at or didn't find as mu, as interesting,
> (Participant 3: line 596-606).

Such comments indicate that a sense of misunderstanding and mistrust remained towards the accelerated pre-registration courses. Greater information and education about the rationale and format of the accelerated course is needed to dispel such suspicions if the accelerated courses are to be accepted more fully.

Participants offered examples of what they perceived to be inappropriate Arts degrees. A previous degree in drama was considered 'something completely abstractly different' (Participant 2: line 111-112). From a degree in accountancy 'there'd be rafts of stuff [physiotherapy related] which they wouldn't have touched on at all'. The concern for Participant 6 was how such accelerated students would find the time 'to actually make sure

that those bits, the, the background understanding of those are actually adequate to then move them clinically' (Participant 6: lines 303-312).

Nonetheless some science-based degrees did not fulfil all requirements either:

> I have had one student and erm, she really struggled erm, because her first degree was in biochemistry or something and it wasn't in sport science so she just didn't know where the hamstrings [muscles] were or what they did, although she was very, very intelligent and good with the patients but she just was really struggling (Participant 1: line 151-156).

Not all participants agreed about the sports science degree as a suitable pre-requisite either. One considered it a 'soft option' because 'I think the impression is that the sports science students get a lot of free time and don't have to put very much into it …' (Participant 10: line 539; line 600-601). Telling this participant that applicants to the accelerated training must have a First Class Honours or Upper Second Honours degrees didn't seem to appease this clinician. However, others disagreed. Speaking from personal experience Participant 4 stated that the sports science degree was of 'higher quality' and 'a lot of depth' (lines 135-145).

For others it was not just the content of the science-based first degree that added benefit for the accelerated students to enable them to cope with the condensed course but the skills learnt from that first degree in that 'the main skill is just to be able to learn in a certain way' then 'I suppose they could really come from any, any background and, and develop really on the MSc' (Participant 12: line 460-462). This indicates that they had learnt how to learn and reflects the metacognition discussed on p58.

Another participant was less concerned with the type of degree and concentrated on the person:

> I would probably go much less on what their relevant degree was and much more about what their motivation and their kind of holistic approach actually was really,
> (Participant 6: line 370-372).

To this participant the scientific content was less important as long as the first degree had 'social relevance' meaning that:

> they actually have some desire or wish or previous experience of dealing with people or understanding the facets that actually make up people really,
> (Participant 6: line 322-324).

To this clinician when choosing new staff to work with clients with long-term and disabling conditions:

> I think their, partly their clinical experience and their erm, qualifications is only as relevant as the other bits that you need to try to tease out of them at interview.
> [J: … bits?]
> Those other bits are really being able to, being able to work cooperatively being able to work as part of a team, being able to see people in their whole contexts
> (Participant 6: line 375-386).

The philosophy of the course was important to some participants:

> my perception, wrongly or rightly, would be that a science-based course would give you a more analytical approach, a more logical approach, things that er, otherwise a sci, whereas a, an arts based degree I, I see as being a, a lit, a little bit more amorphous, not quite as defined, based on more abstract, abstract ideas,
> (Participant 4: line 867-872).

Participant 2 agreed that coming from a science background it 'certainly would make their life easier' whereas a Arts-based course 'would be very different prospect in terms of the way they learn, in terms of erm, … sort of how they study', (Participant 2: line 567-572). Hence most participants were resolute that the knowledge and skills from a science background were essential pre-requisites for the accelerated pre-registration course. Based upon these discussions they appeared more accepting of the format and delivery of the accelerated pre-registration course.

In an interesting twist when asked whether they would accept a physiotherapy graduate having had a previous Arts background to work in their team all participants gave surprising answers. They 'wouldn't mind' (Participant 1: line 636); it wouldn't 'actually necessarily hugely concern me' (Participant 9: line 894); 'I probably wouldn't be worried about it' (Participant 12: line 471). In a contradiction to their previous claims they said that they would acknowledge the graduates' hard work involved without the support of prior science based background:

> If they've managed to, to get their physio degree which is an achievement by anyone's standards erm, then fair-play to them,
> (Participant 2: lines 556-559).

This was supported by Participant 9 (line 848-850) and by Participant 12 who agreed:

> it's not an easy course by any stretch of the imagination, they have to work very very hard and you see that every time that you see them coming in as students so, you know, if they have managed to get through the course and actually have

completed then, you know, they must have had, must have some skills that makes them prepared to come into the work place. I think it shouldn't make a difference,
(Participant 12: lines 475-481).

Indeed, one was even more complimentary. 'In a way I should respect the History graduate more, shouldn't I? cos they must've worked even harder' (Participant 1: lines 914-915). Hence the majority of participants considered a previous degree to be necessary for accelerated physiotherapy training for the additional study and life skills to enhance their new accelerated learning. However, as noted, contradictions existed as to which type of graduate they would accept within science-based subjects or the Arts.

Comfort zone: a musculoskeletal bias
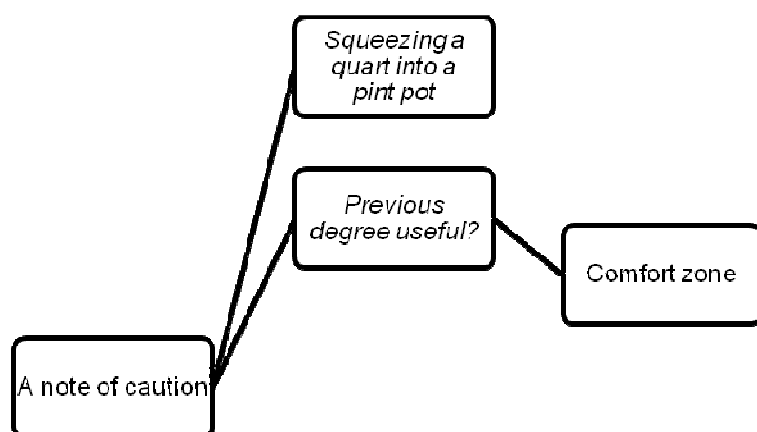
As noted many participants commented that the accelerated students would require a science background to enable their accelerated studies. In another interesting twist they suggested that, as graduates, they became too reliant upon this background. In the context of this analysis the 'comfort zone' was derived to mean the accelerated graduates' residual reliance upon the subject and content of their first Honours degree. Many participants appeared to believe that this was invariably a background of Sports Science, or similar subject matter. Indeed one participant knew of no other route by which accelerated students might join the course. 'They're the only ones I've ever worked with (laughs)… All of them' (Participant 12, line 447).

Of note sports science or similar types of courses have some relation and cross-over with the musculoskeletal speciality of physiotherapy in terms of physiology, biomechanics, analysis of human movement and exercise, (Leeds Metropolitan University, 2009). Some participants saw this positively as the accelerated graduates were then utilising their range of skills to their advantage. Hence it was thought that certain patients were managed well by these new clinicians with a depth of knowledge in that field that was 'definitely' better than the traditional counterparts, (Participant 11: line 387). This was 'just by default because that's what they've done before, not because of what they've learned on the course' (Participant 13: line 432-435). Others agreed:

> if you ask them, you, they always say 'oh yes I've done sports science before I came into physiotherapy', erm, and almost from a week in to working with them you can see the way they pattern, the way they work and it's very much exercises to do with musculo-skeletal things, (Participant 12: lines 154-158).

However for this reason some participants from the other two main threads of physiotherapy (namely the neurological or cardio-respiratory specialities) saw the comfort zone less positively. These participants considered these accelerated graduates to be too reliant upon their preferred musculoskeletal clinical knowledge and musculoskeletal clinical skills. As such, the same participant noted that 'watching it from a neuro point of view I don't think they get the neuro side of things or training as well' (Participant 12: lines 158-160).

> I know this is kind of quite a sweeping generalisation but a lot of them [accelerated graduates] are musculo-skeletal based and I find that they don't have as much interest, and that's not always the case but in the large majority of them, they are not as interested in the respiratory and er, [neurological] rehab side of things and much more musculo's [musculoskeletal] 'cos a lot of them have come from sports sciences,
> (Participant 12: line 119-125).

To these participants it was 'evident' that the accelerated cohorts thought 'they only need to do the musculo-skeletal and that kind of thing' (Participant 10: line 781-784). On some placements relating to respiratory care or care of the older person the accelerated graduates were often thought to 'have difficulty' because 'they don't have the interest in those areas' (Participant 10, line 498- 500). To the participants this appeared to have had ramifications in terms of the accelerated graduates' levels of interest and participation. In some circumstances their comfort zone appeared to be detrimental as the accelerated graduates' clinical reasoning [clinically based problem solving] was thought too narrow minded. This was

then thought to have implications regarding these graduates' clinical management of the neurologically impaired or cardio-respiratory impaired patient. According to Participant 12 'they come onto the Masters course with an idea of where they want to be' with 'that focus' having had experience of working in sporting environments such as gymnasiums (line 205-208). Hence at work these accelerated graduates were said to look for patients suffering sports injuries even though they work on neurological wards being a very different clinical speciality:

> they [the accelerated graduate] can spot a weak quad [quadriceps muscle of the thigh] but they can't actually tell you erm, what's the reason for it. It's just a weakness of the muscle, [to them] it's a musculo-skeletal problem [e.g. thigh strain]. They can't then identify that actually they've [the patient's] got a hemiplegia [a 'stroke' causing significant brain damage that caused the muscle weakness] down that side erm, and, or, you know a neglect [related to brain damage], it's just they're focused very much on the muscle. It's the muscle, the muscle, the muscle,
> (Participant 12, line 299-305).

This concerned this participant greatly. It reinforces Gourgey's (1998, p82-3) belief that some novice students do not clinically reason well. They tend to quickly choose a solution strategy but rarely stop to evaluate their work to see if it would achieve their goal and hence waste time on 'wild-goose chases'.

Yet to be fair to all it could be argued that traditionally trained graduates may have a similar interest in musculoskeletal therapy although no participants appeared to consider this. One study of seventy-four fourth year traditionally trained students at the University of Otago, New Zealand, responded to a prospective questionnaire survey results indicating that 68.8% of the participants intended to work in hospital `rotational' position in their first year of employment (as is common practice). However, 61% intended to work in musculoskeletal physiotherapy in a private practice within five to ten years post graduation. According to that study none intended to be employed as a cardiorespiratory physiotherapist in the same period (Dodson et al., 2001, p19). It is appreciated that New Zealand offers a different health and social climate but a similarly gloomy picture occurs in the UK. Of 222 questionnaires from final year physiotherapy students from 22 physiotherapy training institutions in the UK 80% of students were positive about the value of cardiorespiratory physiotherapy. 45% confirmed that they would consider specialisation but only 6% stated an intention to specialise, (Roskell and

Cross, 2003). This must certainly have ramifications for pre-registration education and impact upon the staffing of specialities in the future profession.

In summary physiotherapy participants from the cardio-respiratory and neurological specialities reported, what they saw as, a narrow minded approach in relation to some accelerated graduates. This is explored further in the next section as participants from in the musculoskeletal field of physiotherapy also saw other difficulties with the comfort zone.

Can't see the wood for the trees
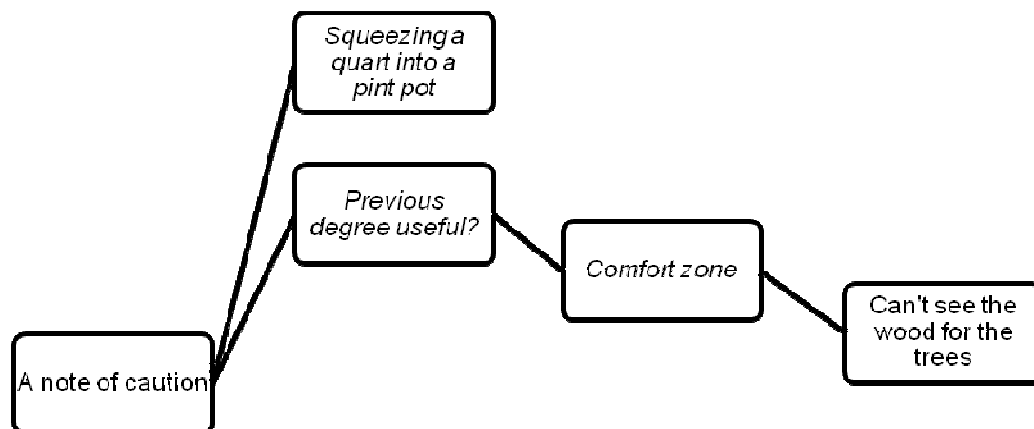
Participants from the musculoskeletal specialities recognised confusion in some accelerated cohorts who had prior experience of working in a sporting environment. It was suggested that they could not appreciate the extent and effect of ill-health 'especially working in a hospital' where 'you really have to tone down' (Participant 11: line 394-395). In contrast to the majority of traditionally trained graduates who had less musculoskeletal experience they said they appeared the more likely to miss clues and perhaps treat inappropriately. Participant 11 spoke of one patient suffering severe back pain, being hospitalised, and needing bed rest because of a prolapsed disc. She thought it inappropriate that the accelerated graduate failed to appreciate the severity of the case. Instead the accelerated graduate would try to teach progressive spinal exercises when the patient couldn't 'even stand up and walk to the toilet' (Participant 11, lines 393-401). The clinician's concerns here was that whilst the accelerated graduates 'just tend to be a lot more clued up' they remain 'focussed on the specific problem

rather than the, the whole, the whole scenario' (Participant 11, lines 408-410) and in doing so

miss a more realistic treatment plan. Participant 11 believed that this was because:

> they'll know something that they've heard and they'll hone in too quickly and
> won't think about, sort of, the more, the more broader aspects of it,
> (Participant 11, line 446-449).

Of significance participants for this study viewed many accelerated graduates as having, what

could be characterised as, a blinkered approach. Some accelerated graduates were said to

miss significant clinical cues which, they believed, the traditionally trained graduate would be

more likely to have spotted. This shortcoming is described in this analysis as the accelerated

graduates not being unable to 'see the wood for the trees'. They were said to be too reliant

upon the musculoskeletal comfort zone that restricted a more holistic approach and, in this

case, would affect the patient's clinical treatment.

This could be explained by theories of clinical reasoning which, itself, is:

> a process in which the therapist, interacting with the patient and significant
> others... structures meaning, goals and health management strategies based on
> clinical data, client choices and professional judgement and knowledge,
> (Jones and Rivett, 2004, p3)

Pattern recognition is one such skilled clinical reasoning tool used by experts whereas

novices are said to lack sufficient knowledge and experience to recognise these clinical

patterns. Instead they are said to rely on 'the slower hypothesis testing approach to work

through a problem', (Jones and Rivett, 2004). Physiotherapy participants appeared to suggest

that some accelerated cohorts focused too much, missed clues and hence made mistakes.

This is suggestive that the accelerated graduates inappropriately considered themselves to

be skilled in their specific clinical fields being their comfort zones and questions their beliefs in

expertise described by on p181. To the participants this contrasts with those students and

graduates from the traditional route who were less focused. As such they 'tend to look at the

picture maybe a little bit more holistically' (Participant 12: line 309) and so a more 'functional'

approach (Participant 11: line 441-443).

Given the specificity of this particular 'comfort zone' there is little in the literature to support

this theme. However, others have identified a 'tailored' approach to learning. From her review

of accelerated nurse training there was a real sense of accelerated students wishing to 'clear

the way for them to learn 'what I really need to know to be a nurse' ' (Cangelosi, 2007, no page); the assumption being a real need to cut to the chase given the quantity and time constraints involved (Kasworm, 2003, p22).

This desire to 'eliminate what students considered extraneous material and stress the most important concepts' (Scott, 2003, p35) is questionable. According to Miller et al. (1999, p164) 'students at this stage judge the relevance of learning within a narrow frame of reference defined by their own expectations and those of others in relation to their role'. Hence one wonders how does the novice student know what is relevant and what is not?; or that their previous knowledge and experience is sufficient or relevant? In terms of the research aims for this study (namely to develop a theoretical appreciation of the APRC and their implications for physiotherapy education and practice) these findings provide a powerful reflection of both the admissions procedures and policies for applicants with a sports science-type background and the subsequent pre-registration training of such individuals. It appeared that some of the participants of this study desire graduates with more holistic approaches to their clinical practice.

Over-confidence
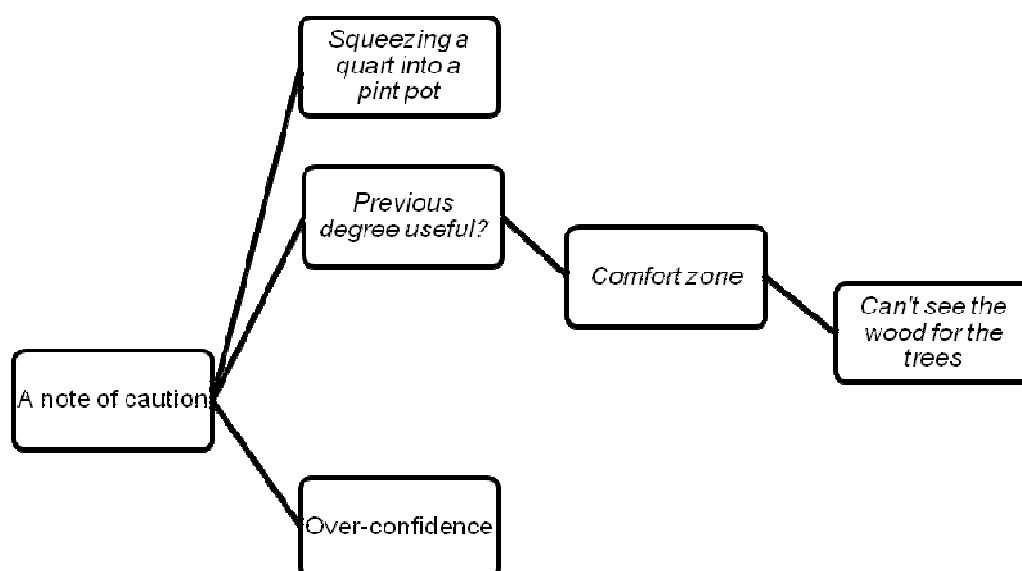
Many participants were pleased with the confident abilities of the accelerated staff in that they were prepared, and able, to undertake their clinical duties without need of regular support:

> obviously if you're on a busy ward and you don't have much time and
> somebody's saying 'yeah I'm fine, I'll go off and see that patient', erm, you might
> be quite willing 'oh yeah you go and do that'….,
> (Participant 11: line 282-285).

However, in the same sentence this participant suggested that this unsupervised independence can have negative effects:

> … and then that's the problem when things happen further down the line and,
> and you sort of realise that maybe they weren't as good as you thought,
> (Participant 11: line 285-287).

Others suggest that these graduates could appear 'over-confident in some areas that perhaps they haven't got the experience in' (Participant 9: line 256-257). This concerned another:

> that's the thing that just scares me a bit about the Masters students erm, Masters
> graduates. Sometimes if they were on their own they would go and get
> themselves into a situation where they would lay their hands on too much and be
> doing too much to someone where it, it's maybe a person that they really need to
> step away and think about the broader picture a little bit,
> (Participant 11: line 431-437).

Perhaps because of the nature of the conversations direct comparison were made between the two cohorts. Hence traditionally trained graduates could be viewed as 'anxious' and 'wet behind the ears' whilst the accelerated graduates could be 'over-confident'. This was highlighted by one clinician:

> if a BSc student's so anxious that they don't want to do anything, that can be
> difficult as well. Erm, … so …
> [J: Which are you more likely to see, the anxious BSc graduate or the over-
> confident MSc graduate?]
> Over-confident MSc graduate (laughs),
> (Participant 11: line 470-481).

Having been identified as a key issue in the interviews in Stage Four the notion of over-confidence was examined within the questionnaires of Stage Five. 32% (n=16) of the questionnaire respondents agreed with Question 17 that asked if the 'Accelerated graduates are over-confident [and so less likely to seek clinical support]'. In contrast 68% (n=34) disagreed. One clinician did not respond. Disagreeing with the statement suggested that

these clinicians did not consider the accelerated graduates to be overly confident. The following is a breakdown of responses:

- 46% (n=23) of all such respondents were Band 7 physiotherapists being a high ranking seniority amongst staff who would be responsible for staff's day-to-day supervision,

- 30% (n=15) of respondents were staff who had themselves studied M-level modules as part of their own post-registration, post-graduate training, and

- 20% (n=10) of respondents worked in the musculoskeletal clinical specialities.

These aforementioned questionnaire responses did not mirror nor complement those from the interviews. It was difficult to analyse why this might be the case. In particular, it was noted on reflection that the questionnaire question had two elements within it; over-confidence and the likelihood to seek support. The question and its resulting judgements are therefore ambiguous. It is difficult to draw accurate conclusions and hence the findings from the interviews seem more candid. This is because qualitative research is said to give the individuals 'a voice', (McLeod, 2001, p3). The very nature of conversation enables clarification and elaboration between the researcher and participants. Qualitative research is said to provide 'rich or thick descriptive accounts' and is concerned with 'describing the constituent properties of an entity, while quantitative analysis is involved in determining how much of an entity there is', (Smith, 2003, p1). Hence, again, greater emphasis was placed upon my interview findings and analyses. These highlighted the issue of over-confidence in other ways that had particular ramifications as shown in the next themes.

Loose cannon: getting their backs up
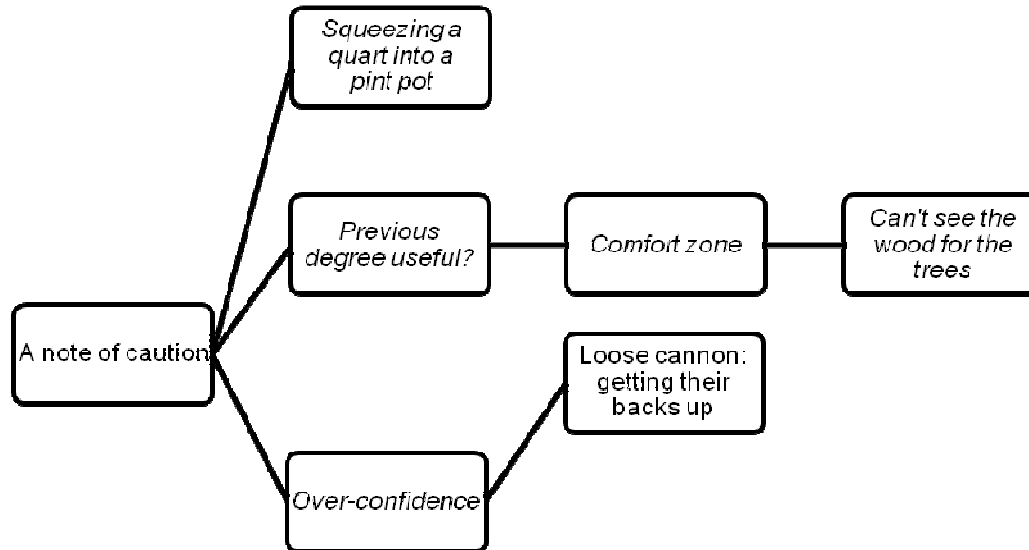
A further development of the accelerated graduate's self-confidence and self-assurance was that some participants suggested that these graduates went too far by 'confidently' expressing their opinion that 'caused some friction' within the multi-disciplinary team (Participant 10: line 277-280). Instead, Participant 10, and others, would prefer 'to have them run it by me beforehand' to 'suggest a slightly different approach'. Having worked on hospital wards for several years this clinician stated that 'you can tread quite a fine line between getting people's backs up', (Participant 10: line 255-261). Papp et al. (2003, p267) agreed suggesting that students are, on the whole, 'masters of their own destiny' but noted that some nursing students were too self-directed and did not recognise possible over-stepping of their authority. From my study other physiotherapy participants were more scathing of the accelerated graduates:

> I have known a bit of an attitude (laughs) erm, in some MSc graduates that they
> [consider themselves to be] are better (laughs). Erm, I've known of one who at
> least once a week commented 'I've got two degrees', you know, and that can be
> a bit irritating (laughs). So that's one aspect where they might be worse, although
> that might be a minority of graduates,
> (Participant 10: line 701-706).

> I think with the MSc's (hhuh) erm, politely I think they're very confident in their
> own abilities and sometimes that's not always in the best interests of their work
> erm, I, I think (hhuh) erm, impolitely I think sometimes MSc students can be quite
> cocky in their characters erm, not all, as, like I say, not everybody is but they
> certainly have got a very, a very self-assured,
> (Participant 12: line 261-267).

But another participant did not agree and, without prompting, used the same terms to defend the accelerated graduate:

> the accelerated route therapists er, have more confidence about themselves and their, and their ability but they, they don't come across as being cocky, arrogant or feeling they know it all already, they, they, you know, they, they're still wanting to learn, they're still wanting to explore the profession, feel they've got a lot to actually er, a, achieve but they feel they're, feel more well equipped to actually do that if that makes, if that makes sense,
> (Participant 14: line 913-921).

Of the fifteen accelerated graduates that Participant 14 had worked with over seven years she did not recall any sense of overconfidence and reluctance to seek assistance when they should. She considered them to have 'confidence in the right way' (Participant 14: line 936-941). Participant 13 agreed stating that in contrast it was the traditionally trained graduates who:

> can be quite pushy with you and argumenta, not argumentative that's not the right word, but if they ask your opinion and you tell what your opinion is they'll question your opinion, well why ask it in the first place?,
> (Participant 13: line 716-719).

There is much in the literature that describes confidence in the accelerated cohorts. There is nothing, however, to suggest that these individuals are over-confident, cocky or arrogant. Indeed, Cangelosi's 2007 study of nursing students on accelerated courses suggested them to feel inadequate in the clinical arena. The stories from these participants are therefore valuable as they present the positive aspects of confidence but also a cautionary note which is based upon a detailed and elaborate account of the accelerated graduate. This alternative viewpoint is striking and worthy of further study.

Rein them in
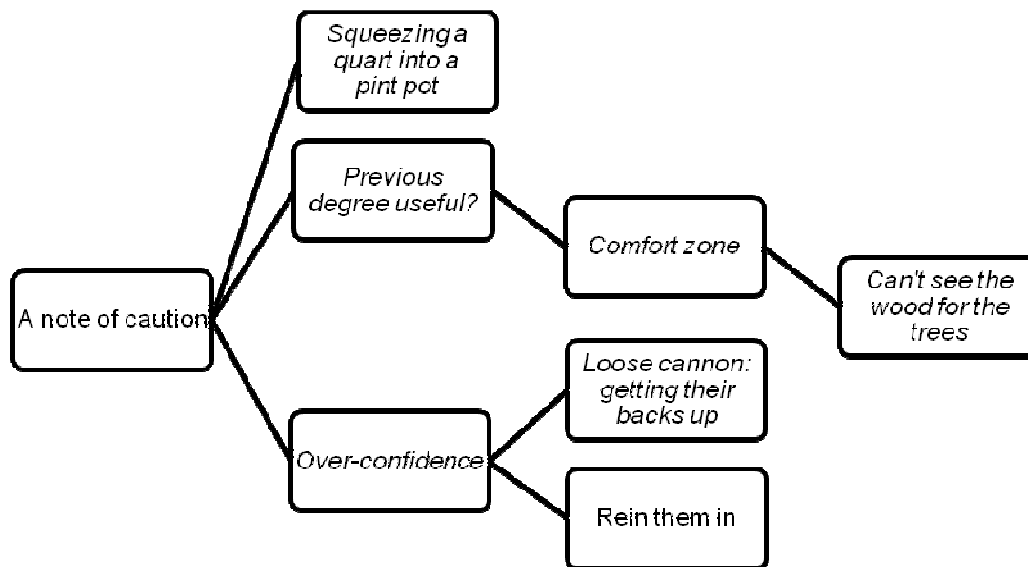
Some participants indicated that the accelerated graduates were 'happier to carry on things on their own' although that 'isn't necessarily what I, I would like them to do' (Participant 9: line 926-928). Because of the perceived over-confidence of some accelerated graduates who became loose cannons, some participants wished to control them in some way:

> when actually you've got to just kind of rein them in a little bit and just say, talk to me about the people you work with.
> (Participant 12: line 365-368).

This is seen elsewhere. From interviews with 24 nursing students Brammer (2008, p1872) agreed having found that the supervising staff in her study kept some nursing students 'on a tight rein and closely monitored and supervised'.

Reasons for a tight rein can be numerous. In this study it transpired that over-confidence could cloud graduates' perceptions of their actual abilities. One new accelerated graduate apparently believed that he had 'reached that level and there was nothing more to learn from a physio point of view', (Participant 8: line 235-237). This is surprising considering that he was newly qualified and at the bottom rung of the clinical ladder. Yet he spent more time with other members of the health-care team as noted previously on p161. Hence 'he kind of needed showing that there is more that you could do with these patients', (Participant 8: line 237-238) and is suggestive of the narrow minded approach. Participant 9 spoke of accelerated

graduates 'trying more advanced things than I think they've perhaps got the clinical ability to do' (Participant 9: line 764-768). This clinician stated that 'I would hate for the orthopaedic surgeon to get wind of [accelerated graduates] trying to attempt very difficult technical tests' (Participant 9: line 955-974). For this reason:

> you have to be maybe a bit more on top of the MSc's and make sure that they're, they're, you know, understanding what you're asking of them,
> (Participant 10: line 389-392).

The last three themes have related to the perceived over-confidence of some accelerated graduates. At times there has been a sense that they may have over-stepped the mark and need reining in meaning close supervision. This last theme relating to 'rein them in' arose verbatim from one participant and indicated the strength of feeling that has implications for the selection, training and subsequent supervision of such cohorts.

Seeking guidance? less likely
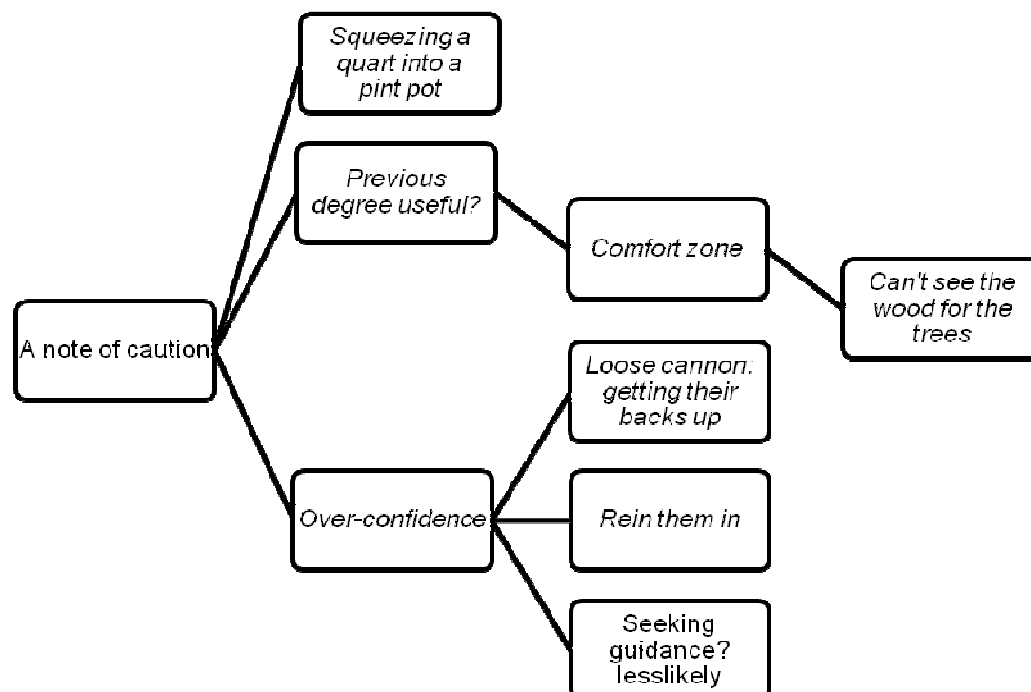
As part of their contractual duties the senior clinicians are expected to supervise the workload of the newer graduates, (Department of Health, 2004). Participants described how the

overconfident accelerated graduate and anxious traditional graduate affected these supervisory roles. When checking the clinical workload of the accelerated graduate one participant described 'pulling a face' and asking herself 'what are they doing that for?' To this participant whereas the traditionally trained graduates were more likely to seek guidance or support the accelerated graduates are more likely to 'motor on' (Participant 9: line 468-478). Yet another participant provided the counter argument. Her accelerated graduate 'really wanted to know' how a successful mode of treatment had been decided upon and 'went away and thought about it and then came back and asked me again about it' (Participant 8: line 431-445). However, there were few such examples from the participants. Instead participants were clear how they would like either cohort to act:

> It needs to be somebody that can say, ah, 'I'm not understanding this' and ask for help rather than just try and cruise their way through it. And that ties into the clinical area. I'd much rather someone put their hand up straight away and say 'I don't understand' than just paddle along and see what happens,
> (Participant 9: line 458-463).

Participants suggested that this approach reflected the nature of the traditionally trained graduates. It appeared from the analysis that seeking guidance was suggestive of proactivity yet the notion of being 'wet behind the ears' suggested passivity. When comparing the two groups participants suggested that the accelerated graduates were less likely to ask for help. 'They don't like asking questions. They like to get on with the job' but so much so that 'you have to hunt them down and find them and find out what's going on with them':

> 'How're you doing?'. 'Fine' is their kind of response. 'No, tell me about your patients'. Then they'll kind of talk you through things, whereas the BSc's will come and quite regularly check with you,
> (Participant 12: line 272-282; 345-351).

Participants said that these accelerated graduates appeared 'withdrawn' and 'reluctant' to talk (Participant 11: line 326-328) but by doing so they were accused of looking 'a bit too self-assured sometimes' (Participant 12: line 616-623). This appeared to be more troublesome to the supervising clinicians than the passive 'wet behind the ears' traditional graduate.

Various explanations are offered for this reservation or reluctance. Despite their intelligence 'I think they just start to panic a little bit about things' (Participant 12: line 321-325). Given the pressures of accelerated training this can be understandable. Youssef and Goodrich (1996)

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studied stress levels in a convenience sample of accelerated (n=48) and traditional (n=46) pre-registration nursing students with wide demographics at one private university in the Washington Metropolitan Area, USA. Using the State-Trait Anxiety Inventory and the Scale of Judgmental Abilities they found consistently higher stress levels in the accelerated pre-registration nursing students than the traditional students. My physiotherapy participants thought that this might be because 'they think themselves as a failure if they can't go off and just do things straightaway' (Participant 12: line 358-359). This supports the notion that accelerated graduates were considered super-human. Another agreed. 'They're not showing us that they don't know things' because 'they've sort of come into the job and felt that we're expecting that they know things already' (Participant 11: line 230-234). Hence some participants suggested that accelerated graduates put additional stress upon themselves than the traditionally trained graduate:

> I do find that they think that they should be brilliant because they've done it for so much longer [studied two courses], they should be perfect at everything, they should get out there and just do it
> (Participant 12: line 365-367).

However, these participants said that the accelerated graduates were wrong to do this noting that they are junior members of staff, just like the traditionally trained graduates. Hence 'they're there to learn as much as anybody else' (Participant 12: line 360-361). As such, overall it transpired that participants preferred this honest approach.

> Sometimes I prefer it when someone says 'I know nothing', 'cos at least you can start from nothing…[because] it's less of a sticky area to say 'let's talk about this' 'cos they've already admitted that they're not confident with it …
> (Participant 9: line 310-311; line 334-337).

Given the strength of feeling regarding this perception of the accelerated preregistration training course this is worthy of further research as some participants indicated that they had to change their method of supervision depending on the type of graduate. Participant 11 found the 'headstrong' characteristic of some to be troublesome, (line 650-652). Participant 9 went further describing the supervision of accelerated cohorts as 'more of a challenge'. To her this was because both supervisor and accelerated graduate were of similar ages but also 'because they're more set in their expectations and more focussed on what they want to

achieve'. However there was potential conflict as 'their expectations might not necessarily meet up with my expectations' (Participant 9: line 664-669).

For this participant, and others, there was a sense that the supervision had to be more direct to deal with the reluctance of both the accelerated students and accelerated graduates to discuss caseloads:

> I, change my method of supervision with them, whereas I used to say you can come and bring your problems to me and we'll, we'll talk about them, I would more take out some sets of notes that I might've noticed were looking a little bit erm, suspect and say let's talk about what you've done with this patient erm, so I did change my method of supervision,
> (Participant 9: line 948-953).

To another it had to be more guided:

> I met up with him quite a few times and we actually did joint sessions with patients and tried to get him to see that there was more that he could be doing with patients erm, and in the end his final appraisal was actually quite good and he accepted that he had missed some things and that perhaps he'd gone into it being slightly over-confident with his physio skills and there was more he could learn,
> (Participant 8: line 207-217).

This confidence made their supervisory role 'harder':

> to have somebody come in who sometimes thinks they know it all basically erm, and actually deep down they don't and that's when it, it's difficult to just try and level it out so it,
> (Participant 11: line 470-474).

Each of these present differing attributes of the accelerated graduates. Accelerated graduates could try to 'bluster it away' and 'pretend' to be fine in order to be 'left alone' (Participant 11: line 328-345). These appeared to influence the senior clinical staff in different, but a more notable manner, than the traditionally trained counterparts. However, in terms of the analysis it seems right to question the rational behind participants' views. According to Participant 9 who felt challenged when supervising some accelerated graduates:

> possibly I find it easier with a BSc to set out, they give me their objectives and I give them mine and we, and we meet in the middle and maybe the MSc's might take a bit more moulding to actually get our two objectives to meet (Participant 9: line 669-673).

It could be argued that the confident accelerated graduate may appear threatening to the participant. Alternatively, whilst the 'wet' traditional graduate required more constant

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assistance perhaps their apparent ineptitude was more appealing and less confrontational than the accelerated graduate who needed to be 'hunted down' to explain what they were doing. The notion of 'moulding' is also significant and will be explored in the next section and in Chapter Nine.

Concluding questions that highlighted preference, approval or doubt

The last questions of both the interview and the questionnaire asked the clinicians to judge the outcome of the accelerated pre-registration course in a deliberate manner. They were asked if, given the choice, they would prefer to work alongside an accelerated graduate or a traditionally trained graduate. Regardless of level of seniority or clinical specialism the majority of clinicians from both sets of data collection claimed no such preference. This accounted for eleven of the fourteen interview participants and 94% (n=47 with one non-responder) of the questionnaire respondents. At face value this upholds the accelerated pre-registration course as a significant success as it suggests that it provides an equitable outcome to the longer traditional course for differing reasons.

Nonetheless, it is worthy to explore the possible reasons for their responses. One admitted that 'I'm gonna sit on the fence here' (Participant 7: line 1039-1040) stating that she had had less experience of working with accelerated graduates and so would reserve judgement but 'could see the potential benefits of an accelerated graduate' (line 983-984). Others avoided a direct answer by saying that 'it comes down to personality' (Participant 8: line 878) and 'how they were as a person and a physio [rather] than erm, than what course they came on' (Participant 1: line 936). This may relate to some sense of political correctness associated with some Hawthorne effect occurring when participants exhibit behaviour or outcomes that they believe that the researcher expects to see, (Polit and Hungler, 1999). Equally, a response bias can occur being the tendency for participants to give the most socially acceptable answers, (Polit and Hungler, 1999). Both are understandable given that all clinicians were aware of my professional and academic background. Within the interviews

some indicated that they 'wouldn't mind' (Participant 3: line 663; Participant 10: line 390), 'wouldn't have a preference' (Participant 4: line 924; Participant 5: line 555; Participant 6: line 574; Participant 13: line 734) and 'wouldn't make a choice based on the qualification' (Participant 2: line 593; Participant 9: line 936). To Participant 10 this was because 'it doesn't matter where they've come from' as 'by the time they qualify erm, … they should all have the abilities and skills that they need to work as a junior physiotherapist', (Participant 10: line 734-739). As such, to this clinician it would depend on how they performed clinically and not the type of course they had studied.

In contrast within their interviews Participants 11, 12 and 14 each stated that they would prefer to work with a traditional graduate, albeit for different reasons:

> as a newly qualified sometimes it's better to work with a BSc just 'cos you know where you are from the beginning and you just start from scratch,
> (Participant 11: line 781-785).

This has resonance with 'Seeking guidance: less likely' as discussed on p192. Some traditional graduates were considered more open and willing to indicate their apparent lack of knowledge or skill. In contrast some accelerated graduates were thought to consider this to be a sign of weakness and would try to 'bluster it away'. Within 'Can't see the wood for the trees' on p184 clinical participants reported some accelerated graduates as 'honing' in too closely to a patient's diagnosis without considering a more functional and/or holistic approach, (Participant 11, lines 393-401; line 446-449). Hence it appeared that both cohorts required input. Yet the phrase 'start from scratch' suggested that these clinicians would prefer, what appeared to be, additional input with the traditional graduate to get the result they desired. Certainly interview participants considered both the accelerated students and accelerated graduates to be more difficult to supervise. One clinician commented upon a gender and age issue that could cause difficulty if an older, male accelerated graduate resisted the clinical supervision from a younger, but more senior, female clinician, (Participant 11, line 315-318). This brings into question whether there was a sense that some clinicians would prefer to mould their junior staff. This reverts to the historical principle that physiotherapy students were 'expected to conform to a professional mould', (Sparkes and Mason, 2002, p287; Morris, 1993). Within nursing it appeared that a similar model existed in the eyes of the students:

I think it is the source of a lot of conflicts because, 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", (May and Veitch, 1998, p635).

If that is the case it could be argued that based upon their perceptions clinicians may find this easier to do with traditionally trained graduates. There is no suggestion from the data that the traditionally trained graduate is clinically inept or incompetent in any way. Nonetheless their reported passivity and lack of confidence may be viewed as non-threatening by some clinicians. In contrast it could be argued that some clinicians may feel threatened by the accelerated graduates who may challenge their supervision in the guise of clinical debate or, more likely from the data, the accelerated graduates did not follow the expected mode of supervision, (Participant 12: line 272-282; 345-351; 616-623).

Working in a non-musculoskeletal field Participant 12 would choose a traditional graduate believing that accelerated graduates 'don't have as much interest' in her respiratory and neurological rehab' specialities (line 128). This judgement appeared to be based upon attitude as there was something 'just generally in their character or in, just in the mentality' ... 'that I think's just a little bit different', (Participant 12: line 128-132). This has resonance with the 'comfort zones' noted on p181. Some clinical participants believed that accelerated students' and graduates' fashioned their continued attention to one speciality within physiotherapy, predominantly the musculoskeletal field. This attention had three factors. Firstly, several interview participants believed these accelerated cohorts to have had a personal interest in the musculoskeletal management from the outset. They believed that this had determined the choice of subject matter of their first degree. Secondly, these accelerated staff wished to further pursue this interest and attempted to gather as much clinical experience in this field as possible, perhaps at the detriment of other experiences. However, as reported by Participant 12 (line 299-305) this could also mean mis-interpreting other physical pathologies or presentations to fit their assumptions and areas of interest. Lastly, whilst these cohorts did undertake other clinical specialities and experiences it was felt that they would revert to their first interest no matter what:

it's not their place, it's not where they want to be and they'll say "oh it was a really good rotation, I really enjoyed it, I've learnt a lot but I don't, I still want to be

a musculo-skeletal physiotherapist at the end of it" (laughs), (Participant 12: line 217-220).

Participant 14 also chose the traditional route despite having upheld the accelerated route from the beginning, and for much, of the conversation. Her final choice surprised herself and extended the interview somewhat. To the outsider this decision was not surprising given the manner in which she described the accelerated graduates:

> they're good mem, good members of staff, I wouldn't say they're shining, shining lights, you know they're not head and shoulders above erm, the, the oth, the other staff erm, sort of thinking they've been working with us now for three or four years but they're, they're good members, good members of staff, they, they don't er, lack in any skills, knowledge erm, experience at all, erm, they don't seem to have suffered from having a year less to actually, to actually study erm, and yeah, I think it's, you know, they, they, they hold their own, you know, ve, very well, [Participant 14: line 522-531]

There appeared an abundance of what the accelerated graduate was *not* as opposed to the strengths that they might have. It seems that she was initially unaware of her reactions. Yet they were notable and required consideration of the final decision:

> [sighs] although it sounds like I've been boosting up the accelerated route a fair bit, I'm still inclined to go towards the three-year option because something's telling me that three-year's has got to be better than two. Erm, and that's, that's bad I guess but, I mean I, obviously you would judge it purely based on their, you know, their performance and their references and, you know, if you knew the people and their, their, their performance at work and what have you, but if I didn't have any of that and I was purely going to er, the accelerated route [or the], three-year erm, BSc route I, I think I might go for the three-year, three-year option,
> (Participant 14: line 864-874).

Participant 14 offered a valuable insight to this decision finding her own preference 'very strange' (line 892):

> Because I'm saying, er, after a year or so I think there's no difference, no difference at all and why would I choose somebody that I'm gonna have to work harder with initially, and I think it's possibly just goes back to, you know, my early im, early impressions of the courses where erm, I, I, I just felt that three years has gotta be better than, better than two and it's slightly strange that you still would revert back to that despite having quite, I think's, quite strong beliefs that erm, the MSc route does bring a lot of, along, a lot of positives to our newly qualified staff erm, so yes it would certainly, er, I would certainly want to think about it some more 'cos my initial response is for three-years but then thinking about it more it definitely becomes more of a, an argument for, for actually erm, considering the, the, the accelerated, accelerated route,
> (Participant 14: line 892-906).

Of note Participant 14 described a levelling out of initial differences between the traditional graduate and the accelerated graduate. These perceived differences related to additional confidence, initiative and clinical reasoning and were said to occur 'after a year or so', (Participant 14: line 300-308). Whilst this may further promote the accelerated pre-registration course this participant still reverted to what she knew and had experienced. It transpired that she erred towards her own training and stated that 'I feel it didn't do me a lot of harm'. Instead she suggested there to be 'a lack of awareness and knowledge of the, the accelerated route itself, erm, so you're not quite as familiar with what the course might actually en, en, entail'. As such 'you maybe's then less keen to actually employ somebody from a course that you're not as familiar with', (Participant 14: line 1004-1021). This reflects comments made in 'Squeeze a quart into a pint pot'. It suggested that the academic institutions and governing body still need to promote and explain the format of the accelerated courses.

It is of further interest that it was Participants 11 and 14 who stated that any differences that were noted between the accelerated cohorts and traditionally trained cohorts levelled out after the first year of employment, (Participant 11: lines 622-625; Participant 14: lines 300-308). Yet they still chose the traditional route for the aforementioned reasons.

Summary of 'A note of caution'
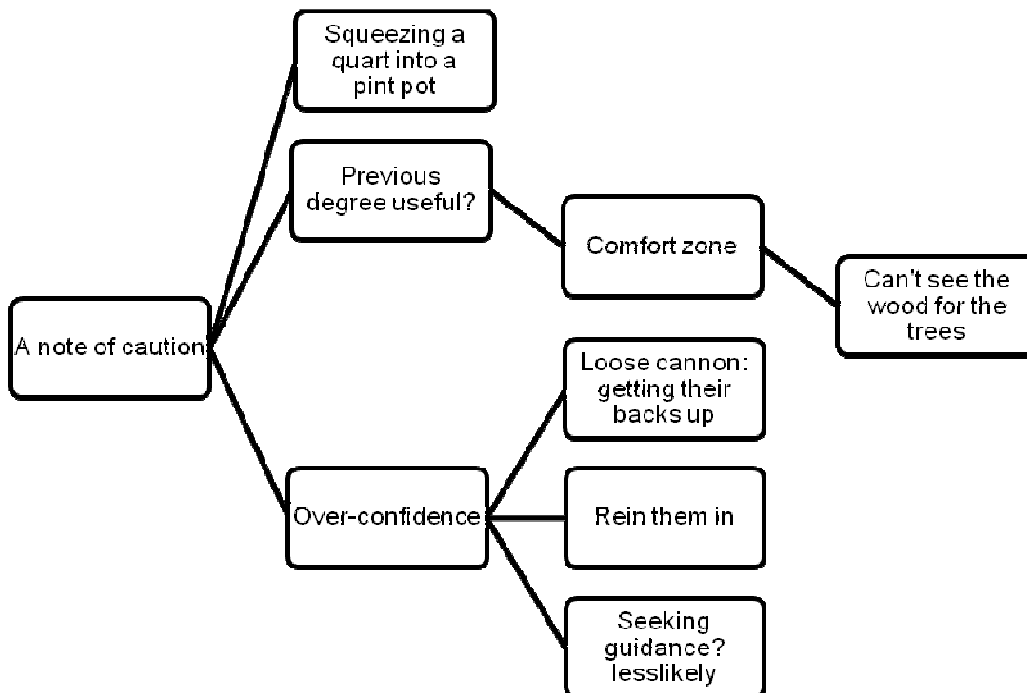
Figure 21: Summary of 'A note of caution'

This chapter presents a contrasting viewpoint to the previous chapter. 'A note of caution' is presented to university educators and the profession, alike. Despite the compliments made towards the pre-registration courses as described in the previous chapter some interview participants voiced doubts, concerns and anxieties towards the manner of the accelerated route and the graduates that it produced.

As ice-breaker interview questions participants were asked to explain the format and rationale for the newer accelerated pre-registration courses. Many could not. Many viewed the shortened course as merely being condensed with little awareness of the transferable academic and life skills that accelerated students might be able to utilise. This was reflected in the theme 'Squeezing a quart into a pint pot'. This lack of appreciation of the course design caused some suspicion and concern amongst the participants. If the course is to be fully accepted it is suggestive that more needs to be done to explain that the accelerated pre-

registration course is different from the traditionally designed course and that these differences need to be embraced.

Other concerns were more discernible. Participants recognised the value of the accelerated graduates' previous degree. However, according to many participants the nature of that degree related to sport or was musculoskeletally biased. To the participants this created issues whereby the accelerated graduates couldn't always 'see the wood for the trees' and missed clinical cues because they viewed the clinical scenario from only from that musculoskeletal perspective.

Whilst some participants viewed accelerated graduates as possessing self-confidence others perceived their manner to be overly self-assured. A few accelerated graduates were considered to over-step the mark whether in team dynamics or in their clinical judgement. Some accelerated graduates were said to lack an appreciation of the delicate nature and balance of teamwork and this over-confidence was said to cause some friction. This self-belief also caused the participants some concern as accelerated graduates sought less support than would be expected for their status and relative inexperience. This was said to have created changes to the format in which the clinical interview participants supported and supervised their junction staff. Indeed, some participants described having to re-invent their supervisory role. This appeared to detract from their initial satisfaction of having accelerated members of staff who could just 'get on with the job'.

However, on balance the participants spoke well of both cohorts. Despite their concerns many interview participants and questionnaire respondents offered no preference in their choice of which cohort to work with. Yet, a few chose to favour the traditional route. This suggests that caution and concern persist.

The next chapter draws major themes from the analysis together in a final discussion that includes a reflective piece of the whole process.

CHAPTER NINE: INTERPRETATIONS AND REFLECTIONS

Introduction

To my knowledge this is unique research that explores clinicians' perceptions of the outcomes of accelerated pre-registration courses in physiotherapy. Results from Stage Three (being the study of physiotherapy students' marks whilst on clinical placement) indicated that accelerated students performed better in some areas of their clinical performance than the traditionally trained students. Interview findings and questionnaire results in Stages Four and Five, respectively, provided varied perceptions regarding accelerated courses but generally clinicians accepted them as they did their traditionally trained counterparts. The majority of participants admired the accelerated graduates for their abilities to train as physiotherapists in a shortened time. Many suggested that their skills and talent added something extra to patient-care and clinical team-work. Greater awareness and lessons learnt from the accelerated students' and graduates' behaviour and attributes could benefit future cohorts. Equally, and of significance, insight into their proactive attitude and approach could benefit the tuition and professional development of traditionally trained cohorts who were thought, in comparison, to be 'wet behind the ears'. However the risk of developing self-assurance is that arrogance may result. Despite this, and other notes of caution presented in Chapter Eight, it remains a significant achievement for the accelerated graduates and those academics and clinicians that supported and developed them.

It is appreciated that the data and subsequent analysis in Chapters Seven and Eight have been presented in a controlled and chronological style. This does not necessarily reflect the analytical process that proved complex to disentangle given that participants saw pro's and con's of each training route for differing reasons. Indeed, 90 themes were eventually consolidated into 21. The full list of themes and development of superordinate themes can be seen in Appendix 11. Part of the inter-relationship of the data collection and subsequent findings is shown in Appendix 8, 9 and 10.

The purpose of this chapter is to respond to pertinent elements that arose from the data analyses in respect of the last two research aims namely:

4.   To understand the impact of the accelerated pre-registration course in physiotherapy by determining student performance and exploring clinician's perceptions.

5.   To develop the theoretical appreciation of the accelerated pre-registration course.

In particular the chapter will explore the possible rationale for the clinicians' judgements. It is of educational interest to explore how the accelerated cohorts succeeded as they did in the shortened timeframe. The issues to be reflected in this chapter relate to:

−   the significance of confidence as perceived by the interview participants

−   reflecting on the learning styles of the accelerated student and graduate compared to the interview participants themselves

−   the ability of accelerated graduates to successfully acclimatise to the working environment (i.e. their skill of legitimate peripheral participation into a community of practice).

The first of these considers my approach to understanding the rationale for the clinicians' judgements.

Insight into the participants' views: understanding their judgements

Of the many quotes that held significance for me during the analysis the following insight was particularly striking. Speaking of the accelerated graduate:

> I think they must be exceptional people to be able to go away and actually be that … focused to do that erm, but that's not the way I work. No. (Laughs), (Participant 12: lines 645-652).

At that early stage of the analysis I had recognised that the interview participants were making direct comparisons between the accelerated graduates and the traditional graduates. Indeed the conversations had led them to do so. Up to that point I hadn't fully appreciated that they were also making comparisons with themselves as people, as having been students

themselves, as senior clinicians and as the standard bearer or benchmark for their judgements. Senior clinicians said that 'these accelerated graduates were not like me'. This remark appeared 'off-the-cuff' being a spontaneous contribution but of interest in the subsequent analysis. As such it highlights the strength of qualitative research. From the subsequent analysis the phrase had both positive and negative connotations and supported the creation of the two superordinate themes as they have been presented in previous chapters. The sense of dissimilarity is worthy of further discussion. As a vehicle to explore their subsequent perceptions of both the traditionally trained and accelerated trained cohorts it was important to consider how the participants might have perceived themselves and their own clinical and academic background. The following is not presented as additional findings to the data collection of this thesis but as a discussion of the subsequent interpretation. The expression 'that's not the way I work' was derived from Participant 12 in the aforementioned quote.

'That's not the way I work': self-deprecation

Of note throughout the data collection and subsequent analysis there was a sense of interview participants' self-deprecation. The notion that accelerated graduates were 'super-human' intrigued me from the start. There was nothing to suggest either from the data or from the literature that these successful accelerated graduates had super-human attributes. Masters level expectations are clearly identified and achievable by many. It was the timeframe and intensity of the shortened course that the clinicians found incomprehensible as noted in the theme 'squeezing a quart into a pint pot' on p171. Yet it was the perception that these graduates could be deemed to be better than the interview participants that held interest to me. In comparison many clinicians also admitted little awareness or understanding of the format and rationale of the accelerated courses. Some clinicians believed their own pre-registration training to be old-fashioned. They recalled their own teaching to have been didactic 'the way you learnt was much more 'taught, I listen' ' (Participant 7: 618-627). This Level 5 Diploma trained clinician said that critical analysis 'wasn't part of my training'. Instead the general learning style was considered to be passive and 'spoon-fed' as 'the teacher stood at the front and dictated and we, we copied it down', (Participant 1: line 121-126).

The contrast between the prescriptive Level 5 training and the current analytical education of Level 6 Honours level outcomes was confirmed by the Chartered Society of Physiotherapy (2008c). Sparkes and Mason (2002) and Morris (1993) both agreed that this didactic and 'dogmatic' style was the historical and conventional approach to physiotherapy education with students being 'expected to conform to a 'professional mould' ', (Sparkes and Mason, 2002, p287). Physiotherapy educationalists have been said to have used a 'pot-filling' approach whereby the students were 'empty vessels waiting to be filled by teachers who shower them with 'liquid wisdom' ', (Morris, 1993 p91). This suggested a passive approach to their learning with little integration and inter-relation of topics, (Morris, 1993). This historical and didactic nature of physiotherapy education appears disparaging. It does not appear to have recognised the skills and experiences that students can bring to their pre-registration education as noted by Scott (2003). It is, however, recognised that the style and standard has been developed over recent years with emphasis upon problem-solving, reflection, critical appraisal and evaluation at Honours level, (Quality Assurance Agency for Higher Education, 2008; Chartered Society of Physiotherapy, 2002b). Indeed the interview participants spoke of such changes. Nonetheless, Morris' dated paper from 1993 is particularly useful to confirm the academic foundation and experiences of the profession. As noted it also reflects the possible educational background of five of the fourteen interview participants from Stage Four and twenty of the fifty-one questionnaire respondents from Stage Five. This may have impacted upon their judgements about students and graduates from either cohorts. These participants recognised that 'everybody's got different learning needs' but some seemed to prefer this passive approach stating that it 'was good for me', (Participant 1: line 371-376). This is of particular interest as one interview participant with an Honours degree also inferred her own passive learning style:

> I need to be sat down and discussing things, rather than being able to go away and, and self-study and things like that which I think the MSc's do a large amount of erm, and you know, I don't take that away from them, (Participant 12: lines 645-652).

In this manner there was this sense of self-deprecation on behalf of many interview participants. It questioned whether they would consider any current style of tuition, whether at Honours level or Masters level, to be better than their own. Indeed this was a strong inference

amongst the two-year Level 5 Diploma physiotherapy clinicians that both the newer BSc (Hons) qualifications and the M-level produced superior graduates. Others also believed that the criticality of the Masters level accelerated pre-registration courses was to be admired and had contributed to, and enabled, the accelerated graduates to succeed. To be fair to them this has been proposed in the literature. Nurse educators of today have been told that they must 'explore innovative methods of educating this next generation of nurses'. To them 'teaching as we were taught' would not provide the sense of 'mastery, self-esteem, or hunger for more education in students' that is expected and demanded for the ever-changing health care environment, (Cangelosi and Whitt, 2005, p116). Nonetheless the self-deprecation may account for the participants' beliefs of the positive attributes of the accelerated graduate.

A further inference could be that they then assumed that it might produce a better quality clinician. To Participant 13 this was because 'at the back of my mind I almost think it's, it [the MSc from an accelerated course] is a better qualification, or it, it appears to be a better qualification on paper', (Participant 13: lines 121-123). Hence there was a sense, to me, that there was an assumption that the newer accelerated course 'must be good, mustn't it'. This was not necessarily a rhetorical question but could be a statement of expectation, trust, hope or faith. It was unexpected within the analysis and proved insightful.

'That's not the way I work': standard bearer

In contrast to their self-deprecation there were several examples by which the interview participants indicated that they felt themselves to be a better quality clinician than the accelerated graduates regardless of their additional experience. This had both clinical and professional connotations. Despite accelerated graduates being thought as having self-confidence and motivation to 'hit the ground running' some participants had reservations. Some accelerated graduates were said to need 'reining in' as their over-confidence got 'people's backs up', (Participant 10: line 255-261). Hence there was a suggestion of over-stepping the mark. It was as if the clinicians wanted these new graduates to 'know their place' and perhaps reverts to the concept of being able to 'mould them' in the manner that the senior clinicians saw fit, (Sparkes and Mason, 2002, p287). This 'moulding' is said to relate to

professional socialisation (Howkins and Ewens, 1999) being the process by which one 'acquires the characteristics necessary to function successfully in his chosen profession', (Fincher Corb et. al. 1987, p226). One wonders in what way the participants may have wanted to mould the new graduates. Perhaps they wanted to ensure that the next generation of clinicians were as skilled as the last. The sense of 'moulding' may possibly relate to the clinician wishing to act as the adjudicator and gatekeeper for their profession with regard to pre-registration physiotherapy students and graduates; in doing so they wished to maintain standards. Successful completion of pre-registration training requires satisfactory completion of both academic studies and clinical work. Nothing appears to currently exist in the literature that relates to clinicians acting as gatekeepers for their respective profession perhaps because it is the role of the governing bodies (Health Professions Council, 2007). However, within academia Gazza (2009) undertook a qualitative study in nursing to explore perceptions of academics in their roles as tutors. 'Being gatekeeper to the profession' was one such theme. One such participant described herself as having:

> control over who enters the profession… We have the burden and the privilege of being certain that the people who graduate from our program are not only good representatives of our program but that they're safe and going to make an impact, a positive impact, on patients, (Gazza, 2009, p222).

Alternatively, perhaps the moulding had a more defensive connotation. Perhaps some senior clinicians said they felt threatened by what they saw as new, dynamic graduates with a better education. Such 'moulding' may be seen to restrain them to make them less threatening. It would be of interest to explore this further in future research.

The Chapter Eight superordinate theme 'A note of caution' reflected degrees of concern from clinicians towards some accelerated graduates as well as traditionally trained graduates. The clinicians in this research claimed that their judgements of students and graduates were important to maintain the professional standards to which they, themselves, aspire. Hence, as noted throughout the past three chapters there has been a difference in views regarding the accelerated pre-registration course as much as the traditionally presented pre-registration course. The final sections of this chapter offer a summary of key findings and their implications.

The significance of confidence

Self-confidence, self-belief and self-efficacy as cornerstones of the accelerated pre-registration course
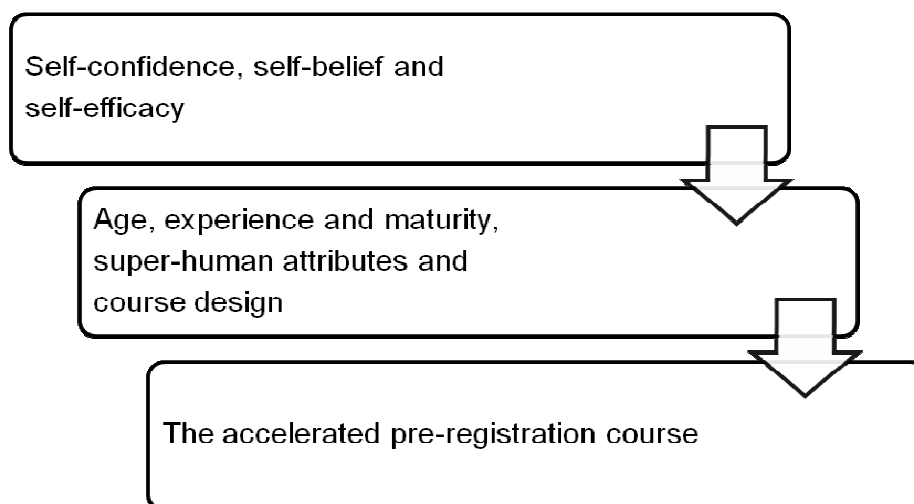
Perceptions of age, maturity and life skills have been recurring issues throughout this research. These, together with successful academic skills, have contributed to perceptions of accelerated graduates' self-confidence and of their success. In particular, several of my interview participants appeared to have confidence in the accelerated graduates' self-confidence but not their arrogance. The following sections consider differing elements that contributed towards the impression of self-confidence.

Self-confidence from academic success

The notions of self-confidence and self-efficacy are said to be contributing factors to academic achievement, (Seifert, 2004; Mayer, 1998; Bandura, 1997). Wlodkowski (2008, p187) argued that self-efficacy is situation specific, and is largely based on, past performance and experiences. In terms of academic achievement my interview participants appeared to assume that these graduates had greater metacognitive skills in comparison to their traditionally trained counterparts. Their assumption could be supported by Scott (2003, p31) because 'students do not come into the classroom as blank slates. They arrive with a plethora

of knowledge and experiences that support their personal understandings of life and the world around them'. Adult learners are also said to have additional skills to manage their study alongside their everyday life and, more importantly, that they will cope with such studies, (Rønning, 2009). According to Heale et al. (2009, p371) these efficacious students are more likely to challenge themselves with 'vigorous effort' to 'attain mastery'. Students who pursue mastery are described as being self-regulating, self-determining, use strategic skills and are metacognitive and achieve deep learning, (Rønning, 2009; Seifert, 2004; Bandura, 1997). Importantly, Seifert (2004, p142) believed that it is effort that creates success and that intelligence is the lesser component and is 'malleable'. This was reflected within my research findings as these concepts were reflected in the section 'Get up and go and knuckle down' on p137 which described participants' admiration of the accelerated graduates efforts and hard work to cope with the academic demands of the course. These concepts were also considered in the section 'Accept the gauntlet' on p158 that identified the accelerated graduate as being more 'brave' to undertake complex or intimidating tasks.

The clinical abilities of those from accelerated routes were confirmed in each of the different stages of this research. Students of the accelerated course performed better than their traditionally trained counterparts as noted in Stage Three in Chapter Six. Interview participants and questionnaire respondents in Stages Four and Five, respectively, also confirmed the clinical skills and competencies of accelerated graduates. The majority of clinicians in my research appeared to have confidence in the knowledge base of their students and graduates and/or that these individuals were capable of making use of their problem-solving and other transferable skills. The possible rationale for this was discussed in the previous section 'That's not the way I work: self-deprecation'. It appears to be a fair assumption as the positive attributes of mature students have been reflected in the physiotherapy literature previously as they are said to have:

> a wealth of experiential learning, social acumen and informed judgement to contribute to physiotherapy undergraduate education and instead of being the marginalised minority, should become a proportionally represented population within the profession,(Sparkes and Mason, 2002, p287).

Hence previous academic experiences appeared to have shaped the accelerated graduates. Their academic successes appeared to have given them greater self-confidence in their abilities.

Self-efficacy and transitions of academic level

Of note, the interview participants in this physiotherapy research were more likely to consider the traditionally trained graduates to lack self-efficacy than their accelerated trained counterparts. Indeed, the traditional group were the more likely to be considered passive, 'wet behind the ears' and preferred to be 'spoon fed' as discussed on p143. Lack of initiative and lack of strategies were seen as weaknesses in this cohort in comparison to the accelerated graduates. Seifert (2004) and Bandura (1997) agreed that such non self-efficacious students lack confidence. These students would view tasks as being more challenging or difficult and more likely to view themselves as incapable. Hence, the issues of confidence, self-efficacy and cognition are all intertwined and it would be beneficial to explore this further. It seems fair to propose that as adult learners most accelerated students have already developed these skills whilst, perhaps by definition, traditional students need to be taught how to do so. This is because to defend the traditional student it is argued that the transition from secondary education into higher education can be problematic as they do not yet have the skills necessary to become independent learners, nor the means of acquiring these skills (Lowe and Cook, 2003; Cook and Leckey, 1999). According to Laing et al. (2005) there could be a mis-match between expectations, preparation and skill if the student relies upon the learning styles they developed and experienced in secondary education as they will then find difficulty acquiring these independent learning style skills. Even for accelerated students Kasworm (2003) feared that such students may do no better if they also rely on previous academic skills. To her this was because the learning models in undergraduate higher education are based upon and limited by young adults' limited maturity and understandings. As such they would also need to 'adjust and develop different learning strategies and attitudes when undertaking new complex studies', (Kasworm, 2003, p22). It was thought that successful students recognised that their past strategies were insufficient and needed to 'refresh or develop a set of different learning strategies and attitudes to handle the specific demands of

the program', (Kasworm, 2003, p21). This is important because adult accelerated degree programs 'represent a new mental model of learning, grounded in adult maturity and responsible engagement in the world beyond the classroom', (Kasworm, 2003, p22). Findings from my research seem to support this viewpoint and contributes to our understanding of what enables accelerated pre-registration courses to succeed. The findings from the study of students' clinical marks in Stage Three indicated that as individuals those from accelerated routes perform well. In the clinical setting Based upon my interviews, clinicians believed that accelerated physiotherapy graduates must have achieved academic and cognitive skills. In the themes 'Get up and go' and 'Independent learner' (p137 and p141) clinicians spoke of the graduates' drive, determination, self-awareness, problem-solving skills and criticality as being above the level expected of the traditionally trained graduates. As such, it could be argued that the accelerated students have an advantage over the traditional students who do not have the benefit of their academic background and experiences. However as one participant noted they only saw the successful students being the 'cream' of the cohort and not the weaker ones who withdrew during their studies, (Participant 7: lines 933-935). Understanding how the accelerated physiotherapy graduate succeeds would be of great benefit in the training and development of their traditionally trained counterparts and should be addressed if the traditional course is to be seen as a competitor to the accelerated course in the future and not a lesser option. As this research has focused upon clinicians' perceptions it would be worthwhile to seek the views and experiences of academics in this respect.

This section is entitled 'self-confidence, self-belief and self-efficacy as the cornerstones of the accelerated pre-registration course'. Based on the emergent analysis and looking back on the whole research process my supposition has become that self-confidence, self-belief and self-efficacy *are* the cornerstones of the accelerated pre-registration course. As such I hope that my findings contribute to the body of knowledge to understand the experiential and perceived understandings of the accelerated pre-registration course.

The consequence of confidence: recognising communities in practice

This section will consider how accelerated students and accelerated graduates learn in their clinical settings and how they may become successful in integrating themselves within their new clinical environment and its clinical team. Many disciplines and professions agree that the work-based clinical placement is an essential component of vocational training. According to the Chartered Society of Physiotherapy it forms 'an indispensable and integral part of the learning process. Learning gained in practice settings is vital to students' educational and professional development', (Chartered Society of Physiotherapy, 2002b, p27). For this reason the CSP stipulates that students should undertake approximately 1000 hours of clinically-based learning to successfully complete their training, (Chartered Society of Physiotherapy, 2002b, p27).

The transfer of learning was defined by Mestre (2002, p3) as 'the ability to apply knowledge or procedures learned in one context to new contexts'. Higgs (1992b) emphasised the importance of the clinical placement for the physiotherapy student to promote 'deep learning' from complex clinical cases, develop reflection and to 'truly appreciate' their roles and responsibilities to develop their autonomous learning and promote change, (Higgs, 1992b, p822). There is a persuasive assumption that the knowledge learnt in the classroom will automatically transfer to other settings (Mestre 2002) such as from the university setting to the clinical workplace. However, it is not necessarily automatic or easily achieved. According to Etienne Wenger the difference between 'mere doing and learning' is that learning changes who we are 'by changing our ability to participate, to belong, to negotiate meaning', (Wenger, 1998a, p226). Within the nursing literature this is supported by the notion that not only is one 'learning to work' but also 'working to learn' and that this is important in students' experiences of learning in placement settings, (May and Veitch, 1998, p635). It is argued that learning is intrinsically tied to involvement and participation as 'the key metaphor and mechanism of learning', (Engeström, 2007, p41; Fuller, 2007; Lave and Wenger, 1991). This relates to communities of practice which, as noted in Chapter Three, are 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly', (Wenger, 2006, no page).

The concept of communities of practice in physiotherapy has been said to take place within in-service education programmes, clinical supervision and preceptorship (meaning support, guidance and mentorship), (Clouder, 2000). Much of the work of the physiotherapist involves teamwork whether that be a uni-disciplinary team of physiotherapists or a multi-disciplinary team of health-care workers. Findings from Stage Three indicated that accelerated students performed well in the clinical environment at each stage of their training. The physiotherapy interview participants from Stage Four described the accelerated graduates as 'hitting the ground running'. Both research Stages may suggest that both accelerated students and accelerated graduates were more able to successfully integrate themselves into the clinical team environment, this being their community of practice. This has been of interest given the shortened nature of the training programme. As noted by one interview participant:

> 'cos there's a, sort of a culture around physiotherapy and they probably don't have very long over that short period of time to pick that culture up,
> (Participant 8: line 478-489)

According to Oxford English Dictionary culture refers to 'distinctive ideas, customs, social behaviour, products; or the way of life of a particular society, people or period', (Oxford University Press, 2009, no page) and so has connection to this concept of community of practice. In situated learning newcomers need to learn the beliefs, values, and practices of the group, (Lave and Wenger, 1991). According to Lave and Wenger (1991) the process by which newcomers become part of a community of practice is the process of legitimate peripheral participation. As such they become progressively more engaged and active in the practice of the community. According to Merriam et al. (2003, p172) this occurs by commitment rather than expertise and mastery. This is reflected in my research as the interview participants viewed the accelerated graduates to have more commitment than the traditionally trained graduates. Clinicians spoke of the accelerated graduates' focus and drive, their ability to motivation to 'knuckle down' as well as their sense of initiative.

It is important to consider how accelerated students' and accelerated graduates' may integrate themselves into their communities of practice to understand how they might be accepted. Some communities of practice are more accepting of newcomers than others. Indeed, studies within the literature offer positive and negative accounts of students being

supported in their clinical placements, (Newton et al., 2009; Gillespie, 2002; Lőfmark and Wikblad, 2001). This is because in terms of a team the characteristics of a community of practice can easily be weakened because of human frailties, (Wenger et al., 2002). Findings from interviews with UK based pre-registration nursing students agreed that the learning experience would be 'emotionally draining and ineffective'. (Webb and Shakespeare, 2008, p569). Brammer (2008, p1869) agreed citing Spouse (1996, p33) who suggested that 'levels of stress experienced are inversely proportional to the degree of familiarity and friendliness offered by their mentor'. These studies appear to suggest that personalities influence the working relationship between staff and student. One student from Gillespie's (2002) study is reported to have said:

> 'I was so connected about answering her question right, and I was so concerned about memorizing the right things, that the whole big picture (of the patient) wasn't important. (The important thing was) all those little questions she was going to test me about', (Gillespie, 2002, p572).

In contrast positive staff-student relationships and a sense of 'belonging' were considered essential to create successful learning experiences in the clinical environment, (Levett-Jones et al., 2009; Gillespie, 2002; Lőfmark and Wikblad, 2001). Gillespie (2002) described the benefit of a more 'egalitarian' relationship in which 'getting along as teacher and student' and 'getting along as people' were beneficial, (Gillespie, 2002, p569). Those with a 'connected student-teacher relationship' were said to share relevant personal information between themselves, (Gillespie, 2002, p569). This enabled mutual knowing, trusting, respecting and subsequent dialogue and hence increased the students' sense of self-confidence and motivation to learn. Within my study the interview participants indicated that the majority of accelerated students and accelerated graduates had excellent interpersonal skills that enabled effective team interactions, (Participant 6: line 54-58; Participant 7: line 388-389; Participant 10: line 175-180). In contrast, the participants' perceptions of the passive nature and 'wet behind the ears' characteristic of many traditional students seemed to cause greater dissociation with them. So much so that Participant 13 considered some traditionally trained students to be 'very very immature' and indicated that 'clinically they, they haven't got a clue and socially they haven't got a clue (laughs)', (Participant 13: line 274-282). Different authors offer advice to the student on how to succeed whilst on clinical placement. This contributes

towards our understanding of how legitimate peripheral participation can be managed successfully. According to Levett-Jones et al. (2009, p319) 'students' first impressions were like a barometer that foreshadowed how their placements would unfold'. Writing as a student midwife with a PhD in cognitive neuropsychology, Miles also believed that first impressions count as 'students who are over-confident can be perceived as arrogant and self-important, and qualified midwives and mentors are likely to view this as dangerous', (Miles, 2008, p704). It is therefore 'imperative for students to behave in reticent, unassuming manner, yet assert themselves to ensure they gain knowledge, skills and confidence', (Miles, 2008, p704). This has much resonance with the 'over-confident' theme from my interviews within 'A note of caution' as clinicians distrusted such accelerated graduates. It is therefore important that such students and graduates recognise the benefits of self-assurance and the drawbacks of apparent arrogance. It is unknown to what extent self-assurance is a taught component of pre-registration vocational courses. This would be worthy of further investigation.

May and Veitch (1998) highlighted other strategies having undertaken 936 interviews relating to nursing studies in Scotland by questioning 228 tutors, 498 students and 210 mentors. It appeared that students used various strategies to 'fit in', 'learn the rules' and 'get the work done', (May and Veitch, 1998, p635). More recently, Brammer (2006) interviewed 24 Australian pre-registration nursing students and described their need to 'play the game', (Brammer, 2006, p701). By doing so they would ask their qualified supervisors questions that they already knew the answers to in order to engage with the staff. By appearing to acknowledge their greater knowledge and experience the students were 'stroking the Registered Nurses egos', (Brammer, 2006, p701). This raises an interesting alternative to my analysis that the traditional physiotherapy students within my study were indeed perhaps more canny than the clinician first thought by wishing to appear passive and subservient to their clinical supervisors. One wonders if they were successfully playing the game. This requires further research. However, if true, this approach appeared to have backfired as my physiotherapy clinicians viewed their passivity negatively. Indeed Webb and Shakespeare (2008, p569) described the importance of students being 'enthusiastic and confident' in order to gain a productive and enjoyable student learning experience. Students also need to be

'assertive and proactive' as 'you get out of prac [clinical practice] what you put in', (Brammer, 2006, p702).

To use Gillespie's (2002) terms my argument is that confident accelerated physiotherapy students and graduates appeared to be more able to facilitate 'connected relationships' more effectively than their traditional counterparts as shown from my findings in each of the Stages of this research. My analysis suggests that their transferable skills created closer, and hence more effective, working relationships to enable their legitimate peripheral participation. Hence they actively used their age, experience and maturity to enable their integration. It was almost as if they had a template from previous experiences to know, or sense, how to proceed. This has comparisons with Schon's reflection-in-action, (Schon, 1987), as their prior knowledge and skills enabled a more fluid legitimate peripheral participation. In terms of self-confidence successful individuals were considered proactive in developing the working relationships between themselves as students and their clinical supervisors. This might simply take the form of 'informal socialisation' in which 'day-to-day banter' on the ward and during meal breaks was a positive component to their interactions, (Levett-Jones et al., 2009, p319). My physiotherapy participants spoke of the accelerated graduates' confident attitude and demeanour aiding their communication, (Participant 11: line 236-238). As noted previously confidence builds upon confidence:

> Students wanted to be recognized as capable and competent, and trusted with increasing levels of responsibility as they progressed through their programme. When they were given the opportunity to work with a degree of autonomy and to demonstrate their abilities, their confidence was enhanced, (Levett-Jones et al., 2009, p319)

Brammer's (2008) interviews with pre-registration student nurses in Australia also highlighted this sense of self-belief. According to Brammer (2008) their confidence increased with each positive experience. Such students asked for constructive feedback and learned not to take criticism personally but learnt from their mistakes. With more experience and greater confidence those students sought more experiences and involvement. I therefore suggest that accelerated students and accelerated graduates discussed in this study wished to push themselves to gain recognition and appreciation as shown in the theme 'Accept the gauntlet' on p158. Having taken responsibility for their own learning, such individuals were more likely

to develop professionally. This was supported by the physiotherapy interviews as the clinicians recognised the value of their accelerated cohorts having already gained previous Honours degrees and additional transferable life skills.

As such, I argue that those accelerated physiotherapy graduates who 'hit the ground running' understand and appreciate the significance of the community of practice and integrate themselves into their teams more quickly than traditional graduates. Social interaction is central to the success of accelerated pre-registration students. This can explain why the interview participants valued the self-confidence and other positive characteristics of the accelerated graduates as seen throughout Chapter Seven. Successful students and graduates might realise that are not alone but are in 'community with others, they could engage in rational discourse and gain confidence in their new role within the group' to create a 'comfortable, emotionally safe environment', (Merriam et al., 2003, p186). It is possible that both accelerated students and accelerated graduates were more likely to recognise the relevant reifications within their community being the 'abstractions such as tools, symbols, terms and concepts produced', (Abrandt Dahlgren e al. 2006, p572). They appeared to recognise the importance of mutual relationships and how to develop them, (Wenger, 1998a), to react more positively to unwritten rules and procedures. By doing so perhaps they may have understood the mechanisms or processes for their inward trajectory better than their traditional counterparts. Hence they understood the importance of mutual engagement better: discover how to engage, how to facilitate the process and how to recognise barriers to the process.

This all contributes to our understanding of why the interview participants and questionnaire respondents valued the accelerated graduates who were described in positive terms throughout Chapter Seven. However, the 'notes of caution' also need to be considered and so will be explored in the next section.

Self-confidence versus competence

Much of the thesis relates to the issues of confidence and competence. Many of the positive attributes in Chapter Seven appeared to associate a confident disposition to success in the clinical workplace. However, as noted in Chapter Eight over-confidence had ramifications in terms of clinical practice and team dynamics. One clinician found it 'irritating' to be told by the accelerated graduate that 'I've got two degrees, you know', (Participant 10: line 703-704). There appeared to be some underlying assumption on this graduates' part that successful academic performance denoted clinical success. Indeed Participant 13 said that Masters level awards from accelerated courses may be perceived as the better clinical qualification compared to the traditional award of Bachelor of Science as noted on p207. Yet Stewart et al. (2000, p903) recommended that the terms 'confidence' and 'competence' should not be used synonymously. From their interviews with four medical house officers Stewart et al. (2000) concluded that 'competence' represented 'what individuals knew about their ability and was based on the individual's previous experience of the task'. In contrast 'confidence' 'described a judgement which influenced whether an individual was willing or not to undertake an activity', (Stewart et al., 2000, p903). In addition, Wood (1987) cited in Meldrum et al. (2008, p213) distinguished between competence and performance stating that 'competence refers to what a person knows or can do under ideal circumstances, whereas performance refers to what is actually done in existing circumstances'.

Evidence from research in medicine suggests that there is little to relate confidence with competence. Morgan and Cleave-Hogg (2002) studied 144 final year Canadian medical students' self-evaluations of their confidence relating to a series of clinical tasks. They found that 'there was no correlation between clinical experience, level of confidence and performance in a standardized simulation test'. Barnsley et al. (2004) had similar findings from their studies of 30 newly qualified junior doctors in New South Wales, Australia. They found there to be 'a poor relationship between junior medical officers' own assessment of their skills and their formally measured competence', (Barnsley et al., 2004, p359). Davis et al. (2006) agreed. Their systematic review of 725 articles explored physicians' abilities to self-assess their competencies compared with external observations of their competence. Their

findings indicated that physicians had limited ability to self-assess accurately, (Davis et al., 2006). Nevertheless in her earlier editorial Carlisle (2000) had suggested that the medical fraternity should:

> strive for ways to conduct objective assessment of competence by formal methods in order to identify the practitioner who may be confident but who has no insight into the fact that their practice is unsafe, (Carlisle , 2000, p886).

This is important advice as it is unclear whether physiotherapists are any more equipped or successful at self-evaluation than medical staff. If not there are several findings from my research that raised concern for the accelerated graduate. As stated on p21 all qualified physiotherapists who have successfully completed validated courses within the UK gain autonomy in their clinical practice, (Department of Health and Social Security, 1977). However, as discussed previously on p26 it is usual that new graduates continue some level of clinical supervision to consolidate knowledge and skills from their pre-registration training. As noted in several sections in 'A note of caution' in Chapter 8 and in particular 'Seeking guidance: less likely' this was found not to always be the case. Clinical autonomy with clinical competence is reassuring but over-confident incompetence is of great concern. A contradiction arose in my analysis in that the interview participants valued the accelerated graduates' confidence yet had concerns in their over-assurance. Indeed they questioned some aspects of their clinical practice. Certainly nothing appeared from the analysis that suggested that the accelerated graduates were considered more clinically skilled than their traditionally trained counterparts. Significantly physiotherapy clinicians told me that some accelerated physiotherapy graduates had missed clinical cues in their management of their patients. Others sought less clinical guidance than was expected. The findings from this research could suggest that some accelerated graduates might simply be too focused viewing their own training as being end-product orientated to gain the vocational qualification as quickly as possible in order to attain their goal. As such they couldn't 'see the wood for the trees'. This contrasts with them being process orientated to provide them the breadth of clinical education, (Scott, 2003; Kasworm, 2003; Donaldson et al., 2000). There were contradictions within my clinicians' contributions as some viewed the traditionally trained graduates as having the broader outlook from their broader training whilst others viewed the accelerated graduates as having the broader outlook by virtue of their two degrees and life

skills. Alternatively, one could interpret the reported clinical mismanagement of the accelerated graduates as relating to issues of competence or competency. It could be argued that the accelerated graduates in my reports were not necessarily incompetent from a technical perspective but it appeared that that they may have made ill-considered clinical judgements that were wrong because they were taken out of context. It appeared that the accelerated graduates' context was their comfort zones from their previous backgrounds. It appeared that what they could not yet do was to transfer this to the relevant physiotherapy context. As such, one might question why more clinicians did not appear to be concerned, or indeed alarmed, by the overly-confident approach of some accelerated graduates. Only a couple of interview participants discussed close knit teamwork as a method to enable close supervision of the newly qualified staff and so to ensure the smooth running of the department, (Participant 1: line 963-968; Participant 9: line 981-983). This, to me, appeared to be their safety net. In contrast other interview participants appeared to maintain their confidence in the accelerated graduates because they had a good knowledge base and life skills from their previous degree; whilst others' safety net was that these accelerated graduates had successfully completed the rigorous training, (Participant 9: line 879; Participant 12: line 478-481).

Given some of the interview participants' self-deprecation it appeared that they placed the accelerated graduates upon a pedestal. Indeed, the notion of the accelerated graduates' super-human attributes was common amongst many interview participants. As such one might question to what extent the physiotherapy clinicians favoured the accelerated graduates' life skills and potentially mistook these life skills for clinical skills. Hence there could have been a mis-match between what the interview participants expected to see of the self-confident accelerated graduate with that of their clinical application and decision-making. In contrast it could be argued that there appeared to be no such mis-match for the traditionally trained graduates as there were no such high expectations of their performance in the first instance. As such there could be an element of a self-fulfilling prophecy for both groups. The traditionally trained students and graduates may have followed a dependency culture. Perhaps the interview participants expected them to be passive because they expected them

to be as spoon-fed as they recalled they had been in their own training. Perhaps the traditionally trained graduates were 'wet behind the ears' because they were expected to be so and were treated as such. In contrast perhaps the accelerated graduates were seen to be more proactive because their self-fulfilling prophecy was that they were considered by the interview participants to be better educated and with more to offer by nature of their two degrees and additional life skills. Equally, on the part of the accelerated graduates they were self-confident and wanted to prove their newly gained autonomy. Thereby perceived success breeds success.

Lastly, it could be argued that the clinicians involved in the interviews and questionnaires were ambivalent about the accelerated graduates because, in the majority of cases, the clinicians viewed both courses as having their own successes and failings. In any case, these findings and conclusions suggest that physiotherapy clinical educators should assess actual performance to ensure clinical standards rather than assume competence as highlighted by Wood (1987). This might mean an enforced supervisory role in the first twelve months being the timescale that the interview participants felt differences between the two cohorts levelled out.

Reflections: my research and me

Reflexivity is the conscious and reflective consideration about me as a researcher, my values and how the subsequent study design and implementation may have impacted upon the findings and knowledge that it generated, (Langdridge, 2007; Willig, 2001). It is important to consider these issues and to reflect upon how I have changed as a result of the research process.

When planning this research it was of initial interest to me to explore whether accelerated students' and accelerated graduates' self-efficacy progressed them through the ranks from novice to expert (Miller, 1999; Benner, 1984) sooner, more efficiently or more effectively that

their traditionally trained counterparts. At the time it was thought that clinicians might judge physiotherapy graduates from both cohorts in terms of Miller's (1999) classification of novice, probationer, practitioner and leader having some similarities to their own job bands from Agenda for Change, (Department of Health, 2004). As such it was thought that some evidence of expertise might have appeared in the collation of students' marks in Stage Three or the interviews in Stage Four. Whilst students' clinical marks did indicate that accelerated students performed better in some areas than their traditionally trained counterparts the documentation that was reviewed could not give any indication about the extent of clinical expertise. Within Stage Four the interview participants rarely raised expertise as a point of interest. Instead, the data analysis from the interviews raised interesting views on confidence and clinical competence showing how fluid the research process can be.

As noted previously I prided myself on my level of skill to undertake interviews having used such a format in my own clinical work. Even so, listening to the audio tapes and reading the transcriptions clearly showed the flaws in my own technique and I found that much had been left unsaid and unexplored in my conversations with clinicians. That said, my style did improve with each interview as can be shown proportionally in terms of word count. At the first interview Participant 1 only contributed 62% of the total word count whilst at the last Participant 14 contributed to 85% of that whole conversation.

I felt that Interpretative Phenomenological Analysis proved a most useful approach. I felt comfortable with the approach as I did not wish to simply describe my findings. Nor did I believe that I could understand the clinicians' contributions fully but felt that the process enabled me to interpret those findings to create an understanding for myself and others. As such, I recognise Crotty's viewpoint who argued that:

> Given that such strong emphasis on the individuality of experience, it is somewhat perplexing to find that, when they come to analyse their data, the interest of most of these researchers tends to focus exclusively on 'themes' and 'shared experience'- in short, on commonalities rather than what is peculiar to the individual, (Crotty, 1996, p13)

This is not to say that the analysis is at fault. I endeavoured to consider the individuals' viewpoint whilst also offering broader themes. The writing of this thesis has made me reflect

further and supported and developed my analysis. The use of superordinate themes and the creation of the chapters in this thesis has taken much additional analysis, thought and debate to present the rich but complex findings in a coherent fashion. A diary system noting decision-making, justifications and their evaluations proved useful at each and every stage of the data analysis.

The interviews and questionnaires from Stage Four and Five, respectively, described the clinicians' views in what they said. Possibly the data does not represent what they thought or what they did outside of the interview or the completion of the questionnaire. However, their thoughts and experiences were discussed freely and thus there was no reason to doubt the sincerity of their accounts. Interpretations within the analysis of the interviews in Stage Four were made based upon the clinicians' discourse and demeanour. As noted on p80 findings from the data must be viewed as a snap-shot in time and hence maybe reflect how the clinicians wanted themselves to be viewed at that time, perhaps for differing reasons. It is likely that participants will have made judgements about both the traditional and accelerated physiotherapy courses based upon their own experiences and subsequent beliefs. This relates to comparison with, and interpretation of, experiences of events and behaviours but done over long periods of time. To judge new students clinicians may have compared them with their own student behaviour thus recalling past events. Such recall may be skewed as memory alters and subsequent experiences alter our beliefs.

Perhaps because of the nature of the conversations stark comparisons were made between the accelerated graduates and their traditionally trained counterparts. Whilst some wished to paint a glowing picture of one cohort they may have inadvertently presented a more derogatory picture of the other. Alternatively perhaps participants believed that both extremes co-exist and that neither training route is overly successful. One such example would be the perception of the over-confident accelerated graduate who is reluctant to seek supervision and guidance versus the anxious, spoon-fed and immature traditional graduate who fails to achieve the desired standards of independence, criticality and inter-personal skills as dictated by the Quality Assurance Agency (2008).

A reflection of the mixed methods approach

de Vaus (1996, p11) argued that research should not 'simply collect facts' but that the subsequent observations and explanations need to be tested. This needs 'a constant interplay between observation and explanation, collection of facts to test the explanation, a refinement of the explanation', (de Vaus, 1996, p11). This was attempted in my mixed methods approach. The interviews in Stage Four provided a wealth of data that produced two Superordinate Themes. The data collection by questionnaire in Stage Five was planned to enable triangulation and to provide a vehicle of dissemination of findings to the broader profession as discussed in Chapter Five. It appeared that some interview participants had not considered aspects of the interview conversation before we met. Their contributions appeared honest and spontaneous to the extent that some contradicted themselves at differing times in our conversations. This might explain why inconsistencies were found between the data analysis from both the interviews and the questionnaires. However, the questionnaires proved less helpful than anticipated. The Likert scales had been initially designed without a neutral response to force the questionnaire respondents to make a judgement but some were changed following the pilot study. It transpired that the ones where a neutral Likert scale option had been re-introduced affected those questions of interest to the overall analysis. The majority of respondents chose to elect these neutral judgements. Whilst this choice was, itself, interesting and noteworthy it made it difficult to form any further interpretation or to contribute to the triangulation as it neither confirmed nor refuted findings from the interviews. Despite careful planning and subsequent piloting of the questionnaires other questions proved troublesome. Questions 14 and 17 proved to be double-barrelled questions in that they contained two distinct ideas or concepts. These were known to be important questions that reflected major themes from the interviews but their subsequent analysis proved inadequate. In addition the final sample size created difficulties as there were insufficient respondents to create detailed analysis. This caused difficulties in attempts to triangulate interview findings with questionnaire results or to correlate results with demographics within the sample. Whilst the data from the interviews was rich and detailed the free text from Question 23 from the questionnaires offered little consensus. The 51 respondents offered 208 different qualitative responses or variations of responses. Many were single words or brief

statements that did not provide clear meaning. Of note the majority of responses were used by differing respondents to describe either or both cohorts.

In the few cases where questionnaire results contradicted the interview findings it proved difficult to know which version to accept. Whilst recognising that it was my interpretation of what I thought the interview participants had said I placed more value upon these findings. That said, I have learnt much from the process and am more appreciative of the need for good questionnaire design in future.

CONCLUSION

Whilst accelerated courses appeared to have been designed in the US in response to consumer demand (American Association of Colleges of Nursing, 2005; Traub, 1997) an alternative reason in healthcare is that of widening participation, (Ouellet et al., 2008; Mason and Sparkes, 2002; Chartered Society of Physiotherapy, 2003a). Yet some have recommended caution as it remains unclear whether their design and outcome can fully meet the needs of our complex society, (Miklancie and Davis, 2005; Speziale, 2002). Hence this research set out to explore clinicians' perceptions of the performance of accelerated physiotherapy graduates.

All clinicians involved in this research regarded the UK based pre-registration accelerated physiotherapy course to be difficult to study. Such students were seen to be dedicated and motivated. Clinicians valued the mature outlook and transferable life skills that accelerated student and graduates brought to their studies and clinical work. This contradicts the 'fluff' degrees that some US accelerated courses are described as being, (Kasworm, 2003). Indeed, findings from the analysis of this research compare favourably with those within nursing. Ouellet et al. (2008, p200-201) stated that the Canadian accelerated training programmes for nurses produced graduates 'in a compressed period of time' that met the 'competencies at a level expected of employers'. Senior physiotherapy clinicians from my research valued the accelerated graduates in their contribution to the workforce that was neither better, nor worse, than their traditionally trained counterparts but offered differing qualities to the service. Equally, clinicians identified strengths and weaknesses from both cohorts. Many traditional graduates were considered competent but lacked initiative and needed 'mollycoddling'. In contrast accelerated graduates were considered to be self-confident but in a few cases as there were examples of perceived arrogance this had clinical and inter-personal ramifications. There was the perception that each graduate group required differing types of supervision to consolidate and hone clinical skills and clinical reasoning skills. It remains possible that some clinicians wished to sound complimentary yet reverted to

their assumption that the accelerated graduates were good because they had managed to complete studies in a shortened time; not necessarily that they were good clinicians.

New applicants wishing to train and join the profession view accelerated courses an attractive alternative to the longer traditional courses believing themselves to provide the necessary pre-requisite skills, (American Association of Colleges of Nursing, 2009; Rushforth, 2004). As more Higher Education Institutions offer such courses these can be seen as an additional recruitment pool for potential applicants to the profession which can benefit service-users and clinical teams, alike. As noted the findings from this study could inform future student selection and programme design.

Taking the work forward: important considerations

It transpired that the clinicians in this study appeared to know little about new methods of pre-registration education. Instead, they appeared to revert to their own experiences and anecdotal evidence from others. As more Higher Education Institutions offer accelerated pre-registration courses there is a strong case for further promotion and discussion of the strengths of both traditional and accelerated pre-registration education within the profession.

Age, experience and maturity of graduates were considered positive attributes within health-care provision. Recognising that there was a fine line between self-confidence and over-confidence some clinicians within this study implied a difficulty in the clinical supervision of soem accelerated graduates. In contrast to the confident demeanour of the accelerated graduates some participants suggested that they would prefer the traditional graduates to have greater self-belief and self-efficacy. This may have implications for more careful student selection and/or student development and education in an already full curriculum. Given that many interview participants also believed that the majority of accelerated graduates wished to specialise in the musculoskeletal speciality of physiotherapy this too may have implications

for pre-registration education in that accelerated physiotherapy students need to perhaps be encouraged to appreciate and understand other clinical fields of expertise.

Recommendations for clinical practice

1. Physiotherapy education has progressed and diversified in past decades. Yet findings from interviews with participants suggest that clinicians know little of the rationale and mode of delivery of the accelerated courses. Greater insight through workshops may enhance the clinical supervision of both accelerated students and accelerated graduates alike. Equally, greater appreciation of the changing delivery of traditional Honours degree course may alter the perceptions of a 'spoon-fed' graduate.

2. The analysis raised issues of clinical confidence and clinical competence amongst both sets of graduates. For the accelerated graduates this was partly related to their 'comfort zones' that were based on the content of their previous degrees. It is therefore suggested that supervising clinicians continue to gauge levels of clinical knowledge and skill amongst both sets of graduate through enhanced post-graduate supervisory and mentoring systems.

Recommendations for education

1. As stated there have been lessons to learn for both traditional and accelerated course provision. Clinical competence must be assured. Hence as a direct result of this research I suggest that relevant teaching teams review the types of university-based summative assessment that would challenge M-level students in line with QAA (2008) guidelines yet ensure clinical competencies and clinical reasoning.

2. Teaching teams might also wish to consider how to further develop self-efficacy and metacognition in their traditional courses to reduce perceptions of passivity whilst also highlighting the risks of perceived arrogant independence to the accelerated courses.

Recommendations for further research

1. This research produced a wealth of data. Yet further exploration of the accelerated pre-registration course is needed. The views of academics and of students would be valuable to better understand how such individuals manage their accelerated studies. Spaid and Duff (2009) described adults in accelerated learning environments as a learning community. To them, successful studies require self-development and group interaction to purposefully form structured, cohesive working groups to work 'collectively and collaboratively toward improving the learning experiences of all the members', (Spaid and Duff, 2009, p105). In order to enhance pre-registration education in both the accelerated routes and traditional routes this would be worthy of further study in the context of healthcare education.

2. Within this study there was insufficient data to explore whether the accelerated graduate progresses through the ranks from novice to expert in a different manner to the traditionally trained graduate. This remains of interest and is worthy of future study.

3. Differences were raised by study participants regarding the attributes of the traditionally trained graduate and the accelerated trained graduate. These seemed to have some impact upon their patient care and their staff interaction. Findings from this research indicated that, generally, traditional graduates were considered to be passive and lack initiative. Yet this contrasts with QAA expectations, (Quality Assurance Agency for Higher Education, 2008) and would benefit further study whether or not this is a widely held view by clinicians and their managers.

4. Lastly, some interview participants considered a few accelerated graduates to be over-confident to the extent that they could be considered 'cocky' or 'arrogant'. In the absence of corroborating evidence anywhere in the literature this, too, would benefit further study.

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Lawrence Erlbaum Associates, Publishers, Mahwah, New Jersey

Zimmerman, B.J., Bonner, S. and Kovach, R. (1996)
"Developing self-regulated learners: beyond achievement to self-efficacy"
American Psychological Association, Washington DC

APPENDIX 1 DIFFERING PHYSIOTHERAPY TRAINING ROUTES

	Pre-registration physiotherapy training with subsequent eligibility to apply to practice to the Health Professions Council and Chartered Society of Physiotherapy								Examples of post-registration training	
Qualification	BSc (Hons)					PgDip	MSc	MSc	MSc	
Duration	2 years + 3 months	3 academic years (England/ Wales)	3 academic years	4 academic years (Scotland/ N.Ireland)	4 academic years	2 academic years	2 calendar years	2 calendar years	1 academic year	3 academic years
Route	Accelerated	Full-time	Full-time (learning situated)	Full-time	Part-time	Accelerated	Accelerated	Accelerated	Full-time	Part-time
Numbers of HEI's	1	30	1	4	10	1	10	3	Various	Various
Examples	Sheffield Hallam'	Appendix 2	East London	Aberdeen Glasgow Edinburgh Ulster	Colchester York	Huddersfield	Leeds Met' Newcastle Teeside	Edinburgh Glasgow King's		
Minimum entry requirement	A2 levels or equivalent	A2 levels or equivalent				Previous Honours degree in related subject	Previous Honours degree in related subject	Previous Honours degree in related subject	BSc (Hons) Physio-therapy	BSc (Hons) Physio-therapy
Level of academic studies	Under-graduate	Under-graduate	Under-graduate	Under-graduate	Under-graduate	M-level	M-level	M-level	M-level	M-level
Level of clinical studies	Under-graduate	Under-graduate	Under-graduate	Under-graduate	Under-graduate	Under-graduate	Under-graduate	M-level	[M-level]	[M-level]
Application	Direct application	UCAS	Direct application	UCAS	Direct application	Direct application	Direct application	Direct application	Direct application	Direct application
Outcome	Pre-registration physiotherapy training with subsequent eligibility to apply to practice to the Health Professions Council and Chartered Society of Physiotherapy								Postgraduate career development: M-level in specialist field to further develop expertise	

Compiled by James Milligan based on personal communication with Jenny Carey, Education Advisor of the Chartered Society of Physiotherapy, 2010

APPENDIX 2

Qualifying Physiotherapy Programmes Leading to Membership of the CSP and Eligibility for Registration with the Health Professions Council

4 year full-time pre-registration programmes
1. Glasgow Caledonian University
2. Queen Margaret University College, Edinburgh
3. Robert Gordon University

3 year full-time pre-registration programmes
1. Brunel University
2. King's College London
3. Leeds Metropolitan University
4. Manchester Metropolitan University
5. Oxford Brookes University
6. Sheffield Hallam University
7. St George's Hospital, University of London
8. University of Birmingham
9. University of Bournemouth
10. University of Bradford
11. University of Brighton
12. University of Cardiff
13. University of Central Lancashire
14. University of Cumbria
15. University of Coventry
16. University of East Anglia
17. University of East London
18. University of Hertfordshire
19. University of Huddersfield
20. University of Keele
21. University of Leicester
22. University of Liverpool
23. University of Northumbria
24. University of Nottingham
25. University of Plymouth
26. University of Salford
27. University of Southampton
28. University of Teesside
29. University of Ulster
30. University of the West of England
31. York St John College

4 year part-time pre-registration programmes
1. Birmingham University (flexible learning route)
2. Brunel University
3. Keele University
4. London South Bank University
5. Sheffield Hallam University
6. University of Central Lancashire
7. University of East London
8. University of Essex
9. University of Salford
10. University of Southampton
11. University of Northumbria
12. York St John College

Accelerated pre-registration programmes
MSc Physiotherapy (pre-registration)
1. King's College London
2. Leeds Metropolitan University
3. Manchester Metropolitan University
4. Queen Margaret University College, Edinburgh
5. Robert Gordon University
6. University of Birmingham
7. University of Cumbria (self-funding)
8. University of East Anglia
9. University of Essex
10. University of Northumbria
11. University of Southampton
12. University of Teesside

MSc Rehabilitation Science (leading to eligibility for HPC registration)
1. University of Brighton
2. Glasgow Caledonian University

MSc Allied Health Professional Studies (leading to eligibility for HPC registration)
1. University of Teesside

Postgraduate Diploma in Physiotherapy (leading eligibility for HPC registration)
1. University of Huddersfield
2. University of Southampton

Other programmes
1. BSc (Hons) Physiotherapy Work Based Learning (full-time: 2 years 10 weeks); Sheffield Hallam University
2. BSc (Hons) Physiotherapy situated learning programme (full time: 3 years); University of East London

APPENDIX 3
Literature Search

A detailed search strategy of healthcare literature search was undertaken using healthcare databases such as Cinahl, MEDLINE, PubMed and Web of Science (ISA) and using educational databases such as ERIC, British Education Index, Australian Education Index and Educational Research Abstracts (ERA). Exploration of the British Library's Integrated Catalogue including the Electronic Storage and Retrieval System (ESTAR) also proved invaluable.

Examples of key terms (listed in alphabetical order) included:

- Academic AND expertise

- Academic AND mastery

- Accelerated AND course

- Accelerated AND education

- Accelerated AND course AND education

- Accelerated AND learning

- Accelerated AND training

- Fast-track AND education

- Pre-registration AND education

- Pre-registration AND accelerated AND education

- Second AND degree

Additional searches were also undertaken by key publication (e.g. 'New Directions for Adult and Continuing Education') and by key author to identify other useful texts and information sources.

APPENDIX 4
Ethical approval

Ethical approval was required as this study related to professionals' perceptions of the academic and clinical development of their chosen profession. Ethical permission was requested and granted from the School Research and Ethics Panel (SREP) within the School of Human and Health Sciences of the University of Huddersfield on 8th May 2007 and the National Research Ethics Service (NRES) on 9th August 2007. Local permission was also required by each of the relevant Research & Development (R&D) departments of those NHS Trusts in which I wished to research. These required additional personalised applications. A few of these NHS Trusts also required me to apply for Honorary Contracts and some also stipulated that I gained Criminal Records Bureau (CRB) clearance if I was to interview staff within clinical environments. This latter prerequisite was circumnavigated by hiring a room in the local staff training department within the NHS Trust grounds. As such, R&D approval was gained on the following dates and indicates the slow progress of this stage of the research process and the need for greater and more careful forward planning:

NHS Trust 1:	R&D approval:	6th July 2007
NHS Trust 2:	R&D approval:	7th September 2007
NHS Trust 3:	R&D approval:	11th September 2007
	Honorary contract:	18th September 2007
NHS Trust 4:	R&D approval:	15th November 2007
NHS Trust 5:	R&D approval:	20th December 2007
NHS Trust 6:	R&D approval:	19th May 2008
	Honorary contract:	22nd May 2008
NHS Trust 7:	R&D approval:	27th August 2008
	Honorary contract:	25th June 2008

It was planned that participants would be asked to divulge their personal and professional opinions towards aspects of their profession using accounts and anecdotes that may relate to work colleagues. Hence their informed consent was required. It was essential to ensure that due ethical consideration was rigorous throughout all stages of the research process with confidentiality at the core. As the researcher I had insider knowledge of the profession and its membership it was essential that anonymity and impartiality was assured so that the views of

either party remained confidential. I also recognised the need for sensitivity in terms of recruitment and data collection at all stages of the research process and sought advice from the study supervisory team wherever necessary. Importantly, data were anonymised at collection. Having insider knowledge created a risk of a lack of objectivity and possible reinforcement of preconceptions from either party. It was essential that participants did not feel judged. As anonymity and confidentiality was assured no recriminations could occur because of their participation. In practical terms, participants' informed consent was ensured using detailed participants' information sheets, (see Appendix 3 and 4). These had been approved as part of the NRES application.

Whilst interview data was recorded by audio equipment and transcribed, pseudonyms were used to ensure participant anonymity. Participants were therefore informed that any identifying features such as names, places etc were altered and anonymised to encourage freedom of expression. All data remained confidential and held in a secure location by the researcher. Audio recordings were erased following the analysis stage in line with guidance from the Research Office of the University of Huddersfield. For all of these reasons no audio-tape can be or will be used publicly in the dissemination of findings to protect participants' identities.

The data collection took place on work premises and potentially during the working hours of the participants. It was essential that such data collection did not impede upon participants' time and role in patient care. Negotiation was essential between the researcher, study participants and relevant line managers.

Since the interview was semi-structured the researcher could not fully guarantee that sensitive, embarrassing or upsetting topics might not have emerged during the data collection process. It was my responsibility as the researcher to ensure informed consent and minimise potential emotional harm, (British Psychological Society, 2009a, 2009b). In the unlikely event of emotional upset, I had contact details for named contacts for staff support.

To avoid contravening ethical guidance within the quantitative data collection by questionnaire, no encryption or other identifying methods were used to encourage participation from clinicians. The disadvantage of this, however, was that non-respondents

from the questionnaire survey could not be identified and re-contacted.

APPENDIX 5

Information sheet and consent form for interviews:
Version 2: Reference: 07/H1311/75 AB/112990/1

\<Insert date\>

Participant Information Sheet for data collection by interview

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

You are invited to take part in a research study. The following information explains the purpose of the research and what it will involve. Please take time to read the following information carefully and ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Purpose of the study:
This study relates to accelerated or 'fast-track' pre-registration training schemes within physiotherapy. To date, fourteen such courses exist within Great Britain.
The purpose of this study is to ask how clinicians view these courses in comparison to the traditional undergraduate course. In particular, emphasis is placed upon the skills of the graduate clinicians from both types of course.
This study forms part of the researcher's PhD studies at the University of Huddersfield. Results of the study will be presented within the thesis and relevant publications.

Authorisation of the research:
The research proposal was accepted by the School Research Degrees Committee of the University of Huddersfield on the 30th June 2006, the School Research and Ethics Panel of the University of Huddersfield on 8th May 2007, and the National Research Ethics Service on 9th August 2007.

Study participants:
You have been asked to take part in this study as you have had experience in the clinical education and supervision of both BSc (Hons) physiotherapy graduates and the accelerated M-level physiotherapy graduates and thus able to make some judgements and comparisons between the two types of graduate.

You are asked to take part in a subsequent informal interview with the researcher in order to gain an insight to physiotherapists' views of physiotherapy training courses. The interview would take less than one hour. Ideally, the interview shall be audio-taped to record the quantity of material. All discussions will be confidential. The tape and its transcript will be held securely during the analysis stages. The audio-tape will not be made public. Once completed, the audio-tape will be erased. Only the researcher will have access to the tapes. Hence, both the findings from the questionnaires and the interview transcripts will be disguised. Pseudonyms will be used and identifying features will be altered throughout the analysis stage, report writing and subsequent publications. This would relate to peoples' names, places etc. It is likely that verbatim quotations will be used in the study results and subsequent publications; however, no identifying features shall be included.

Withdrawal:
It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason.

Expenses and payments:
The data collection will take place in a location of your choice and convenient to you. As such there will be no expenses incurred on your behalf.

No official funding exists for this research; costs are incurred by the researcher.
Liabilities of NHS staff participating in this research on NHS premises will be covered by NHS indemnity.

Problems
Any concerns that you may have relating to the research process shall be addressed.
Please contact my Director of Studies Dr Chris Davies at c.s.davies@hud.ac.uk or by telephone on 01484- 47XXXX

Contact Details:
Should you wish to contact me in future please do so by e-mail at j.g.milligan@hud.ac.uk or by telephone on 01484-47XXXX.

Thank-you for considering taking part in this study and taking the time to read this sheet.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

Consent Form for data collection by interview

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher:
James Milligan

		Y/N
1.	I confirm that I have read and understood the information sheet dated <insert date> for the study entitled "An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners". I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3	I give consent to the use of audiotapes as a method of data collection in the knowledge that data will be kept securely and confidential	
4.	I understand that relevant anonymous sections of my data may be looked at by the research supervisory team.	
5.	I give consent to the use of anonymous verbatim quotes to be used in the research report/ thesis, conference presentations and publications.	
6.	I give consent for relevant anonymous sections of my data to be included in the research report/ thesis, conference presentations and publications.	
7	I agree to take part in the above study.	
Participant's name (please print):		
Participant's signature: Date:		
Researcher: James Milligan		
Researcher's signature: Date:		

Complete two copies; one for the study participant; one for the researcher.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

Consent Form for data collection by interview

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher:
James Milligan

		Y/N
1.	I confirm that I have read and understood the information sheet dated <insert date> for the study entitled "An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners". I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3	I give consent to the use of audiotapes as a method of data collection in the knowledge that data will be kept securely and confidential	
4.	I understand that relevant anonymous sections of my data may be looked at by the research supervisory team.	
5.	I give consent to the use of anonymous verbatim quotes to be used in the research report/ thesis, conference presentations and publications.	
6.	I give consent for relevant anonymous sections of my data to be included in the research report/ thesis, conference presentations and publications.	
7	I agree to take part in the above study.	
Participant's name (please print):		
Participant's signature: Date:		
Researcher: James Milligan		
Researcher's signature: Date:		

Complete two copies; one for the study participant; one for the researcher.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

APPENDIX 6

Information sheet & consent form for Questionnaires
Version 2: NRES Reference: 07/H1311/75 AB/112990/1

Participant Information Sheet data collection by questionnaire

<Insert date>

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher:
James Milligan

Outline:
You are invited to take part in a research study. The following information explains the purpose of the research and what it will involve. Please take time to read the following information carefully and ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Purpose of the study:
This study relates to accelerated or 'fast-track' pre-registration training schemes within physiotherapy. To date, fourteen such courses exist within the United Kingdom.
The purpose of this study is to ask how clinicians view these courses in comparison to the traditional undergraduate course. In particular, emphasis is placed upon the skills of the graduate clinicians from both types of course.
This study forms part of the researcher's PhD studies at the University of Huddersfield. Results of the study will be presented within the thesis and relevant publications.

Authorisation of the research:
The research proposal was accepted by the School Research Degrees Committee of the University of Huddersfield on the 30th June 2006, the School Research and Ethics Panel of the University of Huddersfield on 8th May 2007 and the National Research Ethics Service on 9th August 2007.

Study participants:
You have been asked to take part in this study as you have had experience in the clinical education and supervision of both BSc (Hons) physiotherapy graduates and the accelerated M-level physiotherapy graduates. If you agree to participate, you will be asked to make your own judgements and comparisons between the two types of graduate based on your own experiences and perceptions.

Taking part in the study requires completion of a questionnaire. This should take ten-to-fifteen minutes to complete. Findings from each questionnaire will be anonymised. Your identity will be kept confidential. As such there can be no follow-up of non-respondents; you are asked to return the questionnaire form whether completed or not.

Withdrawal:
It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason.

Expenses and payments:
The questionnaire completion will take place in a location of your choice and convenient to you. As such there will be no expenses incurred on your behalf.
No official funding exists for this research; costs are incurred by the researcher.

Problems
Any concerns that you may have relating to the research process shall be addressed.
Please contact my Director of Studies Dr Chris Davies at c.s.davies@hud.ac.uk or by telephone on 01484- 47XXXX

Contact Details:
Should you wish to contact me in future please do so by e-mail at j.g.milligan@hud.ac.uk or by telephone on 01484-47XXXX.

Thank-you for considering taking part in this study and taking the time to read this sheet.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

Consent Form for data collection by questionnaire

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher:
James Milligan

		Y/N
1.	I confirm that I have read and understood the information sheet dated <insert date> for the study entitled "An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners". I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3.	I understand that relevant anonymous sections of my data may be looked at by the research supervisory team.	
4.	I give consent for relevant anonymous sections of my data to be included in the research report/ thesis, conference presentations and publications.	
5.	I agree to take part in the above study.	

Participant's name (please print):

Participant's signature: Date:

Researcher: James Milligan

Researcher's signature: Date:

Complete two copies; one for the study participant; one for the researcher.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

Consent Form for data collection by questionnaire

Study title:
An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher:
James Milligan

		Y/N
1.	I confirm that I have read and understood the information sheet dated <insert date> for the study entitled "An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners". I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3.	I understand that relevant anonymous sections of my data may be looked at by the research supervisory team.	
4.	I give consent for relevant anonymous sections of my data to be included in the research report/ thesis, conference presentations and publications.	
5.	I agree to take part in the above study.	

Participant's name (please print):
Participant's signature: Date:
Researcher: James Milligan
Researcher's signature: Date:

Complete two copies; one for the study participant; one for the researcher.

Acknowledgement:
This information sheet and consent form has been developed in line with published advice from Dr Hugh Davies, Ethics and Training Adviser of COREC in November 2005.

APPENDIX 7 QUESTIONNAIRE

An exploration of accelerated pre-registration courses in physiotherapy: perceptions of practitioners

Name of Researcher: James Milligan
NRES Reference: 07/H1311/75   AB/112990/1

<Insert date>

Introduction:
This survey relates to accelerated pre-registration physiotherapy courses, meaning those study routes that enable eligibility for membership of the Health Professions Council and Chartered Society of Physiotherapy in a two year route compared to traditional three-year training routes. You will be aware that accelerated pre-registration courses are taught and assessed at Masters level. This questionnaire has been developed following a series of face-to-face interviews with senior physiotherapy staff.

Instructions:
Some questions relate to the individual as a student; others as a graduate clinician.
Some of the questions may appear to be similar but do address different issues. Please read each question carefully.
Please answer each of the following questions by **circling the number** on the Likert scale that best describes your opinion e.g.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	④

Questionnaire:

Section 1 relates to students and training:

1. To what extent is the eighteen year old student with A-levels equipped to start physiotherapy training compared with the accelerated student holding a first degree?

Less well equipped	Less equipped	The same	More equipped	Very well equipped
1	2	3	4	5

2. Three years of training are required to develop the necessary skills to become a physiotherapist

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

3. The physiotherapy profession is advantaged by offering a variety of training programmes

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

4. Accelerated physiotherapy training courses were designed only for the benefit of university recruitment rather than the patient

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

5. The student aged 18 years is less likely to cope with the emotional stress of patient care than the accelerated student with a prior first degree

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

6. Good physiotherapists "are born, not made". The type of training course is irrelevant.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

7. Accelerated physiotherapy training courses were designed more for the benefit of short-term government targets than for the benefit of the profession

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

Section 2 relates to physiotherapy graduates and their employment:

8. To what extent does the clinical knowledge of the traditional graduate compare with the accelerated graduate.

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

9. To what extent does the problem-solving skills of the traditional physiotherapy graduate compare with the accelerated graduate?

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

10. To what extent is the traditional graduate able to deal with complex clinical issues compared with the accelerated graduate

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

11. To what extent does the practical ["hands-on"] skills of the traditional graduate compare with the accelerated graduate?

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

12. To what extent does the academic background of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

13. To what extent does the clinical reasoning skill of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?

Far less	Less	Just the same	Greater	Far greater
1	2	3	4	5

14. Accelerated graduates perform well because of their life skills.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

15. Some clinical staff may feel threatened by the accelerated graduate's Masters' level qualification.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

16. Having been taught at Masters' level, graduates from accelerated physiotherapy courses will benefit the physiotherapy profession more than traditional BSc (Hons) graduates.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

17. Accelerated graduates are over-confident [and so less likely to seek clinical support]

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

18. Accelerated physiotherapy training courses provide the same outcome as traditional undergraduate programmes but faster.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

19. To what extent do traditional graduates acclimatise to the workplace compared with the accelerated graduate.

More slowly	Slowly	Just the same	Quickly	More quickly
1	2	3	4	5

20. The physiotherapy team is better served with an accelerated graduate than a traditional graduate.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

21. Managers would prefer to employ an accelerated graduate than a traditional graduate.

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

22. Given the choice would you prefer to work alongside an accelerated graduate or a traditional graduate?

Accelerated graduate: ☐   Traditional graduate: ☐   No preference: ☐

23. Please list 5 attributes that you think best describes the accelerated 2 year graduate and the traditional 3 year BSc graduate?

Accelerated 2 year graduate	**Traditional 3 year BSc graduate**
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Please complete the following demographic information:

What was your pre-registration physiotherapy training?

Remedial Gymnast and subsequent transfer to Physiotherapy	
Chartered Status [pre-Graduate Diploma in Physiotherapy]	
Graduate Diploma in Physiotherapy	
BSc (Hons) Physiotherapy	
MSc by accelerated route	
Other- please state	

For how many years have you **worked** as a qualified physiotherapist?

0- 4 years	
5- 9 years	
10- 14 years	
15- 19 years	
20 + years	

What is your current highest post-registration qualification?

BSc (Hons)	
M-level modules	
MSc	
PhD/ Professional doctorates	
Other	

What is your current job band?

Band 5	
Band 6	
Band 7	
Band 8	

What is your current job title?

What is your clinical speciality related to your current job description?

Amputee Rehabilitation	
Cardiorespiratory	
Care of the Older Person	
Learning Disabilities	
Mental Health	
Musculoskeletal	
Neurology	
Oncology and Palliative Care	
Paediatrics	
Women's Health	
Other (please state)	

How many Band 5 graduates have you supervised in the clinical setting?

Accelerated route: graduates from the 2 year accelerated physiotherapy courses

0- 4 students	
5- 9 students	
10- 14 students	
15- 19 students	
20 + students	

Traditional route: Band 5 graduates from the traditional BSc (Hons) physiotherapy

0- 4 students	
5- 9 students	
10- 14 students	
15- 19 students	
20 + students	

Very many thanks for your time

Please return in the pre-paid envelope or alternatively send to the following address:

James Milligan MSc MCSP,
School of Human and Health Sciences, The University of Huddersfield
Huddersfield, HD1 3DH
Tel: +44 (0) 1484 47XXXX, e-mail: j.g.milligan@hud.ac.uk

APPENDIX 8
Relationship of the clinical placement assessment categories in Stage Three to the interview questions of Stage Four

1. Patient Assessment	11. To what extent does the practical ["hands-on"] skills of the traditional graduate compare with the accelerated graduate?
2. Patient Management	11. To what extent does the practical ["hands-on"] skills of the traditional graduate compare with the accelerated graduate?
3. Clinical Reasoning	9. To what extent does the problem-solving skills of the traditional physiotherapy graduate compare with the accelerated graduate?
	10. To what extent is the traditional graduate able to deal with complex clinical issues compared with the accelerated graduate
	13. To what extent does the clinical reasoning skill of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?
4. Evaluation and Reflection	
5. Organisation and Planning	19. To what extent do traditional graduates acclimatise to the workplace compared with the accelerated graduate.
6. Collaboration and Teamwork	20. The physiotherapy team is better served with an accelerated graduate than a traditional graduate.
	21. Managers would prefer to employ an accelerated graduate than a traditional graduate.

APPENDIX 9
Relationship of the clinical placement assessment categories in Stage Three to the [superordinate] themes from the interviews in Stage Four

1. Patient Assessment	Age, experience and maturity
2. Patient Management	Self-confidence Over-confidence Accept the gauntlet Wet behind the ears Initiative
3. Clinical Reasoning	Spoon fed Comfort zone Can't see the wood for the trees
4. Evaluation and Reflection	Seek guidance: less likely Spoon fed
5. Organisation and Planning	Hit the ground running Accept the gauntlet Not 'wet behind the ears' Initiative Not 'spoon fed'
6. Collaboration and Teamwork	Leadership skills

APPENDIX 10
Relationship of the [superordinate] themes from the interviews in Stage Four to the questionnaire questions in Stage Five

Perceptions of Success
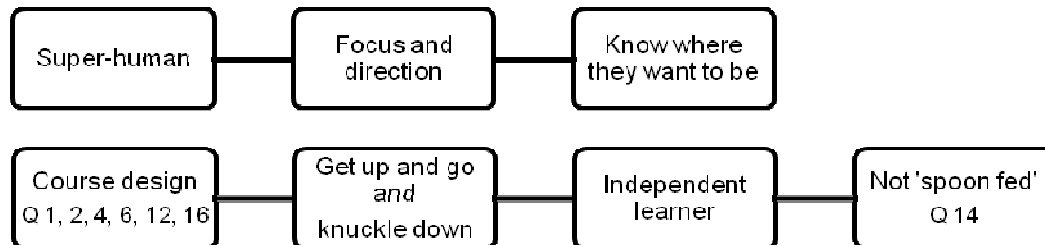
Questionnaire questions:

1. To what extent is the eighteen year old student with A-levels equipped to start physiotherapy training compared with the accelerated student holding a first degree?

2. Three years of training are required to develop the necessary skills to become a physiotherapist

4. Accelerated physiotherapy training courses were designed only for the benefit of university recruitment rather than the patient

6. Good physiotherapists "are born, not made". The type of training course is irrelevant.

12. To what extent does the academic background of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?

16. Having been taught at Masters' level, graduates from accelerated physiotherapy courses will benefit the physiotherapy profession more than traditional BSc (Hons) graduates.
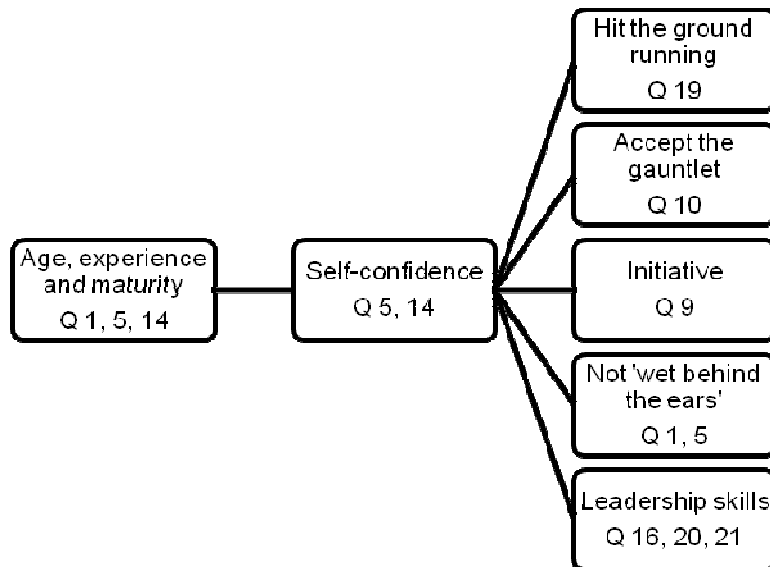
Questionnaire questions:

1. To what extent is the eighteen year old student with A-levels equipped to start physiotherapy training compared with the accelerated student holding a first degree?

5. The student aged 18 years is less likely to cope with the emotional stress of patient care than the accelerated student with a prior first degree

9. To what extent does the problem-solving skills of the traditional physiotherapy graduate compare with the accelerated graduate?

10. To what extent is the traditional graduate able to deal with complex clinical issues compared with the accelerated graduate

14. Accelerated graduates perform well because of their life skills.

16. Having been taught at Masters' level, graduates from accelerated physiotherapy courses will benefit the physiotherapy profession more than traditional BSc (Hons) graduates.

19. To what extent do traditional graduates acclimatise to the workplace compared with the accelerated graduate.

20. The physiotherapy team is better served with an accelerated graduate than a traditional graduate.

21. Managers would prefer to employ an accelerated graduate than a traditional graduate.

A note of caution
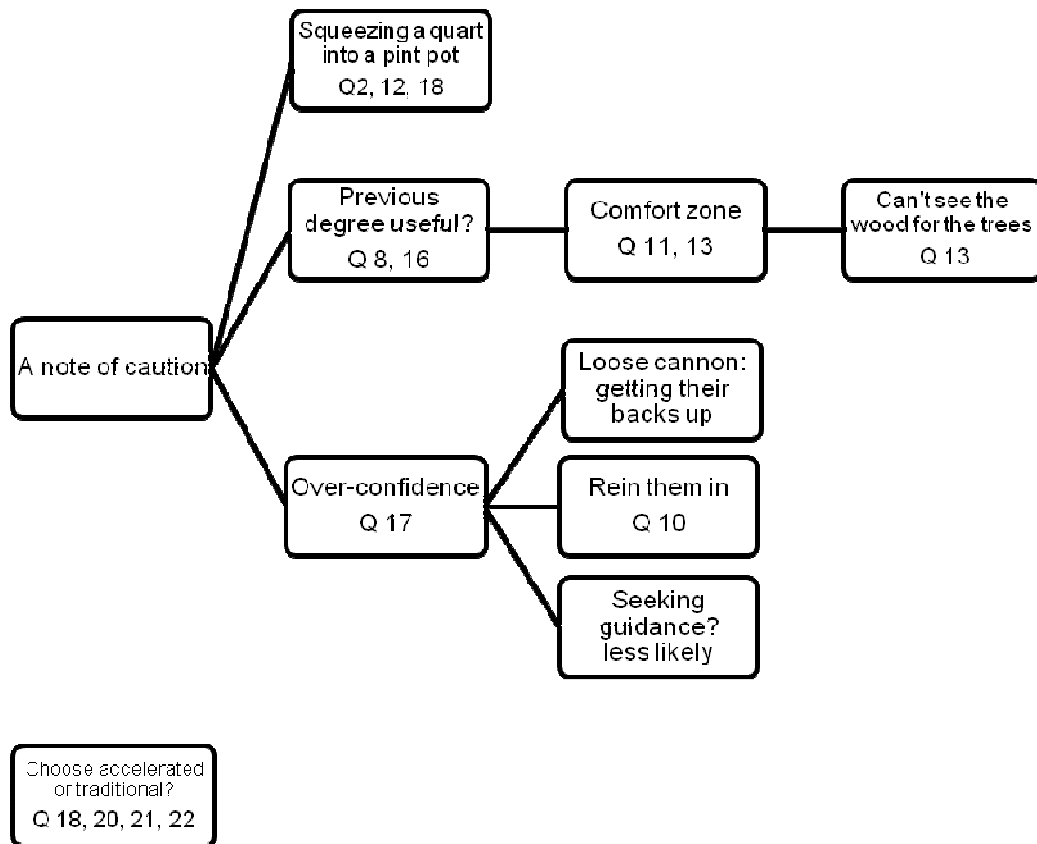
Questionnaire questions:

2. Three years of training are required to develop the necessary skills to become a physiotherapist

8. To what extent does the clinical knowledge of the traditional graduate compare with the accelerated graduate?

10. To what extent is the traditional graduate able to deal with complex clinical issues compared with the accelerated graduate?

11. To what extent does the practical ["hands-on"] skills of the traditional graduate compare with the accelerated graduate?

12. To what extent does the academic background of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?

13. To what extent does the clinical reasoning skill of the traditional physiotherapy graduate compare with the accelerated physiotherapy graduate?

16. Having been taught at Masters' level, graduates from accelerated physiotherapy courses will benefit the physiotherapy profession more than traditional BSc (Hons) graduates.

17. Accelerated graduates are over-confident [and so less likely to seek clinical support]

18. Accelerated physiotherapy training courses provide the same outcome as traditional undergraduate programmes but faster.

20. The physiotherapy team is better served with an accelerated graduate than a traditional graduate.

21. Managers would prefer to employ an accelerated graduate than a traditional graduate.

22. Given the choice would you prefer to work alongside an accelerated graduate or a traditional graduate?

APPENDIX 11 CREATION OF SUPERORDINATE THEMES AND THEMES

		Perception of Success													A note of caution									Discussion		
		Super-human	Focus and direction	Know where they want to be	Get up and go and knuckle down	Independent learner	Not 'spoon fed'	Age, experience and maturity	Self-confidence	Hit the ground running	Accept the gauntlet	Initiative	Not 'wet behind the ears'	Greater leadership skills	Squeezing a quart into a pint pot	Previous degree useful?	Comfort zone	Can't see the wood for the trees	Over-confidence	Loose cannon: getting their backs up	Rein them in	Seeking guidance? Less likely	Preference (Outcome of the APRC)	Participants' self-deprecation	Reflexivity	Other
1	1st degree															x										
2	1st degree Arts is disadvantageous															x										
3	1st degree: Arts background as good as Science															x										
4	1st degree content is important															x										
5	1st degree gives head start regardless of content															x										
6	1st degree means they know how to learn															x										
7	Acclimatise to the new working environment								x																	
8	Age, experience and maturity							x																		
9	Antagonism								x																	
10	Benefits of the APRC	x	x	x	x	x	x	x	x	x	x	x	x	x												

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11	Bias						x						x		x	x	x	x	x	x	x	x				
12	Breadth of skills required		x					x	x			x														
13	Can't see the wood for the trees																x	**x**	x							
14	Changing story																									
15	Changing times																								x	
16	Characteristics of the APRC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	
17	Choose APRC or traditional?																						x			
18	Choose APRC graduate?																						x			
19	Choose traditional graduate?																						x			
20	Comfort zone																**x**									
21	Commitment		x	x																						

		Super-human	Focus and direction	Know where they want to be	Get up and go and knuckle down	Independent learner	Not 'spoon fed'	Age, experience and maturity	Self-confidence	Hit the ground running	Accept the gauntlet	Initiative	Not 'wet behind the ears'	Greater leadership skills	Squeezing a quart into a pint pot	Previous degree useful?	Comfort zone	Can't see the wood for the trees	Over-confidence	Loose cannon: getting their backs up	Rein them in	Seeking guidance? Less likely	Outcome of the APRC	Participants' self-deprecation	Reflexivity	Other
22	Comparison of the APRC v traditional																									
23	Comparisons- difficulty making comparisons																						x		x	
24	Confidence- negative trait																x	x	x	x	x	x				
25	Confidence- positive trait							x	x	x	x	x	x	x												
26	Confusion of training														x											
27	Content- personality traits more than knowledge							x	x																	
28	Contradiction																								x	
29	Contribution to the profession																						x			
30	Course design					x	x								x	x										
31	Deficit, squeeze and catch-up														x											
32	Definition of the APRC																									x

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33	Demanding [expecting jobs]																									x
34	Difference noted between APRC v. Traditional	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
35	Different supervision						x						x							x	x	x				
36	Different vehicle																									x
37	Fair judgement																								x	
38	Focus and direction		x																							
39	Gauntlet										x															
40	Gender																						x		x	x
41	Get up and go				x																					
42	Hard work																		x	x	x	x				
43	Hit the ground running									x																

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44	Holistic approach							x					x					x					x			
45	How it works				x	x	x	x	x								x	x								
46	Ice breaker question																									x
47	Independent learner					x																				
48	Initiative											x														
49	Implications and recommendations																						x		x	x
50	It must be good musn't it?	x																						x	x	
51	James debate																								x	x
52	Keep an eye on them																		x	x	x	x				
53	Knuckle down				x																					
54	Lack of knowledge creates bias																x									x

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55	Language																									x
56	Leadership skills													x												
57	Learning from the research																						x		x	x
58	Learning styles					x																				
59	Levelling out																						x			
60	Life skills							x	x																	
61	Loose cannon																			x						
62	M level clinical experience																									x
63	M level training more than life skills					x		x								x										
64	More open						x						x									x				
65	Musculoskeletal bias																x	x								

		Super-human	Focus and direction	Know where they want to be	Get up and go and knuckle down	Independent learner	Not 'spoon fed'	Age, experience and maturity	Self-confidence	Hit the ground running	Accept the gauntlet	Initiative	Not 'wet behind the ears'	Greater leadership skills	Squeezing a quart into a pint pot	Previous degree useful?	Comfort zone	Can't see the wood for the trees	Over-confidence	Loose cannon: getting their backs up	Rein them in	Seeking guidance? Less likely	Outcome of the APRC	Participants' self-deprecation	Reflexivity	Other
66	Need for the APRC																									x
67	No difference noted between APRC v. Traditional																									
69	Outcome of the APRC- positive	x	x	x	x	x	x	x	x	x	x	x	x	x									x			
70	Perceptions of the APRC course	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
71	Personality	x	x	x	x		x	x	x										x	x	x					
72	Playing the game		x	x																						
73	Qualification conflict																							x		x
74	Qualities of a physiotherapist																									x
75	Questioning criticality-positive	x				x	x		x															x		
76	Rein them in																				x					
77	Participant background- academic																									x

		Super-human	Focus and direction	Know where they want to be	Get up and go and knuckle down	Independent learner	Not 'spoon fed'	Age, experience and maturity	Self-confidence	Hit the ground running	Accept the gauntlet	Initiative	Not 'wet behind the ears'	Greater leadership skills	Squeezing a quart into a pint pot	Previous degree useful?	Comfort zone	Can't see the wood for the trees	Over-confidence	Loose cannon: getting their backs up	Rein them in	Seeking guidance? Less likely	Outcome of the APRC	Participants' self-deprecation	Reflexivity	Other
78	Participant background- clinical role																									x
79	Participants' self-deprecation																							x		
80	Safety net	x				x		x							x							x				
81	Scared							x		x			x													
82	Seek guidance																					x				
83	Self aware							x	x				x													
84	Self confidence								x																	
85	Spoon fed						x																			
86	Student performance																									x
87	Super human	x																								
88	Traditional route																					x			x	x

#		Super-human	Focus and direction	Know where they want to be	Get up and go and knuckle down	Independent learner	Not 'spoon fed'	Age, experience and maturity	Self-confidence	Hit the ground running	Accept the gauntlet	Initiative	Not 'wet behind the ears'	Greater leadership skills	Squeezing a quart into a pint pot	Previous degree useful?	Comfort zone	Can't see the wood for the trees	Over-confidence	Loose cannon: getting their backs up	Rein them in	Seeking guidance? Less likely	Outcome of the APRC	Participants' self-deprecation	Reflexivity	Other
89	Use their skills							x								x										
90	Wet behind the ears												x													